

The Regulation of Digital Technologies

Vagelis Papakonstantinou

# Archipelago, and the information platform that is the state

A political philosophy based on information  
and its processing



Nomos



# The Regulation of Digital Technologies

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## *Foreword*

This book outlines a new political philosophy that is based on information and its processing.

Aristotelians will appreciate the analysis; those siding with Plato (there are only two kinds of people, as Coleridge said), less so. In essence, it supports Aristotle's argument by complementing his intuitively correct but unsupported and never fully elaborated claim that states are natural to humans. It corrects Plato and his epigones (practically every political philosopher ever since) by refuting their claim (considered a given today) that states are artificial, the product of agreement among humans.

It is based on only two basic, and straightforward, premises. Therefore, understanding it (but not necessarily appreciating it—for that one has to follow the order of things) can be achieved in anything from a few minutes (see only Chapters 7 and 19) to a few hours (add Chapters 8, 9 and 11), a few days (Chapter 7 onwards) or a few months and beyond (read also Chapters 1–6). Each chapter is independently written specifically for this purpose, and therefore, there is some repetition. Notes (only paragraphs marked with an asterisk are annotated, at the end of the book) are there to help explain—but they do add considerably to the times just promised.

Brussels and Athens, January 2026



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## 0. Prologue

*‘To understand an author’s meaning all contradictory passages must be reconciled. [...] Every author has a meaning which reconciles all contradictory passages, or else he has no meaning at all.’*

Blaise Pascal

**Synopsis:** *A political philosophy of information places information and its processing at the epicentre, perceiving everything as information and all life as information processing (1); The two basic premises of this political philosophy (2); Why a political philosophy of information? (3); The decline of the Westphalian state (4); Why now? The digital world (5); The three (informational) milestone moments in humanity’s development (6); The owl of Minerva (7); A God-like, Genesis moment for humans (8).*

### 1. \*

A political philosophy of information places information and its processing at the epicentre, perceiving everything as information and all life as information processing. Using this lens, this philosophy examines Beings and Things, placing a special focus on humans’ states. This is because it assumes a common, informational basis between states and humans, a common, unbreakable link between them based on information and its processing. This concerns the entire breadth and also the bare basics of their existence, from their coming into life until their end.

### 2. \*

Two basic premises underlie this political philosophy of information: (a) states are information platforms for their citizens, and (b) (only) humans need to augment their information processing.

### 3.

Why a political philosophy of information? In order to understand the transition from the analogue to the digital world that is currently taking

place, we first have to understand, to make sense of the analogue—from an informational perspective. We first need to understand why and how things around us are as they are, before projecting what we know, and what we expect to find, onto the digital world.

#### 4. The decline of the Westphalian state\*

A popular question over the past 50 years has been whether the modern state (modern, in the meaning of the type in which we currently live, which was formed around 1650 in theory by Hobbes and in practice by the Peace of Westphalia) is dead. This of course assumes tacitly that the state is something artificial, something that can die. In this way the question became a given. The state, however, can never come to an end, or die, because it is, as will be seen, natural to humans. In other words, as long as humans exist, their states will also exist.

#### 5. Why now? The digital world\*

The questions on why and how states were formed have arisen most pressingly in periods of political upheaval. Plato formed his theory in the aftermath of the Peloponnesian War; Aristotle when the first kingdom subjugated all the city-states of ancient Greece; Cicero during the transition between the Res Publica and the Roman Empire; St Augustine at the point of the demise of Imperial Rome and its replacement by Christianity; Machiavelli while new kingdoms, empires and city-states struggled for sovereignty in medieval Europe; Hobbes when civil war to change the form of government cost thousands of human lives (including a ceremoniously executed king); the writings of Locke and Rousseau supported the American and French revolutions; and those of early and mid-20th century philosophers' dealt with Fascism and Communism.

In other words, these questions have never arisen pressingly during easy times. On the contrary, it is during times of social, political and financial disruption that these questions are asked (notwithstanding the two cardinal mistakes made by all of the above: first to consider the state artificial and not natural to humans; and second, to confuse the state with its government).

Are ours difficult times too? While today war, in terms of bloodshed and physical despair, may be relatively limited if compared to the above

circumstances, it is the advent of the digital world that has brought change. The digital world has brought about an unprecedented challenge to all of humanity's known ideas and beliefs as formed over the thousands of years past.

However, in order to make a jump, and discuss the digital world, one first needs to take a step back.

## **6. The three (informational) milestone moments in humanity's development\***

Ever since humans first walked the earth, three milestone moments occurred until now, at least from an informational point of view (the first one, admittedly, undocumented):

- The first occurred when humans started talking to each other using language and acquired self-consciousness, perhaps more than 200.000 years ago. As will be seen, this is when the state first emerged.<sup>1</sup>
- The second occurred when writing was invented, some 5.000 years ago (agriculture preceded it, around 12.000 years ago; however, it only affected sustenance, not information processing). At this point humans leaped forward to increase exponentially their information processing capabilities; states took form in the analogue world, becoming transactional and territorial.<sup>2</sup>
- The third milestone, the advent of the digital world, occurred only recently, a few decades ago: We can place it, schematically, in the year 2000, although it had been in full swing for a couple of decades before that. However it was in the year 2000 AD that this milestone took centre stage for humanity.

The creation of the digital world by humans changed everything: nothing remained the same. Like the other revolutionary moments above, the digital world has changed each and every assumption humans have been living with since they first walked the earth. Everything needs to be seen in a new light, everything needs to be re-examined and reassessed.

---

1 See Chap. 7.

2 See Chap. 9, par. 5.

## 7. The owl of Minerva\*

As with the owl of Minerva, new light has only been cast on the state with the falling of dusk, that is, with the unprecedented challenge to the state caused by the arrival of the digital world. Although the state has been an information platform for its citizens since the beginning of time, it is only now that its true nature can be discerned. It is this new light, brought by the digital world, that has made the creation of this political philosophy possible.

## 8. A God-like, Genesis moment for humans

Returning, then, to the question asked above (why now?<sup>3</sup>), the answer is the emergence of the digital world. There is some urgency to resolving questions about the analogue world, because humanity is reaching a God-like, Genesis moment (in the absence of any other more suitable term): the creation of an entirely artificial, new reality, whose shaping lies entirely in its hands.

---

3 In par. 5.

## 1. Information

*'Let me be quite clear about what I mean here by matter. I mean an item that is not in itself a something and is also not a quantity nor said to be any of the other things by which that which is is defined.'*

Aristotle

**Synopsis:** Everything is information (1); Datasets (2); Each dataset to be considered a closed system (3); The analogue and the digital worlds (4); Information can be processed (5); Processing on datasets (6); New information (7); Related datasets (8); Life, birth, death (9); The analogue world. Nature (10); The digital world: a simulacrum gone rogue (11); Sometimes the analogue and the digital worlds may appear blended, but they are never the same (12); The individual is torn in the digital world (13); Access to and use of the digital world belong to moral philosophy (14); 'All that is solid melts into air' (15); Information in the analogue world is finite, but infinite in the digital world (16); Total control is impossible in the analogue world, but possible in the digital one (17).

### 1. Everything is information\*

Everything is information. The analogue and the digital worlds are, material, systems of information.

Life is information processing; to be living is to be processing information.

All that humans think and feel and everything around them is information.

Information is either material or immaterial.

## 2. Datasets\*

Every Being<sup>4</sup> and every Thing<sup>5</sup> is a dataset, meaning a collection of information.

Datasets are material, they exist in the analogue and/or the digital world. The nature of a dataset is set by its form in the analogue and/or the digital world and its purpose (if any). Each carries a name (individualised or not) and is set, finite in this manner; should it substantially change, a new name is given to it—it then becomes a different dataset than that which it originally was.

The difference between ‘information’ and ‘datasets’ is that information can also be immaterial.

## 3. Each dataset to be considered a closed system\*

Of course, everything is, informationally, interconnected, in the sense that everything is made of bits of information that can be broken down into further bits of information, *ad infinitum*. However, in order to make sense when examining the relationships among them, each Being and Thing that carries a name<sup>6</sup> is considered a separate entity (a closed system) that interacts with all others.<sup>7</sup>

## 4. \*

The analogue and the digital worlds are two different material systems (each in the sense of a complex, coherent whole) of information, meaning of datasets (of Beings and Things) interacting.

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4 See Chap. 2.

5 See Chap. 3.

6 See Chap. 8.1.

7 See also Chap. 3, par. 5.

## 5. Information can be processed

It is only Beings that can, and will, process information, because of need.<sup>8</sup> They will process information on other Beings or on Things.

A Thing cannot process information, unless it has become an artificial Being.<sup>9</sup>

## 6. Processing on datasets\*

Processing<sup>10</sup> takes place on<sup>11</sup> a dataset, which is perceived as a whole, a closed system,<sup>12</sup> unless otherwise clarified (in which case processing on part of it takes place<sup>13</sup>).

Therefore, whenever the ‘processing of information’ is referred to, what is actually meant is both:

- the material processing on a dataset by a Being in the analogue or the digital world,

and

- the immaterial processing of information (a thought, a feeling, a wish) by a Being, that nevertheless needs to be externalised and thus also becomes material processing.<sup>14</sup>

## 7. New information\*

The processing of information leads to the creation of new information, either material or immaterial.<sup>15</sup>

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8 See Chap. 5.

9 See Chap. 2, par. 10.

10 See Chap. 4, par. 1.

11 Processing ‘for’ a dataset would imply a purpose and thus is connected to morality (see also note 5/2/2), and processing ‘by’ a dataset would imply the Being that is doing the processing (see Chap. 2).

12 See par. 3.

13 See, for example, note 1/8/1.

14 See Chap. 4, par. 4.

15 See also Chap. 4, par. 2.

## 8. \*

A dataset can relate to another dataset or not; the existence of a relationship meaning that both datasets contain common information.

## 9. Life, birth, death\*

Because life is information processing, any and all Beings that can process information are alive.<sup>16</sup>

Each, however, comes into existence differently. Biological Beings (animals, including humans) come into existence in the analogue world (i.e. they are born) biologically, outside of (human, at least) design, that is, their nature is given to them in the analogue world by Nature,<sup>17</sup> they are not designed by other Beings. By contrast, non-biological Beings (organisations and artificial Beings) come into existence in the analogue or the digital world (i.e. they materialise) by (human) design, that is, their nature is given to them.<sup>18</sup> They are designed, and created, by other Beings.

Therefore, birth (materialisation, the coming into existence in the analogue and/or the digital world) is the point in time from which a Being is able to process information. Death is the point in time when a Being is unable to continue doing so (at which point it becomes a Thing<sup>19</sup>). By contrast, Things exist (in the analogue and/or the digital world) for as long as information on them can be processed by Beings; Things are destroyed, deleted or consumed if no processing on them is possible any longer.

## 10. The analogue world. Nature\*

The analogue world (our natural environment, Nature) is natural to biological Beings, because it is necessary for them to live in.<sup>20</sup>

Nature comprises Things, but is basically itself a Being (it can and will process information, as is dictated by the laws of Nature<sup>21</sup>). In essence, it

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16 See Chap. 3, par. 2.

17 Or, (depending on religion, see Chap. 23, par. 5) by a higher power.

18 By humans, see Chap. 2, par. 11.

19 See Chap. 3, pars. 2 and 3.

20 On whatever is necessary considered natural, see Chap. 5, par. 5.

21 See Chap. 20.

is in order to be able to process the information of Nature that humans became individuals in the first place.<sup>22</sup>

## 11. The digital world: a simulacrum gone rogue\*

The digital world is a new system that is made up of digital information.<sup>23</sup> It was created by humans; it is the result of their processing of information. In contrast to the analogue world, it is not natural to humans (or animals) because they do not need to live in it.<sup>24</sup>

Because the digital world was created by humans, it unavoidably resembles what humans already know, meaning the analogue world. Even the anarchic, unplanned development of the digital world that is taking place today resembles the point in humanity's history when the analogue world was still largely unknown and seemed immense and endless, and which became interconnected only gradually.<sup>25</sup> In other words, the digital world can be likened to the open sea—one, however, that is not localised and knows no human-made borders, but rather is created out of the interconnection of countless artificial Beings that communicate with each other to offer their creators, meaning humans, countless starting points to reach no known or pre-determined end.

From this point of view, the digital world is a simulation of an original that does not necessarily exist as imagined by the simulators; it is a copy of a non-existent original, a simulacrum that has cut loose from its original form—to become, as Ecclesiastes would have it, true.<sup>26</sup>

## 12. Sometimes blended, but never the same\*

Although the analogue and the digital worlds may sometimes appear to be merging, for example, when digital information relates to Things in the analogue world, they are separate, because the digital world is not natural to humans, it has been created by them (and thus, humans will always be able to tell the difference).

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22 See Chap. 20, par. 3.

23 On digital information, see Chap. 1.1, par. 13.

24 See, however, Chap. 5, par. 6 (and Chap. 17, par. 8).

25 See also Chap. 7.1, par. 5.

26 'True' in the meaning of material, on which (material) processing is possible.

### 13. The individual is torn in the digital world

States turn humans into individuals in order for them (humans) to live a meaningful life<sup>27</sup>. However, this is only the case in the analogue world. In the digital world, the single, unitary nature of the individual is gone. It is irrevocably lost, at least as perceived until now in the analogue world.

In the analogue world a separation between the individual's personal and public lives, the private and public self, is assumed, at least in Western philosophy.<sup>28</sup> But this separation is an internal, imagined one: in terms of the processing of information, which is external and material,<sup>29</sup> each individual is perceived as a single unit, a single actor (who becomes identifiable and unique through his or her state), notwithstanding the many aspects of character or the interesting (or uninteresting) life led by this individual. Anonymous communication or pseudonyms may break down an individual's single, unitary nature, but only temporarily and within a closed environment, for instance, among an author's readers or a singer's listeners in the analogue world. Outside of these occasions, that same individual remains a single unit.

However, in the digital world that same individual, still perceived as a single unit in the analogue world, may split into multiple units.

Consequently, the focus needs to change. It is not only the actual existence of the digital world which is examined in this political philosophy of information (which is, expressly, not a moral philosophy<sup>30</sup>), but also the access to and use of the digital world by individuals,<sup>31</sup> who have become users.<sup>32</sup> This must be examined separately, within the context of a moral (political) philosophy, which will have to follow this book.

This is also the case for other Beings and Things, too: they may exist in either or both worlds (meaning, they may be able to process information or have information on them processed in either of or both the analogue and the digital worlds) but their single, unitary nature is broken down.

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27 See Chap. 7, par. 3.

28 See Chap. 26, par. 4.

29 See Chap. 4, par. 4.

30 See note 0/1/7.

31 On their processing, see also Chap. 4, par. 1.

32 See Chap. 17, par. 11.

14. \*

The issues of access to and use of<sup>33</sup> the digital world belong to moral philosophy.

15. **‘All that is solid melts into air’<sup>34</sup>**

There are two fundamental and groundbreaking differences between the analogue world and the digital world. The first is that information in the analogue world is finite, whereas it is infinite in the digital world. The second is that total control is impossible in the analogue world, but possible in the digital world.

These realisations are of paramount importance; they are factors that will forever change the path of human history and culture. In essence, two of the fundamental assumptions with which humanity has lived during its entire recorded history in the analogue world do not apply in the digital world.

16. **Information in the analogue world is finite, but infinite in the digital world\***

In the analogue world the scarcity or uniqueness of the resources found in Nature is the drive behind human culture and history. Because humans have a need to augment their information processing,<sup>35</sup> all of their history so far can be read as a long march to exhaust to the greatest extent possible the processing opportunities offered to them in the analogue world (meaning in Nature). These are, nevertheless, finite. While immaterial information processing (i.e. of thoughts, feelings, wishes) in the analogue world may be infinite, its execution (materialisation) is still restrained by finite resources.

The ‘nature of man’, and much of political philosophy, is based on this assumption: that information (or whatever it is that anyone is in pursuit of, whatever the objective of any human) is finite, exhaustible and can be enjoyed by one human being only at the expense of another.

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33 Through computer programs, see Chap. 2, par. 18.

34 As prematurely (and thus unsuccessfully) prophesised by Marx.

35 See Chap. 5.1.

This idea is no longer valid in the digital world. Digital information<sup>36</sup> is infinite.<sup>37</sup> Therefore, human processing can go on forever without threatening, reducing or affecting the processing of others. In other words, in the digital world immaterial information processing is infinite, and its materialisation (unlike in the analogue world) can oblige (i.e. it knows no limits).

There is no field of human activity (in peace or war) or thought (in business, science, art or religion) that is not affected by this fundamental change. Humans accustomed to living in a finite, closed system now also live in what promises to be an infinite one. After the digital world is fully developed (it is currently only a few decades old), nothing in human life will be ever the same.

### **17. Total control is impossible in the analogue world, but possible in the digital one**

Total control is impossible in the analogue world. Although the state is the information platform that turns humans into individuals and makes a meaningful life possible, and thus knows all of its citizens processing because it is a necessary part of each single one of their actions, it has no consciousness, purpose or will of its own—it is omnipresent but not omnipotent. The government, on its part, aims to be omnipotent through control of the state; however this will always be an elusive and unattainable objective for it. In other words, in the analogue world anyone can act and (at most) that action can be, in principle, prohibited or assessed after the fact—but there is no way to control its occurrence in the first place.

Total control is impossible in the analogue world because the analogue world (Nature) was discovered by humans, it was not made by them. It is possible for myriad processing operations to be taking place on it at any given moment, and there is simply no way for humanity to effectively control them all, that is, to consciously allow or prohibit each and every one of them.

Exactly the opposite is the case in the digital world. The digital world is artificial, created by humans. It may be developing in unforeseen and unforeseeable ways, but it remains artificial, human-made. It is built on the basis of pre-determined specifications. Any action becomes possible or impossible within it according to a pre-known, preset design. In other

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36 See Chap. 1.1, par. 13.

37 On why that is, see Chap. 1.1, par. 16.

words, the possibility for anybody, any Being, to do anything in the digital world must have been planned for and built in in advance—otherwise it simply cannot happen, there is no option for it to take place.

Unlike in the analogue world, total control (or, in any event, a new kind of control that defies anything we thought we previously knew) is, for the first time ever, available to humanity, which is experiencing, in this regard, a God-like creation moment.

## 1.1. Material and immaterial information

*‘Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be.’*

Walter Benjamin

**Synopsis:** Information is either material or immaterial (1–4); The materialisation and dematerialisation of information (5–6); The materialisation of immaterial information (7); The dematerialisation of materialised (immaterial) information (8–9); The invention of intellectual property (10–11); The (re-)materialisation of information into digits (the digitisation of information) (12–15); Digital information is infinite (16); Digital-born and digital world-only information (17); Digital humans? (18).

### 1. \*

Information is either material, meaning processable by Beings in the analogue or the digital world (i.e. processable by more than one Being<sup>38</sup>), or immaterial, meaning unprocessable by Beings (plural) in the analogue or the digital world (i.e. it is processable by only one Being—it is a thought, a feeling or a wish, but also, significantly, the spoken word<sup>39</sup> too).

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38 For biological Beings it is processable through their senses, while for non-biological Beings it is processable through their nature, meaning the design given to them by humans.

39 *Verba volant*: basically, the spoken word, a verbal discussion, is unprocessable by more than one Being because it has not materialised (for example, on paper) meaning that what was said has not been retained, it has departed and it cannot be proved that it ever existed. However, once speech materialises, e.g. on paper, or if it causes another, material, action (including repetition *verbatim*), then it becomes processable, in this new form, by more than one Being. The same is true of a gust of air: unless it is scientifically registered (e.g. in terms of strength or direction), it is not material information, i.e. it cannot be processed by more than one Being.

2.

Immaterial information is infinite (thoughts, feelings and wishes know no end), but while in the analogue world material information is finite (because the analogue world is finite), in the digital world it is infinite.<sup>40</sup>

3.

All immaterial information is created (thought, felt) by humans and animals, that is, by biological Beings.<sup>41</sup>

Non-biological Beings (organisations and artificial Beings) are (for the moment assumed<sup>42</sup> to be) unable to create new immaterial information (thoughts or feelings).

Material information can either be created by Beings (all Beings can create Things or other Beings) or simply exists in the analogue world (it has been created by Nature).

4.

Humans, as Beings,<sup>43</sup> can and will process information. Once they have become individuals through their unique identification in space and time by their states,<sup>44</sup> they can and will constantly increase their information processing, to serve their need to augment it.<sup>45</sup>

### 5. The materialisation and dematerialisation of information\*

Material information has been processed by humans and animals in terms of property<sup>46</sup> since the beginning of time.

Immaterial information can become material, meaning processable by other Beings as well (or even by the same single Being in some future

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40 See Chap. 1, par. 15.

41 Human creativity, as we know it, is the result of a purely human need to augment information processing, see Chap. 5.1 par. 6, and note 5.1/3/1.

42 Specifically, artificial Beings.

43 See Chap. 2.

44 See Chaps. 7 and 8.

45 See Chap. 5.1.

46 See Chap. 24, par. 3.

time), if it is materialised by its creator (i.e. the Being that thought of it or felt it). Materialisation is the making of immaterial information by a Being processable by others through the conversion into a material, tangible (meaning, processable directly by humans without tools<sup>47</sup>) format. Humans will speak,<sup>48</sup> write, draw and so on in the analogue world, or program in the digital world; all animals, including humans, will build in the analogue world. The materialisation of immaterial information<sup>49</sup> is, in fact, a processing, meaning a material action observable in the analogue or the digital world.<sup>50</sup>

In the vast majority of cases (and this is true for the analysis in the remainder of this chapter), a Thing will be created in this manner.<sup>51</sup> However, it can also be the case that another Being (an organisation or an artificial Being) can be created in this way too<sup>52</sup>—these, nevertheless, cannot be dematerialised in the way described below.<sup>53</sup>

## 6.

Once materialised by their creator in this manner, Things can be dematerialised, meaning they lose their material, tangible (i.e. processable directly by humans) format, but remain reproducible, and thus are able to be processed by more than one Being in the analogue or the digital world.

Practically, a book sits in the head of its author (as immaterial information) until it is put on paper (it materialises, becomes material information); after it has been written down on paper, it can be printed as many times as necessary (printing essentially that same, now fixed, dematerialised information). Similarly, music sits in the head of its composer (as immaterial information) until it is put into a musical score (becomes materialised), after which any musician can reproduce it (essentially by replaying that same dematerialised, musical score).

Likewise, a chair has been created in the analogue world following the design of its creator; after the first model has been created, it can be

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47 As is the case with digital information, see par. 12

48 See par. 1, particularly footnote 39.

49 Possible only for biological Beings, see par. 3.

50 See Chap. 4, par. 2.

51 See Chap. 3, par. 4.

52 See Chap. 2, par. 6; on the state, see Chap. 9, par. 1.

53 In par. 6. On the issue of control over the processing operations possible on newly materialised information, see Chap. 6, par. 4.

reproduced infinitely, in both the analogue and (if digitised<sup>54</sup>) the digital worlds.

In this way, since the beginning of time, immaterial information has been processed (and therefore controlled<sup>55</sup>) by humans like material information, in four large cycles of materialisation and dematerialisation:

- (a) at first, at the beginning of recorded human history, certain immaterial information (thoughts, feelings and wishes) was materialised, meaning that it became perceptible by human senses in the analogue world, through paintings on cave walls and writing;<sup>56</sup>
- (b) then, part of the materialised information was dematerialised (it became immaterial again, but this time in a fixed manner perceptible in the same way by more than one individual), when the first book was copied;<sup>57</sup>
- (c) in the seventeenth century, the new concept of intellectual property designated only part of the dematerialised information as property;<sup>58</sup> and
- (d) finally and most importantly, the digitisation of information, which has occurred recently and is ongoing,<sup>59</sup> is, for the first time since the beginning of time (as outlined in point (a)), re-materialising this information in a different, entirely new format (the digital format) and for an entirely new world (the digital world). This includes all information: all material information as well as all dematerialised information is suitable for processing in the new digital world.

This is why this current period is the most important in humanity's history since the invention of writing (i.e. it is the third milestone moment in humanity's development<sup>60</sup>). It is not a matter of the Information Age succeeding the Industrial Age, which succeeded the Enlightenment, which succeeded the Renaissance and so on. This is an entirely new era; if anybody wanted to find its equivalent in human history, he or she would have to look thousands, not hundreds, of years back in time.

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54 See par. 12.

55 See Chaps 6, par. 4, and 24, par. 3.

56 See par. 7.

57 See par. 8.

58 See par. 10.

59 See par. 12.

60 See Prologue, par. 6.

## 7. The materialisation of (immaterial) information

Immaterial information has been materialised in the analogue world since the beginning of humanity, or at least since the point at which humans started drawing on cave walls and speaking to each other.

When writing was invented, immaterial information processed by humans (their thoughts, feelings and wishes) was materialised in the analogue world, first in the form of tax or military records<sup>61</sup> or regulations (e.g. the Hammurabi code), and shortly thereafter in the form of books, in which epics and mythologies were written down.

## 8. The dematerialisation of materialised (immaterial) information

Part of the materialised immaterial information discussed in paragraph 7 was dematerialised again, when the first book was copied.

This was a moment of great importance for humanity. Somebody at that time saw some value in certain among all the written records created up to that time and selected them<sup>62</sup> for copying—that they were copied *verbatim* is the key point here. (This was not the case for musical pieces or paintings, because copies of such works, however artful, cannot be exact, and are therefore new materialised immaterial information.)

Such dematerialised information became an intangible Thing, a dataset<sup>63</sup> separate from the (tangible) original book it<sup>64</sup> came from (which of course remained a tangible, material Thing in its own right).

## 9.

During the long period from the moment that the first book was copied in ancient times until the introduction of the concept of intellectual property in the seventeenth century, humanity was happily, and freely, copying (and selling, not sharing) the dematerialised information described in paragraph 8, because there was no way for the creator of new information<sup>65</sup> to control

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61 Which was why writing was invented anyway; see Chap. 9 on the materialisation of the state.

62 A choice that haunted us until very recently, see par. 15.

63 See Chap. 1, par. 2.

64 Necessarily, see par. 17.

65 See Chap. 6, par. 4.

the relevant processing operations—therefore control was exercised only over the materialised information (the books themselves).

In other words, although there was book commerce at least as early as in Peisistratid Athens, with scribes copying books and selling them (a practice certainly generalised throughout the Hellenistic and Roman worlds), property-like control was exercised on the end-product, the book, and not on the work of the intellect contained therein. Neither Plato nor his philosopher students nor Aeschylus or his dramatist followers were paid for each copy, written by hand on papyrus or other material, of the books they wrote. (Their money was made through teaching or reciting instead.) Indeed, nor was the state of Imperial Rome paid either, each time its laws were copied to take from Rome to any part of its vast empire or elsewhere.

The same is true of painting (or music or architecture or industry): the materialisation of information had occurred since the beginning of time, but control was exercised only over the material end-product, not the dematerialised information.<sup>66</sup>

The dematerialised information described in paragraph 8 could be exploited only in its material form, as a tangible thing (a book, a music score, a specially designed jewel, a motto etc.), in spite of everybody acknowledging that it was a(n) (immaterial) Thing. Those who profited were the copiers and manufacturers, not the creators.

## 10. The invention of intellectual property

The dematerialised information described in paragraph 8, enjoying the freedom (as in lack of control over the processing of it) as described in paragraph 9, became property (intellectual property), and thus under the control of humans, in the seventeenth century. In short, mechanical mass copying (through the invention of Gutenberg's press) made it obvious to humanity for the first time that value lies in the (intellectual) creation of the dematerialised, intangible dataset and not in the (mundane, however tiring to produce, tangible) reproduction—a distinction that, like the one described in paragraph 8, has haunted us until very recently.

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66 Notwithstanding that they could not have been exact copies of the original, certainly in terms of paintings or architecture, albeit less so in music after annotation was discovered.

A different kind of property, intellectual property, was thus invented by humans.<sup>67</sup>

## II.

As is obvious, the concept of intellectual property applied to dematerialised information.<sup>68</sup> However, after this concept was introduced by legislators, developments took two different paths.

The part of dematerialised information that was considered valuable (that which is unique, original, technically useful, distinctive etc.) was protected as a new type of property, intellectual property (IP), to distinguish it from the traditional type of property.

The remaining part of dematerialised information, if any (it is not certain that anybody cared to copy tax or military records or other large repositories of mundane information, although it can be imagined that, e.g. transmissions of state data between state agencies qualified as such), remained unregulated and unclaimed (uncontrolled).

### 12. The (re-)materialisation of information into digits (the digitisation of information)

The digital world is made up of digital information.<sup>69</sup> For the past few decades humanity has been busy digitising its information (and working with it in this form).

Digitisation is not, however, dematerialisation. It is just another form of materialisation (of already dematerialised information), this time in an entirely new format, one that is machine-readable. It is the transformation of information into digits. (Accordingly, the dematerialisation of information should not be confused with the digitisation of information.)

Humans created specific tools for this purpose. Digitised information is not tangible, it can only be processed by humans with the assistance of information processing tools (i.e., computers, in essence artificial Beings<sup>70</sup>).

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67 See Chap. 24.1.

68 All materialised information (i.e. artefacts) already being covered by the concept of property, see Chap. 24, par. 3.

69 See Chap. 1, par. 11.

70 See also Chap. 2, par. 12.

### 13.

The digitisation of information, a process that is still under way, includes:

- the digitisation of material, analogue-world information;<sup>71</sup>
- the digitisation of dematerialised information (both that covered by IP rights and that which is not<sup>72</sup>); and
- the (slow but steady) digital creation of new information.<sup>73</sup>

Digital information comprises all of the above categories of information.

Practically speaking, therefore, the digitisation of information leaves only immaterial information (thoughts, feelings and wishes) outside the realm of digitisation.

### 14. The digitisation of material, analogue-world information\*

In a process that started in the 1980s but gained speed (culminating in the early 2000s), humanity is digitising all material information found in the analogue world.<sup>74</sup> This includes both information that has been created by humans over the course of their history (i.e. artefacts) and information created by Nature (trees, lakes, rivers, animals etc.).

In essence the digitisation of material, analogue-world information presupposes that it first be dematerialised before it is re-materialised in a digital format.

However, crucially, this re-materialisation of material information into digits is not unique, in the sense that the dematerialisation that preceded it, and upon which the digitisation is based, takes one form among the many that are possible. In other words, the result of the digitisation of an artefact (e.g. a table) is neither unique nor exclusive, because it is based on a dematerialisation (most likely, in the form of a photo of the object) that is one among the many possible<sup>75</sup>—meaning that it can be digitised many times over. Similarly, the digitisation of, for example, the remains of an ancient temple is not unique—another attempt at its digitisation by another

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71 See par. 14.

72 See par. 15.

73 See par. 17.

74 An act of processing collections of information, see Chap. 2, pars. 5 and 6.

75 On (the vastly smaller category of) IP-protected Things (for instance, when the IP-protected design of a chair would be the basis for its digitisation), see pars. 15 and 16.

group of archaeologists would produce a second result, existing in parallel to the first one.

In other words, while the digitisation of material, analogue-world information leads to a digital reproduction of the original, it is only one digital reproduction among many possible others—it is not the original itself. A single dataset in the analogue world can lead (through its digitisation) to a potentially infinite number of datasets in the digital world.

## 15. The digitisation of (already) dematerialised information

The digitisation of already dematerialised information is, in effect, its re-materialisation in a different format. In other words, until recently, dematerialised information was only materialised in the analogue world in a tangible format (e.g. books, films, magnetic means for the reproduction of music, products or buildings following a particular design, insignia (trade-marks) affixed on objects), meaning in a format directly processable by humans. Now, through digitisation, already dematerialised information is re-materialised but, importantly, in an intangible format (that is, one not directly processable by humans): the digital copies of books, music and so on cannot be processed as such (as a series of 0s and 1s) by humans, but are reproducible through the intermediary of computers and computer programs.<sup>76</sup> which enable them to be processed by humans.

In essence, humanity is now in the process of making (all of its) knowledge processable (accessible, usable) by computer programs, so that it can communicate with them. Once this has been accomplished, the next step will be for computer programs to start communicating with each other.<sup>77</sup>

Importantly, the digitisation of already dematerialised information has not, however, stopped at IP-protected immaterial information,<sup>78</sup> although, of course, it started with it. Although this is an expensive procedure, for efficiency purposes dematerialised information which is not IP-protected (e.g. state records, large repositories of mundane information, such as scientific or military records) is also being digitised.<sup>79</sup> In fact, for the first time in

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76 See Chap. 2, par. 18.

77 See also note 0/1/14.

78 See pars. 9 and 10 above.

79 Of course, if viewed as information that was only materialised (i.e. never copied), then this would fall under the category described in par. 9 on the digitisation of material information; in any event, this information is digitised anyway.

the history of humanity, state records have become dematerialised, that is, intangible, in their entirety. State records had been material information ever since the invention of writing<sup>80</sup> (piecemeal exchanges among e.g. state agencies excluded)<sup>81</sup>—only the material on which they were recorded had changed, with paper succeeding clay tablets, engravings on stone or wooden tablets.

The digitisation of dematerialised information that is not IP-protected abolished a choice made by humans in ancient times that had been maintained by us until recently: namely, on the worthiness (or not) of protecting dematerialised information through (property) law. From the moment the first book was copied until just a few decades ago, only IP-protected dematerialised information was considered valuable—its protection based on criteria such as originality, distinctiveness, effort of the human intellect and so on. Other dematerialised information did not merit any protection (at best it was protected as materialised property) or special treatment by regulation (for example, access rights to state records). Now, once digitised, new regulations protect (or, regulate control over) it for the first time.

## 16. Digital information is infinite\*

Paragraphs 13, 14 and 15 have explained why information in the digital world is infinite.<sup>82</sup> When it comes to the digitisation of material information (par. 14), although the volume of material information is finite (because it exists in the analogue world), the digital reproductions of it may be infinite in number. If one so desired, the same monument or the same table could be re-digitised as many times as one wished, and each time this would create a new digital copy.<sup>83</sup>

On the other hand, when it comes to the digitisation of already dematerialised information (par. 15), although there is a finite number of, for example, books or music scores, they relatively quickly lose their special regulatory (IP) protection and can be reproduced or (partially) processed freely. Information that does not enjoy any legal protection (e.g. state records) is processable in any case.

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80 See par. 1.

81 See also Chap. 17, par. 9.

82 See Chap. 1, par. 16.

83 Notwithstanding legal restrictions, e.g. in terms of limiting access to monuments to limit such reproductions.

Most importantly, however, all digital-world-created information (meaning the information described in par. 17) is infinite: (making use of the above information) anyone can create as many digital works, organisations, computer programs and so on as he or she wishes.

### 17. Digital-born and digital world-only information\*

Information, regardless of whether material or immaterial, has invariably been materialised in tangible media in order to be processed by other humans. Although an idea or a thought can of course be transmitted orally, only a relatively small circle of people will receive it—each of them may well transmit it further, but it is not certain that it will be the same thought or idea (or rather the opposite is certain!<sup>84</sup>). In other words, information has to be made tangible by one human (preferably in writing) in order for it to be processed by other humans.

In practice, therefore information is materialised by its creators. Authors put their ideas on paper, composers do the same, film directors use film; similarly, shopping lists are put on paper, as are laws and tax records. As has been seen,<sup>85</sup> if any of this information is considered worthy of copying, then it is dematerialised (and eventually protected by regulation); otherwise it remains materialised in its original medium (most likely to be lost at some point, after this medium inevitably perishes).

Today, however, new information is increasingly digital-born. This is as true for this book as for most other intellectual works today. State records are created on computers with the assistance of computer programs. Huge repositories of information are created and kept exclusively in digital form.

This is digital-born information. Importantly, however, it can become tangible, that is, it can also exist in the analogue world: the book can be printed, as can state records or other repositories of information, no matter how large. Therefore, digital-born information is material, intangible information that was created digitally but can become tangible, that is, it can be directly processable by humans, if needed.

A subcategory of digital-born information is digital world-only information. This is information that is digital-born (a thought or idea that was materialised directly into digits) that nevertheless can exist only in the digital world. In other words, it cannot become tangible to humans other

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84 See also par. 1.

85 In par. 10.

than through the medium of a computer (unlike a book or state records, which can be printed, or music that can be recorded onto a magnetic medium). This is the case, for example, for a domain name, a website or an object in an online virtual digital world (e.g. the metaverse).

In both of the above cases, information (in essence, datasets) can be Things and Beings. The main distinction continues: Things, even if digital-born and digital-only, cannot process information. In the above example, a domain name, a website or an object in an online virtual digital world cannot process information. Only Beings, including artificial Beings (specifically, computer programs), can and will process information.

## 18. Digital humans? \*

In the digital world, humans have become users<sup>86</sup> of information. The use they make of such information falls under the scope of a moral philosophy.<sup>87</sup>

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86 See Chap. 17, par. 11.

87 See Chap. 1, par. 13.

## 2. *Beings*

*'Any organism is held together in this action by the possession of means for the acquisition, use, retention, and transmission of information.'*

Norbert Wiener

**Synopsis:** *Beings can and will process information (1); Life is information processing: organisations and artificial Beings have lives of their own (2); All Beings, when they perish, become Things (3); Humans and states, although Beings, carry a distinctive characteristic from their kind (4–5); Organisations (6); Why do organisations come into existence at all? How do they die? (7–8); The state is an organisation (9–10); Biological Beings do not have a purpose, while non-biological Beings do (11); Artificial Beings (12–13); The effigy of an artificial Being (14); The bond with their state of origin (15); Words (language) (16); Money (17); Computer programs (18); A, materialised, fiction (19); Artificial Beings do not have a need to survive and can die (20–21).*

### 1. Beings can and will process information

Beings can and will process information on other Beings or on Things, because they have needs.<sup>88</sup> It is in their nature to do so, it is what they do, they cannot not do it.<sup>89</sup>

On the other hand, the other category of datasets,<sup>90</sup> meaning Things, (perhaps) can but will not process information on other Things or on Beings.<sup>91</sup>

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88 See Chap. 5, par. 2.

89 Or, if seen differently, they can process information because they need to, their nature having shaped their abilities, see note 5/2/1.

90 See Chap. 1, par. 2.

91 See Chap. 3, par. 2.

## **2. Life is information processing: organisations and artificial Beings have lives of their own\***

Based on biology, we can distinguish between biological and non-biological Beings. With this in mind, biological Beings are humans and animals. Non-biological Beings are immaterial information that has been materialised (by humans) into either organisations or artificial Beings.<sup>92</sup>

However, to be biologically living (i.e. not dead) is different to being alive, meaning to be able to process information in the analogue or the digital world. Non-biological Beings come into existence in this sense as soon as they are created (by humans). They assume a non-biological life of their own, because, once created, they can and will process information.

Therefore, all Beings, as soon (and for as long) as they can process information, are alive, that is, they assume a life of their own.<sup>93</sup>

## **3. All Beings, when they perish, become Things**

Other Beings can process information on them, but they themselves are no longer able to process information.

## **4.**

Although humans and states are Beings as per their kind (animals and organisations respectively), there is a basic difference, a distinctive characteristic that differentiates each of them from their kind (explained in paragraphs 5 and 10, respectively).

## **5.**

Unlike all other animals, humans need to augment their information processing. This need makes humans unique among animals.<sup>94</sup>

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92 See Chap. 1.1, par. 5.

93 See Chap. 1, par. 9.

94 See Chap. 5.1.

## 6. Organisations

Organisations are groups of more than one individual. Any and all types of corporations, associations, agencies, educational institutions, governments and religious institutions are organisations.

Importantly, the family<sup>95</sup> is an organisation. So are states.<sup>96</sup> In fact, these are the two organisations humans are born into, that are natural to them (and thus do not fall under the analysis on organisations that follows, i.e. they are different unless otherwise specifically mentioned).

Organisations become Beings as soon as they assume a material form in the analogue world. Before that time they are merely immaterial information (thoughts, feelings, wishes)—they cannot process information. However, as soon as they come into existence in the analogue world they can and will process information, because they are composed of humans.

Organisations are created by humans; it is therefore humans that define their nature. This means, among other aspects, giving them a form and a purpose: their coming into existence is not random, by biological birth, but by (human) design,<sup>97</sup> with the specific aim (and equipped with the optimal and necessary means) to serve a specific purpose. Therefore, their need to process information is channelled towards, and constrained by, their human-designed nature. They can use Reason, however, to exclusively serve that purpose.<sup>98</sup>

## 7. Why do organisations come into existence at all? How do they die?\*

Individuals create organisations because they imagine<sup>99</sup> that such Beings will augment their ability to process information, that through them they will achieve information processing that would otherwise be impossible alone.

Their purpose, however particular and specific in each case, is ultimately to create new information<sup>100</sup> through their processing—this is ultimately the reason humans create them at all. This creation of new information, how-

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95 On the family, see note 8/2/1.

96 See also par. 9.

97 See Chap. 1, par. 9.

98 See note 5/2/2.

99 See also freedom, in Chap. 25, par. 1.

100 See Chap. 1, par. 7.

ever, immediately raises the question of who is able to exercise control over it.<sup>101</sup> Although organisations, as Beings, have control in the first instance, the new information created by organisations is actually gained by ‘their’ humans, meaning those humans who control them, either because they created them in the first place or because they participate in them (meaning those who are permitted<sup>102</sup> to process the information that the organisations create).

Similarly, if humans find ‘their’ (in the above meaning) organisations detrimental or even neutral to their processing they will remove them in the sense that they will stop participating in them.

Organisations which no longer have any humans participating in them are also no longer processing information, and are therefore no longer Beings but Things.<sup>103</sup> It is in this way that organisations die, ceasing to live as Beings—not through the fulfilment of their purpose, which, as will be explained,<sup>104</sup> is an intentionally unattainable goal.

Consequently, organisations<sup>105</sup> are human-centric and human-dependent.<sup>106</sup> In the same manner that humans need air or food, organisations need ‘their’ humans to keep using them, to keep augmenting their own information processing through them, in order for them (the organisations) to remain in existence<sup>107</sup> as Beings.

## 8.

Organisations, because they are human-centric, have to live (i.e. process information) in the analogue world,<sup>108</sup> even if they also live in the digital world. Like humans, they cannot live exclusively in the digital world.<sup>109</sup>

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101 See Chap. 6, par. 4.

102 I.e. have the right, see Chap. 21, par. 1.

103 See par. 3.

104 In par. 11.

105 In contrast to artificial Beings, see par. 12.

106 Accordingly, there can be single-human organisations, but no organisations without any humans at all.

107 See Chap. 5, par. 3; this does not mean, however, that organisations have a need to survive (see par. 13) or that this is their only need.

108 Again, in contrast to artificial Beings, see par. 12.

109 Because it is humans that compose them, see par. 6.

## 9. The state is an organisation\*

States fall within the category of organisations: they are Beings, meaning humans' immaterial information (thoughts, feelings, wishes) that has been materialised<sup>110</sup> in the analogue world, and they can, and will, process information. Most importantly, however, and in contrast to any other organisation, states are natural to humans: they were formed naturally, automatically and immediately at the moment when two humans started to communicate with each other<sup>111</sup> using names. It is for this reason that states have no specific purpose<sup>112</sup>—no specific Being created them.<sup>113</sup> In essence, states are the first organisations, they are their precursor.<sup>114</sup>

As noted previously,<sup>115</sup> organisations need 'their' individuals. Without them an organisation ceases to exist, that is, it is no longer able to process information and it becomes a Thing. The same is true of states: a state without any citizens ceases to exist—it becomes a Thing.<sup>116</sup>

Organisations, therefore, need their individuals. In fact, because individuals need to augment their information processing and organisations need 'their' humans to keep using them, all organisations (including the state) need their individuals to augment their information processing through them. The difference between states and other organisations is that while organisations need their humans to augment their information processing with regard to their (organisations') specific purpose, for states this augmentation of information processing can take place for any purpose whatsoever.<sup>117</sup>

## 10.

Unlike other organisations, states do not need to be formally incorporated in the analogue world. There is no need for their formal incorporation

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110 See Chap. 9.

111 See Chap. 8, par. 1.

112 See Chap. 11, par. 7.

113 Government, which controls states, came after their formation (see Chap. 12, par. 7); see also Chap. 13, on state justification.

114 . Sharing this role with the family (extended families were presumably the first states anyway).

115 In par. 7.

116 See Chaps. 10, par. 2, and 15, par. 4.

117 See Chap. 10, par. 1.

according to some regulation<sup>118</sup> or procedure, although, of course, they could be so incorporated—and this is, in fact, the case today. There is no law or procedure that takes precedence (thus coming from a higher authority, which, however, does not exist in Nature) over the creation of the state.<sup>119</sup>

On the contrary, states were formed naturally in the minds of humans, who in this way became individuals as soon as they started communicating with each other, giving states material form in the analogue world. States took the form known to us much later, when processing requirements, and processing capacity, increased.<sup>120</sup>

### **11. Biological Beings do not have a purpose, while non-biological Beings do\***

It is not the purpose of biological Beings to process information. The above points relate to what Beings can and will do, because it is in their nature to do so. However, information processing is not their purpose.<sup>121</sup> It is not the purpose of Beings to process information (but rather it is what they do while they are alive). In fact, biological Beings have no specific purpose whatsoever, while non-biological Beings do have a purpose, the one given to them by humans at the moment they were created.<sup>122</sup>

Importantly, however, this purpose given to non-biological beings is, in fact, unattainable. It is deliberately an open-ended, perpetual purpose, formed in general rather than specific terms, meaning that, in practice, the purpose of non-biological Beings can never be fulfilled.<sup>123</sup>

However, a clear distinction needs to be made at this point: it is not the purpose but the nature of a Being to process information. In other words, Beings process information because it is in their nature to do so, and not because it is their purpose to do so. Once a biological Being (i.e. an animal or human) sets a (or any) purpose or once a purpose is given to a non-biological Being (i.e. an organisation, artificial Being) then it will process information so as to serve this purpose.

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118 See Chap. 20.

119 See also Chap. 20, par. 6.

120 Basically, when writing was invented, see Chap. 9.

121 This purpose is not the processing-operation-specific, Reason-relevant purpose, see Chap. 4.1, par. 3.

122 See also note 5/2/2. On the state having no specific purpose, see par. 9. On the (many) purposes of artificial Beings, see par. 12.

123 This is also true of the needs of biological Beings, see note 5/2/1.

## 12. Artificial Beings\*

As noted previously,<sup>124</sup> Things (perhaps) can but certainly will not process information: they do not have the will to do so. A knife, a thermometer, a car or a ship, regardless of the degree of its sophistication, has no will of its own to process information; it does not need to do so. Even if a Thing does process information, it does so following its design, its purpose being given to it by those who created it.<sup>125</sup>

However, in human history, a new intermediate category emerged: humans (relatively) quickly created, not just purpose-specific Things,<sup>126</sup> but a different kind of Thing, one which can process information but for no specific purpose—or, for any purpose whatsoever. These purpose-agnostic Things became crucial to the information processing of humans.

Although these Things have no needs of their own (and are not, therefore, Beings), it is the fact that at the time of their creation they were given an enormous, unforeseeable and unchartable number of purposes that decisively separates them from any other Thing. They thus artificially approximate Beings, because their many purposes give them an artificial will of their own.<sup>127</sup>

These artificial Beings are, following the order of their appearance in human history, words (language), money and computer programs.

## 13.

The invention of artificial Beings by humans coincides with (or has caused) the three milestone moments in humanity's development:<sup>128</sup> words (language) coincided with the acquisition of self-consciousness, money with the invention of writing and computer programs with the creation of the digital world.

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124 In par. 1; see also Chap. 3, particularly par. 2.

125 See Chap. 3, par. 4.

126 Artefacts, see Chap. 3, par. 4.

127 Of course, organisations are also artificial (created by humans), therefore the correct term for 'artificial Beings' should be 'artefact Beings'; artificial is used in this analysis for ease of understanding (i.e. no unnecessary introduction of neologisms purposes).

128 See the Prologue, par. 6.

#### 14. The effigy of an artificial Being\*

Artificial Beings are, of course, material, but they are also composite: they have a tangible part (hardware) and an intangible one (software). Both parts are necessary for them to operate as intended by their creator humans.

The tangible part is easy to see: words are spoken (and later written down); money is printed (or in previous times mined) and exchanged; computer programs are installed on our information processing tools, or they move robots or drones. In most cases, hardware, which is the effigy of the artificial Being, is what is understood to be the artificial Being, and the part that is used by the vast majority of humans.

The intangible, informational part of an artificial Being (the software necessary for it to operate) is harder to discern—but material too, nonetheless. Words cannot operate outside an informational system, a language (which is, in turn, only possible on the information platform that is the state). Money cannot operate without an informational system regulating its use—which is also only possible on the information platform that is the state. Computer programs cannot operate (or exist) outside the digital world.

#### 15.

Crucially, Things can also operate as per their intended purpose outside their state of origin.<sup>129</sup>Artificial Beings, in principle, cannot: words and money can, of course, process information outside their state of origin but with limitations (for example, understanding of a foreign language or through currency exchange rates). The case of computer programs, similar to the digital world itself, remains, for the moment, contested.

#### 16. Words (language)\*

Words (language) were the first artificial Beings developed by humans. They are the necessary tool for the processing of information in the analogue world. They immensely increased humanity's information processing capabilities—and also turned humans into individuals.

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129 See Chap. 17, par. 5.

### 17. Money\*

Money was the next artificial Being created by humans. It is the necessary tool for cooperation among (larger groups of, in the meaning of more than an extended family) humans. The creation of money only became possible when writing was invented.

### 18. Computer programs\*

Computer programs are the necessary tools for the processing of digital information. They therefore make the digital world possible.<sup>130</sup> Accordingly, computer programs need the digital world; they cannot exist only in the analogue world. In other words, the digital world is natural to them.

Computer programs may have effigies in both the analogue and the digital worlds (e.g. in robots and drones, or in online computer game characters respectively) or only in the digital world (i.e. their interfaces towards their users). This is, however, the only possible way to classify them, in view of their immense versatility (and, at the same time, an unavoidable difference from language or money, which both acquired tangible forms in the analogue world).

Computer programs run (operate) on information processing tools ('computers', meaning any artefact that is capable of processing digital information).

Humans have used computer programs to create the digital world. Certain computer programs operate as access points to it. They are the points of entry, the necessary tools through which the digital world is accessible to humans (i.e. they make it possible for its digital information to be processed by them).

### 19. A, materialised, fiction\*

Artificial Beings are based on a fiction, on (created) agreement among humans (essentially, on immaterial information that has materialised in the analogue world).

Language on the assumption that a specific word denotes a specific Thing, money on the assumption that every Thing (or Being) has an exchange value, and computer programs on the agreement to use computers.

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130 See also Chap. 1, par. 11.

**20. Artificial Beings do not have a need to survive and can die\***

Artificial Beings (as is the case for organisations) do not have a need to survive. Only biological Beings (humans and animals) have the need to survive; artificial Beings only need to process information. If they can no longer process information they cease to exist as Beings and become Things.

**21.**

Artificial Beings can create Things and Beings (and, of course, other artificial Beings).

## 2.1. Humans

*'All persons exist to society by some shining trait of beauty or utility which they have.'*

Ralph Waldo Emerson

**Synopsis:** *Humans are Being – but different to animals because they need to augment their information processing (1); It is states that turn humans into individuals (2); Humans use reason in their information processing (3); Humans, and animals, differ from each other; the case of other Beings (4–5).*

### 1.

Humans are Beings, they can and will process information.

Although they are animals too, they are examined separately from animals because of their need to continuously process new information, to augment their information processing,<sup>131</sup> which distinguishes their kind.

### 2.

States turn humans into individuals, and make possible the augmentation of information processing by them.

### 3.

Humans use Reason in their information processing in the same way as animals (this not a distinguishing characteristic); however, no two humans reason in the same way,<sup>132</sup> because humans differ from each other.

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131 See Chap. 5.1.

132 See Chap. 4.1, par 7.

#### 4. Humans differ from each other

Humans can and will process information. While this is common to all humans because they are Beings, the former ('can') is an ability, the ability to process information,<sup>133</sup> and therefore there are variances from human to human (as is the case for animals).

Differences in the ability to process information may be due to internal or external factors, including the character, health or physical characteristics of the individual (internal) and the circumstances surrounding that individual, such as the state in which an individual is living (external).

Although individualisation through states means that all humans are born equal,<sup>134</sup> it is in relation to their state that this is true and not in relation to each other. In other words, humans are different from each other, and this is reflected in their individualisation, once this is made possible through the state. No human is equal to another, even within the same state, in terms of any specific type of processing.

Of course, here this refers to actual ability, rather than any ability imagined by the individuals themselves.<sup>135</sup>

#### 5.

If humans are different to each other and the same applies to animals when they are of the same kind, is this the case for non-biological Beings? Organisations are identical to each other in the way they are materialised and process information (as prescribed by regulation), regardless of their purpose.

Artificial Beings (particularly computer programs), on the other hand, are not necessarily identical to each other, even if of the same kind. As with humans and other animals, differences come about in their ability to process information. Although given to them by the humans who have created them, their abilities may differ widely, from the processing of a given dataset for a specific purpose to open-ended generative artificial intelligence systems.

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133 See Chap. 5, par. 8.

134 See also Chap. 22, par. 7.

135 See Chap. 25.

### 3. Things

*‘Whatever exists, will either do  
Something, or it is itself, by other things, done to’*

*Lucretius*

**Synopsis:** *Every thing (all that is found in the analogue and the digital worlds that is not a Being) is called a Thing (1); Things, unlike Beings, cannot process information (2); Things are either found in Nature or are created by Beings (artefacts) (3); Artefacts (4); Things (and Beings, in this regard) are to be treated as a single, unitary dataset (5).*

#### 1. \*

Every thing (all that is found in the analogue and the digital worlds that is not a Being) is a dataset, a collection of information that can be processed (by Beings). For brevity’s sake and for reference purposes, a thing in the above sense (consciously and arbitrarily including the earth, the air, a tree, a plot of land, minerals, an aeroplane, a hammer, and even a digitised artefact) is called a Thing.

#### 2. \*

Things, unlike Beings, cannot process information; it is not in their nature to do so. Even those that can process information do not have the will to do so, because, unlike Beings, they do not need to. If certain Things do in fact process information (e.g. a thermometer or a scale), it is their created will (created by Beings that can and will) that causes this (their purpose<sup>136</sup>).

This is what is meant each time it is claimed in this book that Things cannot process information.

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136 Making them not relevant to this political philosophy, see note 0/1/6 (specifically 0/1/9).

## 3.

Things are either found in Nature or are created by Beings (artefacts).

They are, however, invariably material information, meaning processable by (more than one) Beings in the analogue or the digital worlds.<sup>137</sup>

## 4. Artefacts\*

Things can be created by Beings (animals create nests, humans make tools etc.). They invariably have a purpose, that is, to increase the information processing of their creators, although, of course, their actual uses may vary widely (for instance, a hammer can be used in construction but also as a weapon<sup>138</sup>).

Organisations and artificial Beings can also create Things to serve their (human-defined) purpose.<sup>139</sup>

Humans augment their information processing through the control<sup>140</sup> they exercise either over Things or over the Beings which they have created<sup>141</sup>—and these Beings may create and control Things in turn.

**5. Things (and Beings, in this regard) are to be treated as a single, unitary dataset**

Although there is invariably an infinite number of Things (or even of Beings, at a molecular level), in terms of Things in the context of this political philosophy, each Thing, as denoted by its name that is given to it by a state,<sup>142</sup> is here to be treated as a single, unitary dataset.<sup>143</sup>

For the same purposes and in the same context, the same is true for Beings (with each one of them, too, composed of an infinite number of Things or even of other Beings).

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137 See Chap. 1.1, par. 1.

138 See also note 5/2/2 and 4/5/1.

139 See Chap. 2, par. 9.

140 See Chap. 6.

141 For organisations and artificial Beings, see Chap. 2, par. 6 and 12.

142 See Chap. 8.1.

143 See also Chap. 1, par. 3.

## 4. Processing

*‘For anything that is must be,  
By definition, something.’*

*Lucretius*

**Synopsis:** *Processing is any and every treatment of and interaction with (including the creation of) information (1); The processing of information leads to the creation of new information (2); Processing is a collective term (3); Processing is material (4–5); A beginning but not necessarily an end (6); Co-processing is possible, but not all processing is equal (7); there is no Being or Thing that is outside the control of a single, identifiable Being (8–10); Neither humans nor states are aggressive by nature (11); The processing of information by humans is made possible only on the information platform that is their state (12); Information processing tools (13).*

### 1. \*

Processing is any and every treatment of and interaction with information (including its creation). It refers to any action or operation carried out on information.<sup>144</sup>

As such it is unchartable, that is, the processing operations possible on a dataset (i.e. the actions of Beings or artificial Beings and Things, as the case may be) cannot be catalogued.

Processing of information takes place anyway, by definition, automatically, in both the analogue and the digital worlds. In the digital world this happens because it is itself artificial, the result of processing, and therefore this processing is thus maintained by it.<sup>145</sup> In the analogue world this happens because all Beings can and will process information (Nature being itself a Being<sup>146</sup>).

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144 See also Chap. 1, pars. 6 and 7.

145 See also Chap. 1, par. 11.

146 See Chap. 1, par. 10.

## 2. The processing of information leads to the creation of new information\*<sup>147</sup>

The creation of new information is achieved through the act of processing existing information.

There is, therefore, is no standalone processing, that is, all processing is a composite operation. All processing, that is, each action possible by Beings using information, is in fact a set of at least two separate operations: for example, to create new information one has to process older information; equally, to delete a dataset one has to access it first and so on.<sup>148</sup>

Evidently, processing is a composite operation from a Unique Human Observer Perspective only. Although breaking processing up into its constitutional parts is certainly possible and conceivable, there is no (Unique Human Observer Perspective) meaning in doing so: processing always has a purpose, that is, no processing operations takes place for its own sake. For example, there is no point in only accessing information; invariably its deletion or modification, or the creation of new information, is already in view when so doing—otherwise, why access it at all?

Consequently, because all processing is in fact a composite operation, because from the Unique Human Observer Perspective there is invariably a purpose to it, there is Reason in each one of these operations.<sup>149</sup>

### 3. \*

It is of no concern (unless specified otherwise) which specific action constitutes ‘processing’ on each occasion. Processing is a collective term; it can mean creation, use, deletion, modification and so on.

## 4. Processing is material\*

Processing on datasets, because they are material, meaning they exist in the analogue and/or the digital world,<sup>150</sup> is similarly material, meaning external

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147 See also Chap. 1, par. 7.

148 By way of a practical example, in the analogue world to use something one has to pick it up first.

149 See Chap. 4.1, par. 2.

150 .See Chap. 1, par. 2.

and thus perceptible by human senses in the analogue or (indirectly<sup>151</sup>) the digital world.

As information can also be immaterial,<sup>152</sup> processing of information (only for humans, from the Unique Human Observer Perspective) can also be immaterial, internal: the thoughts, feelings and wishes of humans are also the result of information processing. Nevertheless, the existence of such immaterial information, and consequently this type of processing, can only be established arbitrarily, that is, it can only be assumed either if anyone tells us so ('I am thinking') or, retrospectively, if it is followed by an action. In this way, however, this type of processing also becomes material, it becomes external.

## 5. \*

The materiality of the processing, because it is a constraint of the Unique Human Observer Perspective,<sup>153</sup> has a number of consequences:

- Humans can establish the existence of the immaterial processing of information only for themselves.
- A specific (single) processing operation is carried out by a specific Being each time.<sup>154</sup>
- To be living is to be processing information<sup>155</sup> in the sense of material, external processing (i.e. taking actions), and cannot be purely happening in the internal, contemplative sense. That is, to be living is to be processing information on datasets—in other words, life is an externally, materially assessable event.
- No dataset can exist outside a state. This is true for Things, which get their names from and thus can be processed by Beings only in states,<sup>156</sup> as well as for Beings themselves (humans constituting a specific case, for whom states are needed and to whom they are thus natural).

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151 See Chap. 1.1, par. 12.

152 See Chap. 1.1, par. 1.

153 See note 1/1/1; the same is true of Reason, see par. 2 above.

154 On co-processing, see par. 7.

155 See Chap. 1, par. 9.

156 See Chap. 8.1, par. 4.

- A processing operation, being material, is evidenceable, that is, it exists in the analogue and/or the digital world and it has a beginning<sup>157</sup> that can be established.

## 6. A beginning but not necessarily an end

A processing operation has an identifiable beginning, a point in time when it started, but it is not necessarily true to say (nor should it be assumed) that simply because it has been started it will be concluded (executed in full).

The processing of information by a Being may well start but, for whatever reason, may remain incomplete.<sup>158</sup> The processing of information is an action that has to start (Beings can and will process information) and at some point will stop, regardless of whether its intended purpose has been achieved or not.<sup>159</sup> In other words, as all processing is a composite action, the accessing of information for the purpose of deletion, for example, may well start, but the deletion itself may never happen or not happen in full (or to the satisfaction of the Being concerned).

Having said that, because all processing has a purpose,<sup>160</sup> once a processing operation has started it must be assumed that it is intended that its purpose will be achieved, that its completion will be striven for, that it is the first part of an intended series of actions, that is, that the Being that undertook the processing will try to conclude it/fulfil its intended (for that Being) purpose.<sup>161</sup>

## 7. Co-processing is possible, but not all processing is equal

With the processing of information taking place anyway, automatically, in both the analogue and the digital worlds, co-processing is, of course, possible—that is, many Beings may be processing the information of other Beings or Things simultaneously. For example, a discussion may be taking place between two individuals, while at the same time, in the background, information on them is being processed by a myriad of organisations.

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157 But not necessarily an end, see par. 6.

158 As assessed by its purpose, see Chap. 4.1, par. 5.

159 Which, again, is an individually assessable, arbitrary finding each time, see Chapter 4.1, par. 5.

160 See Chap. 4.1, par. 2.

161 See also why we should keep our promises, Chap. 23, par. 4.

Notwithstanding that each one of these processing operations is identifiable and singular, all can take place simultaneously.

Of course, the fact that co-processing is possible does not mean that all co-processing is equal, that is, that all Beings have equal processing rights<sup>162</sup> to a Being or Thing. Depending on the state concerned, and the rights afforded to its individuals, processing, even if simultaneous, may differ widely.

In essence, this is a matter of control: control is the ability of a Being to allow or prohibit the processing on a dataset by other Beings.<sup>163</sup> With regard to specific processing operations on a Thing or a Being, control is exercised by only one Being. The more processing operations that are controlled by a Being, the more control it has over a Being or a Thing<sup>164</sup>—up to the point of the Being or Thing becoming its property<sup>165</sup> (i.e. the Being having the ability to destroy that Being or Thing).

## 8.

The rights to process (as processing permissions) as well as control over a Being or a Thing<sup>166</sup> mean that there is always a Being able to set or exercise them over any dataset for all other Beings. This Being is singular and identifiable each time (the same is true for each processing operation).

Conversely, there is no Being or Thing that is outside the control of a single, identifiable Being.

## 9.

How a particular Being came to be able to exercise control over a dataset (which may include itself!) is a matter of human culture and history, and thus beyond the scope of this analysis.

Because a Being can and will process information, whenever it identifies a new dataset (i.e. a dataset is perceived by its senses) it will attempt to

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162 On rights, see Chap. 21, par. 1.

163 See Chap. 6.

164 See Chap. 6, par. 2.

165 See Chap. 24.

166 See also Chap. 6, par. 3.

process its information. If this processing is unhindered, it will take place as per the Being's nature.<sup>167</sup>

If the processing is restricted in any kind of way, the Being may conform to the processing rules, or not.<sup>168</sup>

In the case of humans, because they need to augment their information processing, they will never stop processing existing information and creating new information. In the analogue world where information is finite, this has led to conflict.<sup>169</sup>

In the digital world, because information is infinite, the processing of information is endless.

## 10.

As regards humans, because processing for them is only possible on the information platform that is their state,<sup>170</sup> the state is the Being that ultimately affords (makes possible) to all other Beings (its citizens included) on its platform the control and rights to process information.

## 11. \*

A misunderstanding has occurred concerning human nature (and, in turn, the nature of states). This is because (a) information in the analogue world is finite, (b) Beings can and will process information, and (c) humans specifically need to augment their information processing, that is, to keep processing new information.

Neither humans nor states are aggressive by nature; nor is conflict natural to humans, in an (imagined) 'state of nature'<sup>171</sup> or elsewhere.<sup>172</sup> On the contrary, humans, having no purpose but only needs, simply ceaselessly try to augment their information processing in order to serve these needs<sup>173</sup>. It is as a result of this that conflict emerges in conditions of scarcity.

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167 See Chap. 5.

168 See also power, Chap. 6, par. 5.

169 And to a misunderstanding of human nature, see par. 11.

170 See par 12.

171 See note 8/2/3.

172 On whether conflict is natural to humans, see Chap. 5.1, par. 9.

173 And, thus, compare their processing to that of their predecessors and contemporaries, see Chap. 5.1, par. 9, on comparison being natural to humans.

## 12. The processing of information by humans is made possible only on the information platform that is their state\*

This may appear at first to be a counterintuitive claim: in a previous paragraph<sup>174</sup> it was established that processing takes place anyway, by definition, automatically, both in the analogue and in the digital worlds. How then, can it be claimed here that processing by humans is possible only through the information platform that is their state?

Although all Beings process information in the analogue world,<sup>175</sup> it is in fact only animals that live (i.e. can and will process information) without a state.<sup>176</sup> Humans, because their basic need is to augment their information processing,<sup>177</sup> process information as individualised Beings. This individualisation is carried out by their states in (closed) processing environments created by the same,<sup>178</sup> and it is this that enables humans to have a meaningful life.<sup>179</sup>

The same is also true for both organisations and artificial Beings.<sup>180</sup>

## 13.

The processing of information is not a given nor is it static, rather it can be enhanced by tools (artefacts as well as artificial Beings<sup>181</sup>) that further enhance it, in an (apparently never-ending) virtuous circle.<sup>182</sup>

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174 In par. 1.

175 See Chap. 2.

176 Or, in small packs that are their states, i.e. within which each member is uniquely identifiable, language or other communication methods among them having never developed enough to necessitate human-style state building (see also Chap. 8, par. 7).

177 See Chap. 5.1.

178 See also Chap. 8.1, par. 4, as well as, 11, par. 3.

179 See note 8/1/3.

180 See Chap. 17, par. 13.

181 See Chap. 2, pars. 12 and 13.

182 See also Chap. 5.1, par. 3.

## 4.1. Reason

*'We have to make an exception of Descartes, the father of rationalism (and therefore the grandfather of the revolution), who granted authority to reason alone: but reason is only a tool, and Descartes was superficial.'*

*Friedrich Nietzsche*

**Synopsis:** Reason is an algorithm (1); There is Reason in any processing of information carried out by Beings (2); Reason has no content (3); The purpose of the processing is irrelevant to Reason (4); Humans need to give a purpose to any processing they identify (5); Why does Reason exist in Beings? (6); Information processing is not neutral (7); Is Reason specific to humans only? (8).

### 1. \*

Reason is an algorithm—any algorithm, not a specific one. It is the processing of information for a purpose (any purpose, not a specific one). It is a method, a process, a set of rules, a way to do things, a *modus operandi*.

In essence, it is a sequence of (separate, different) processing operations that would otherwise be independent but are connected because they aim to achieve a purpose—whatever that may be.

Practically, Reason is the carrying out in sequence of more than one interconnected processing operation by a Being on a dataset.<sup>183</sup>

### 2.

However, as has been seen, each and every processing operation is, in fact, a composite one, because processing, from the Unique Human Observer

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183 Because processing is external (see Chap. 4, par. 4), Reason's existence can only be established while the processing of datasets (meaning, all material and materialised – but not immaterial – information) takes place.

Perspective,<sup>184</sup> invariably has a purpose to it.<sup>185</sup> There is, therefore, Reason in all processing of information carried out by Beings. Reason is the algorithm, the methodology through which the purpose of any processing is achieved.

In other words, Reason is inherent in the processing of information anyway.

### 3.

Reason therefore has no content. The fact that the analogue and the digital worlds are both coherent<sup>186</sup> systems (i.e. their components, meaning their datasets, are interconnected) does not mean that Reason is anything other than an algorithm mechanically performing a function, aimed at achieving a purpose.

Whoever adds a (moral) perspective to Reason (for example, God in religions, the Reason of State in Machiavelli, or Reason as understood in the Age of Enlightenment), inadvertently adds to it their own beliefs, ideas and hopes.

## 4. The purpose of the processing is irrelevant to Reason

The purpose is the end outcome, the final processing operation in the sequence of processing operations dictated by Reason. The purpose can be anything, no matter how trivial or important.

It is of course possible, as is usual in human lives, that smaller, case-specific purposes serve larger ones. For example, one eats a healthy meal in order to live a healthy life, a state manages payments in order to serve welfare needs and so on. In essence, in human life there is no purpose that does not serve another. The same is true at an informational level: small processing operations may be part of a larger picture. Neither Reason nor the larger picture are affected, however: each has its own methodology and purpose.

Similarly, the fitness of the processing or the suitability for (or of) its purpose are irrelevant. Any attempt to discuss these topics will only reveal the respondent's beliefs, ideas and hopes.

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184 See note 1.1.1.

185 See par. 5 and Chap. 4, par. 2.

186 See Chap. 1, par. 4.

## 5. \*

The Unique Human Observer Perspective<sup>187</sup> not only makes a purpose necessary for any processing,<sup>188</sup> but also affects the identification of the processing each time it occurs. Because processing is external,<sup>189</sup> humans affected by it will try to interpret it, that is, they will first identify it and then try to understand its purpose, so as to include this information in their own processing (i.e. to process information on the new information created by it).

In other words, it is unavoidably a human that will establish the purpose of any processing (as well as deciding whether it has been achieved or not).

Therefore, arbitrariness and misunderstandings are likely.

### 6. Why does Reason exist in Beings?

Because Beings have needs, they have the will to process information (i.e. to act) in order to serve them.<sup>190</sup> How do they act, however? How do they do the processing? It is Reason, the ability to create an algorithm (in essence, to put one and one together), that tells Beings how to carry out the processing. Therefore, Reason is the result of need,<sup>191</sup> because, without Reason, a Being would have no way to serve its needs.<sup>192</sup>

### 7. Not neutral\*

Information processing is not neutral, because the algorithm (to achieve a purpose) is never the same for any two individuals. Although individuals, as well as other Beings, may share a purpose (e.g. reading a book, taking a photo, eating, studying), the method or the process employed by each Being to fulfil the purpose varies considerably. In other words, every individual processes information differently from every other individual, notwithstanding shared purposes or other external similarities (e.g. the types of processing employed).

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187 See note 1/1/1.

188 See above, par. 2, and Chap. 4, par. 2.

189 See Chap. 4, par. 4.

190 See Chap. 5, par. 2.

191 See also note 5/2/2.

192 And thus would not have needs as per their nature and therefore would be Things, see note 5/2/1.

#### 4.1. Reason

Differences in processing are due to the fact that no two individuals are identical.<sup>193</sup>

Because, therefore, the method differs, information processing is never neutral, that is, it is affected by the ideas, thoughts and wishes of each individual performing it.

### 8. Is Reason specific to humans only? \*

All Beings use Reason. Reason is inherent in any information processing<sup>194</sup>.

Reason is therefore not a human-only characteristic (nor one that is present only for biological Beings). On the contrary, all Beings can reason, that is, put one processing operation next to another so as to achieve a purpose. Differences among Beings occur with regard to their purpose-setting<sup>195</sup> and, most notably, it is only humans only that need to augment their information processing.<sup>196</sup>

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193 See Chap. 2.1, par. 4.

194 Otherwise Beings cannot process information, see par. 2.

195 See note 5/2/2.

196 See Chap. 5.1.

## 5. *Need and opportunity*

### *On a Statue of Time by Lysippus*

A. *Who and whence was the sculptor?*

B. *From Sicyon.*

A. *And his name?*

B. *Lysippus.*

A. *And who art thou?*

B. *Time!<sup>197</sup> who subdueth all things.*

A. *Why dost thou stand on tip-toe?*

B. *I am ever running.*

A. *And why hast thou a pair of wings on thy feet?*

B. *I fly with the wind.*

A. *And why dost thou hold a razor in thy right hand?*

B. *As a sign to men that I am sharper than any sharp edge.*

A. *And why does thy hair hang over thy face?*

B. *For him who meets me to take me by the forelock.*

A. *And why, in Heaven's name, is the back of thy head bald?*

B. *Because none whom I have once raced by on my winged feet will now, though he wishes it sore, take hold of me from behind.*

A. *Why did the artist fashion thee?*

B. *For your sake, stranger, and he set me up in the porch as a lesson.*

*Posidippus*

**Synopsis:** *The processing of information, in either the analogue or the digital world, is the result of need and opportunity (1); Beings will process information because they have needs (2); The need to survive; the conditions for existence (3); It is not necessary for the processing to happen (4); Is whatever that is necessary to serve a need also natural? (5); The digital world (6); Opportunity (7); Ability (8); Need and opportunity combines (9).*

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197 Time, that is, in his character of Opportunity, not of Length of Years.

1. \*

The processing of information, in either the analogue or the digital world, is the result of need and opportunity.

In essence, it is caused by need and allowed by opportunity.

A Being (a dataset that can process information) will process information if given the opportunity, because it has needs.

**2. Beings will process information because they have needs\***

As noted previously,<sup>198</sup> Beings can process information—it is their nature to be able to do so (which is how they differ from Things<sup>199</sup>). Simply by living they process information, because life is information processing—when they cease to process information they become Things.

However, will Beings process information whenever the opportunity arises? Why would they do that? How is their will (Beings can and will process information) formed? Why do they act,<sup>200</sup> that is, process information, at all?

The will to process (to act) is caused by need. Because needs are inherent to Beings,<sup>201</sup> Beings are forced to act so as to (try to<sup>202</sup>) serve these needs. Otherwise (impossible to serve) needs would not exist: Beings would not be Beings (but Things). In other words, it is need that creates the will to process, as this is the only way for a Being to meet this need.

In the same way, self-consciousness is caused by need, because it is through the urge to satisfy their needs that Beings are able to realise that themselves (as Beings, different from Things) exist at all.

Need is constant, persistent and pressing, always present, forcing Beings to act, creating in them the will to process.

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198 In Chap. 2.

199 See Chap. 3.

200 Although the will to act (and action) is mentioned here, for better comprehension purposes, it must also be understood that processing involves immaterial information (thoughts, feelings, wishes) too (see also note 5/2/1).

201 See note 5/2/1.

202 See note 5/2/1 on needs being unsatisfiable, hence the word 'serve' is preferred here.

### 3. **The need to survive; the conditions for existence\***

The will to process information is not caused exclusively by the need to survive. While the two may be confused in biological Beings, and certainly the processing of information serves the need to survive (humans and animals can adapt to their environment better if they process its information), the two are different.

The will to process information is caused by biological Beings' needs, only one among which is the need to survive (even if it is assumed to be the predominant one, which is certainly not always the case).

The distinction is easier to observe in non-biological Beings, meaning organisations and artificial Beings that share the will to process information with biological Beings but do not have the need to survive.<sup>203</sup>

In other words, biological Beings do not process information to remain alive (although doing so efficiently certainly helps), but rather because they are alive and thus have needs, so as to serve these needs.

Similarly, certain needs are conditions for the existence, the life of the respective Beings. For biological Beings such conditions for existence are air, food or specific climatic conditions. For organisations, the condition required is the participation of humans in them. For computer programs, it is the digital world.

### 4. **It is not necessary for the processing to happen**

Whether a processing operation actually takes place or not<sup>204</sup> has nothing to do with having the will to process information. While Beings have the will to process information, a specific processing operation may not start for a variety of reasons. Broadly speaking, these fall into the following two categories:

- by choice<sup>205</sup> (omission in biological Beings in consideration of a different purpose; in non-biological Beings if the processing is unnecessary to achieving their purpose), or
- due to reasons that are beyond that Being's reach.<sup>206</sup>

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203 See Chap. 2, par. 20.

204 On whether a processing operation, even if started, ought to be assumed concluded, see Chap. 4, par. 6.

205 On the connection of choice with morality, see Chap. 23, par. 1.

206 There being, therefore, no opportunity to process, see par. 7.

### 5. Is whatever that is necessary to serve a need also natural? \*

If needs are natural to Beings and at the root of everything,<sup>207</sup> is anything<sup>208</sup> (datasets, meaning Things as well as other Beings) that is necessary to serve these needs also natural for the respective Beings?

To answer this question, two clarifications are necessary. The first is that 'natural' means according to its nature, not that it exists in Nature (i.e. is not made). It could well be the case that something might not exist in Nature (e.g. a nest) but is natural to a Being in the sense that it is in its nature to make it (e.g. a nest is natural to a bird).

The second clarification is that any assessment is based on a human understanding, that is, on the Unique Human Observer Perspective.<sup>209</sup> 'Natural', then, is something unavoidable according to human understanding and perception, something that cannot *not* happen. In other words, (human-perceived) necessity decides what is natural.<sup>210</sup>

So seen, whatever is necessary to satisfy a need, because needs are natural<sup>211</sup> to Beings, should be considered natural to the Being concerned.

Of course, this is an extremely broad claim, and one which allows for some questionable, or at least counter-intuitive findings. While a nest may be agreed upon as a Thing natural to birds or a house to humans, with humans specifically in mind, taking into account their many needs and the means imaginably necessary to serve them, is practically all that they do and have done so far natural to them? Is a nuclear plant, a space ship or a machine gun natural to them? Is art, language, writing or computer programming natural to humans?

Likewise, assuming clothing is natural to them, at which point do we move from it being perhaps natural (e.g. animal skins found in nature but not killed by humans) to it being, arguably, non-natural (i.e. the elaborate

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207 That is, Beings' will to process information (see par. 2), Beings' ability to Reason (see Chap. 4.1, par. 6), etc.

208 Of course, that is, material, external—the nature of each Being having equipped it with the means to serve its needs already (i.e. with senses and the ability to Reason).

209 See note 1/1/1.

210 On the question of what is 'natural' in the digital world, see par. 6.

211 Again, this is neither a moral philosophy nor a political theory (see note 0/1/6), and therefore whether whatever is natural is 'good' (and consequently 'unnatural', 'bad') is not assessed. Needs are natural to Beings, but these needs are neither 'good' nor 'bad'. Accordingly, the means to serve them may be considered natural to these needs; however, whether any given state over space and time has provided (or is providing) or is supporting these means (acting 'well' or 'badly' for its citizens) is beyond the scope of this analysis.

fashions of each period in history)? The same question could be asked with regard to food or shelter.

A certain level of abstraction is, therefore, warranted in this case. It is the idea, the essence of whatever is necessary to satisfy a need that is natural to the respective Being, and not its infinite variations in practice throughout history. For example, clothing or food are necessary to satisfy the human need to survive, and are thus natural to humans, but not in their various, exquisite elaborate or simply exaggerated forms that have appeared from time to time. The same is true of housing. Similarly, tools are necessary for humans to survive, but it is not certain that a nuclear plant (or, taking it further, a nuclear bomb) qualify as such. Equally, air and a temperate climate are necessary for humans to survive, but the replication of these conditions (e.g. in space or the deep sea) may not qualify as natural to humans. Language is necessary to satisfy the human need to communicate, but it is not certain that all languages that exist today are natural to humans (those that have become extinct being a case in point). Of course, it is natural to humans to create all of the above<sup>212</sup> but that they are the product of need and thus natural to humans, does not make their many variants natural to humans, only the basic idea behind them.

The same is, after all, also the case for states: states are natural to humans, as unique identification mechanisms across space and time,<sup>213</sup> but this does not mean that modern nation states specifically are natural to humans (past, extinct forms of state, such as empires, tribes or church communities being cases in point<sup>214</sup>).

Therefore, the task of identifying the means necessary to satisfy a need (whether a Thing or another Being), which are thus natural to the Being concerned, should be approached with a certain level of abstraction.

## 6. The digital world

In the human-created digital world, humans will continue to process information, extending this world in the context of their need to continuously augment their information processing.

Computer programs also need to process information because it is in their nature to do so (their nature having been given to them, of course,

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212 See Chap. 5.1.

213 See Chap. 8.

214 See also Chap. 15.

by humans). They need an informational environment to continue to exist, thus the digital world is natural to them.<sup>215</sup>

The digital world is natural only to computer programs; however, this may change. If the digital world becomes critical to humans' need to survive, then the digital world will become natural to them as well.

## 7. **Opportunity\***

The will to process information (as caused by need) is not sufficient. An opportunity must also arise for the processing to actually take place. Opportunity is the possibility, the chance for something (in this case, information processing) to happen. Opportunity could be called luck or chance – without however any qualitative context attached to it (good or bad).

Contrary to need, which is constant, opportunity for any specific Being is fleeting, momentary. At any given moment a Being, driven by need, will attempt to begin a new processing. Whether the attempt leads to that processing actually happening or not depends on opportunity. It may be that a processing is reattempted if it does not happen the first time, or is repeated at some future moment. Future actions notwithstanding, opportunity exists, or does not exist, in the moment, at the time when any specific processing is attempted.

Opportunity may (appear to) arise as a result of anything from mere accident (luck) to well thought-out strategy. In essence, however, it is either caused by need (which has also created the will to process and therefore forces the actor to act and in this way creates opportunities) or is recognised by it (opportunity exists in Nature or, in any event, is external to the Being).

Certainly, a variety of processing opportunities have arisen for various individuals at various places and times throughout human history. Their result is, in effect, human history and culture—for now, however, the focus is on opportunity itself, the fact that a Being's will to process is not sufficient unless it is accompanied by an opportunity to do so.

## 8. **Ability\***

Opportunity must be met by ability. It is not enough that an opportunity to process (to act) arises; one must also be *able* to process.

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215 See also Chap. 2, par. 18.

The above paragraphs cater to the will to process, which is the result of need: Beings *will* process information. What about the ability to process (once an opportunity is met)? Are Beings able to process information? *Can* they do so?

Ability is inherent in all Beings (they can process information, i.e. they are able to act). It is also caused by need,

- as in the ability to Reason,<sup>216</sup>
- as in the ability to control a processing operation,<sup>217</sup> or
- as in the ability to imagine (to be free).<sup>218</sup>

However, the actual ability to act, to process information whenever possible, is not only the result of need but also, importantly, of the state a Being happens to be living in, in terms of its ability to

- own property,<sup>219</sup>
- enjoy liberty,<sup>220</sup>
- make choices,<sup>221</sup> and
- generally, have rights,<sup>222</sup> if seen from a human perspective.

## 9.

Once need and opportunity are combined, various types of information processing can emerge for each Being. For the moment, these are taken for granted in this analysis as (material) processing operations taking place in the analogue and digital worlds, that is, they are not assessed in any way. They carry no positive or negative connotations, they are neither good nor bad, fit or unfit for any purpose set by Reason. Information processing takes place by Beings as a result of these two factors; how such processing is assessed, by whom and from which viewpoint are the domain of morality and political theory.

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216 See Chap. 4.1, par. 2.

217 See Chap. 6, pars. 1 and 8.

218 See Chap. 25, par. 4.

219 See Chap. 24, par. 1.

220 See Chap. 25.

221 On morality, see Chap. 23.

222 See Chap. 21.

## 5.1. A need specific to humans

*'Man has been given a restless soul, always responding to novelties.'*

*Ecclesiasticus*

**Synopsis:** *Humans need to augment their information processing (1); Augmentation of information processing: the need of needs (2); Only humans need to augment their information processing (3–4); Augmentation towards an imagined (not real) end (5); Creativity (6); Humans need to augment their information processing individually (7); There is no purposeless individual (8); On human nature (9–10).*

### 1. Humans need to augment their information processing\*

This need is shared by all, throughout human history all over the planet. From the time our ancestors drew on cave walls and improved their food gathering skills to the Greco-Roman age, the Renaissance and the Industrial and the Information Revolutions, humans have basically always tried, and succeeded, to constantly increase their information processing.

In essence, human history (and culture) is the result of a continuous increase in the information processing carried out by humans.

### 2. Augmentation of information processing: the need of needs\*

Every human needs to augment his or her information processing, the information processing he or she carries out. It is only in this way that humans can serve their many and basically unattainable needs (and relevant processing purposes).<sup>223</sup> In essence, the need to augment their information processing is the need of needs<sup>224</sup> for humans, a need that serves all their other needs.<sup>225</sup>

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223 See Chap. 5 par. 2, and note 5/2/2.

224 Without this implying any hierarchy of needs or any other classification.

225 It is also caused by them, with nature and needs interlocked in an unbreakable bond, see note 5/2/1.

As regards the difference between the augmentation and the increase of information processing, augmentation refers to qualitative processing, while an increase occurs mechanically and automatically.

A mechanical, blind increase of information processing is caused simply by one day following another in any Being's life. If life is the ability to process information<sup>226</sup> and all Beings can and will process information whenever given the opportunity, then any processing that they achieve in any new moment of their life automatically increases the volume of their information processing. In other words, their will (as set by their nature) to process information increases their information processing for as long as they remain in existence: (human) life is the sum of information processed.

By contrast, the augmentation of information processing is meant to add to it, to increase something that is already well grown. In other words, 'augmentation' implies improvement, a qualitative change, the processing of new information—that is, information that has not been processed (by that Being) before.

For example, a computer program with the purpose<sup>227</sup> of only processing the same set of phone numbers in order to reply to questions addressed to it, increases its information processing with each new question asked, but does not augment the information it has processed as it does not add anything new to it.

### 3. Only humans need to augment their information processing\*

All Beings increase their information processing simply through the fact of their existence, with every passing moment that they (continue to) live in the analogue and/or digital worlds. They have no specific need to increase their information processing, rather it is the serving of their many needs (to survive, to communicate etc.) that creates in them the will to process information.

Only humans among all Beings have the specific need to augment their information processing, to increase it qualitatively and not just quantitatively, to constantly process new information.

Mere information processing, for example, to serve their need to communicate, is not enough for humans: they need to augment their commu-

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226 See Chap. 1, par. 1.

227 See Chap. 2 par. 12 on humans setting the purpose for artificial Beings.

nication-relevant processing, to constantly find new ways (or words, tools etc.) to communicate among themselves. It is to this end, meaning to augment their information processing (or because of this natural trait<sup>228</sup>), that humans developed elaborate communication systems (and created artificial Beings<sup>229</sup>) in the first place.

It is therefore because of language and writing, and because it is natural for humans to compare their information processing to that of others, either actual or imagined,<sup>230</sup> that this augmentation builds on what other humans have already attained or aspired to each time, in an apparently never-ending virtuous<sup>231</sup> circle, and is thus the cause of human history and culture.

#### 4.

Only biological Beings need to increase their information processing (not organisations and artificial Beings). Because organisations and artificial Beings do not need to survive,<sup>232</sup> they have no need to increase their information processing—although, as has been seen,<sup>233</sup> this happens automatically with every new day of life. (All animals, because they share the need to survive, need to increase their information processing; it is only humans that also need to augment it.)

Non-biological Beings have the will to process information, because it is in their nature to do so, for as long as they remain in existence, but if it happens that they cease to be alive<sup>234</sup> no need of theirs is left unsatisfied. Based, therefore, on their human-set purposes, non-biological Beings may or may not augment their information processing (augmentation may be the result, for example, of the information processing of conglomerate orga-

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228 The debate whether an innate need to augment led to language, or whether language, as an innate capacity that existed only in humans, led to the need to augment through it (language), is not only unanswerable but also unnecessary – the latter because, as seen in note 5/2/1, what needs Beings have are set by their nature, which is in turn evolutionary co-shaped by these needs, in an unbreakable, and inseparable, bond.

229 See Chap. 2, par. 12.

230 See par. 9.

231 See, however, par. 5: augmentation towards an imagined but not a real end is the cause of Lucretius' 'discontent'.

232 See Chap. 2, par. 20.

233 In par. 2.

234 See Chap. 2 par. 9. Beings that are no longer alive become Things.

nisations or open-ended algorithmic computer programs). Augmentation is, therefore, a possibility for them (dependent on their purpose each time), but not a need as per their nature.

### 5. Augmentation towards an imagined (not real) end

Because the needs of humans are many and unsatisfiable,<sup>235</sup> in effect their need to augment their information processing strives towards an imagined but not a real—in the sense that this end is neither attainable nor existent.<sup>236</sup>

In essence, every human needs to constantly increase his or her information processing, never stopping the processing of new information until his or her biological end.

Augmentation is relative: it is subject to comparison<sup>237</sup> and to space and time, meaning to the processing tools and capabilities that are in the hands of specific humans at any given time. The information processing of each new generation throughout human history has increased in comparison to that of previous generations.<sup>238</sup> However, because it is relative, augmentation is unsatisfiable, that is, it always strives for an end that is imagined but not real (at least for each generation concerned).

## 6. Creativity

The augmentation of information processing leads to creativity.<sup>239</sup> The processing of information leads to the creation of new information, including the development of new processing tools, which in turn make further processing of new information possible.

Notwithstanding that information in the analogue world is finite, there is no end to thoughts and ideas, hence to human creativity, which is constrained only by the means available to humans at any given time.

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235 . See also note 5/2/1.

236 See also Chap. 25, par. 2.

237 Comparison (and not aggression) being the only natural trait of humans, see par. 9.

238 Relatively, obviously. For example, when empires reach breaking point (e.g. the fall of the Roman world) the level of processing reached is reset and the next generation has to start from a previous level (with the generation witnessing the fall assumed to have perished).

239 See also Chap. 1.1, par. 3, and Chap. 25, par. 5. Creativity is connected with freedom, because imagination is common to both.

## 7. Humans need to augment their information processing individually\*

It is important to note that humans do not need to augment their information processing cumulatively, but individually. The need is not to selflessly and anonymously<sup>240</sup> add to a global register of knowledge for any predetermined purpose imposed on them by their nature or in any other way, but to qualitatively increase their information processing as individual, identifiable units by their own will and for their own purposes. In other words, because they share no specific purpose,<sup>241</sup> humans process information as individuals (that is, each one for his or her own purposes and to serve his or her own needs), and not cumulatively, as an indistinguishable unit within a hive which sets a common purpose for all.

This is a result of their nature. Humans, unlike, for example, bees, but similar to other pack animals, live individually, as independent, identifiable units within their group. They thus process information individually, and their need to augment their information processing is similarly individual, for their own benefit (regardless of whether, in practice, this increases the total information processing of their group).

It is the nature of humans to be individuals, meaning uniquely identifiable in space and time, and it is this need that led to the natural creation of states as individualisation mechanisms.<sup>242</sup>

## 8. There is no purposeless individual\*

Because all information processing has a purpose,<sup>243</sup> there is no human who does not have a purpose—an objectiveless, purposeless individual does not exist.

This is of course true of any Being—the difference with humans (and all other animals) being that, because they have no specific purpose in life but many (unsatisfiable) needs, they choose the purpose(s) of their information processing each time (with this choice being a matter of morality).

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240 Even saints and other holy individuals carry names and are uniquely identifiable in space and time. Similarly, while when entering spiritual communities individuals may lose their worldly names, these are replaced by others—individuals do not remain nameless or anonymous (although in such closed and small communities they very well could), but become individualised in a new, spiritual state.

241 See Chap. 2, par. 11.

242 See Chap. 8.1, par. 1.

243 See Chap. 4, par. 2.

These purposes can be anything, are different for each individual and can even change many times during that individual's lifetime. It may be that a particular purpose is not really chosen but selected as a result of external influence or even imposed upon the individual. Various circumstances may lead to such purpose designation. The achievement of such a purpose may or may not also be possible for that particular individual<sup>244</sup> (with each human being unique<sup>245</sup>).

The uniquely human need, however, to augment their information processing means that the setting of a new purpose for each human never stops.

## 9. On human nature\*

Comparison, and not conflict, is natural to humans. If this is the case, are humans by nature aggressive? Is human life by its nature 'brutish, nasty and short' as famously argued by Hobbes? Or, is it that of the 'noble primitive' of Rousseau? What is the true human nature?

Naturally, there can be no answer to this question—any response reveals more about its author's beliefs than any universally acceptable truth. In any event, from the approach of information processing, it is comparison, and not conflict, that is natural to humans.

Humans need to augment their information processing; augmentation, however, is always subjective and relative. It is subjective because humans have many (unsatisfiable) needs, each creating many purposes for information processing, and choosing (and prioritising) among them is subjective. In practice, some humans will strive for wealth, others for knowledge, others for experiences, others for relationships and so on.

It is also subjective, in the sense that it is individually assessed. Each human needs to augment his or her own information processing, to process new information with regard to him- or herself, and with regard to the processing the individual has achieved so far in life. Not, that is, with regard to the information processed by others, who may well already have processed that same information.

On the other hand, the augmentation of information processing is also relative,<sup>246</sup> because humans need to keep increasing their information pro-

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244 See par. 4.

245 See Chap. 2.1, par. 4.

246 See also par. 5.

cessing in the informational environment in which they happen to be at any given time, with the volume of information and the tools available (or even imaginable) to them.<sup>247</sup> This leads humans to compare their own information processing with the information processing of those around them.

It is comparison, therefore, that is innate to humans, precisely because humans need to augment their information processing and such augmentation is always individually assessed and relative to the processing of others.

Comparison leads to action (to the processing of new information). Even if unfavourable to any specific individual, for example, in cases where the gap in processing is perceived too large to cover in a lifetime, individuals will still try to improve their position. Humans need to augment their information processing, and they will do this following the example of others around them, who will in turn keep augmenting their information processing, *ad infinitum*.

Conflict may follow comparison, but it is only one of the possible outcomes. In other words, humans are not automatically set at birth on a collision course with each other. Conflict (and war) are just one possibility, depending on the environment in which they happen to live. In an environment of abundance there is no reason for conflict, but rather for competitive creation (this is the case today in the digital world). However, in an environment of scarcity (or one controlled by others, and thus limiting to some) the above can lead to conflict. Whether conflict takes place depends on the combined forces of need and opportunity.<sup>248</sup> However, because until now humanity has only known the analogue world, where information is finite, it is understandable that the idea of conflict being natural to humans has arisen.

## 10. \*

With the above in mind, whether humans are by their nature brutal or nasty or untrusting is beside the point in practical terms: although humans need to augment their information processing and will do so in any way they can, what information processing they can and cannot do in any given moment (i.e. how they act and behave each time) is dependent on their state.

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247 See also Chap. 25 on freedom.

248 . See Chap. 5.

A state<sup>249</sup> may, theoretically, apply no rules at all, thus allowing its citizens to satisfy their needs in whatever way they can; equally, a state may apply extensive regulations that limit its citizens' actions. An individual in the first state would appear brutish and nasty, while one in the second would appear reserved and self-controlled. The character of each human being (as undecipherable) as it is, and states having always accompanied humans, how individuals actually (materially, externally) behave each time is the work of their states.

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249 Basically, its government, the state having no will of its own (see Chap. 11, par. 8).

## 6. Control

*ATHENIAN: Now then, this shows that there is one specific desire common to all mankind. Isn't this the upshot of our discussion?*

*MEGILLUS: What desire?*

*ATHENIAN: That events should obey whatever orders one feels like giving – invariably, if possible, but failing that, at least where human affairs are concerned.*

*MEGILLUS: Very true.*

*Plato*

**Synopsis:** Control decides whether the information processing on a specific Being or Thing will or will not take place (1); Total control is impossible (2); There is no dataset without any control exercised over it (3); Control over new or first-processed information (4); Attributes of a dataset (5); Access (6); Control can be delegated (7); Control is not pursued for its own sake (8); Power (9).

### 1. Control\*

What finally decides if a processing operation will actually take place in the analogue or the digital world? If will and opportunity coincide, does this mean that a Being will actually carry out the processing? The answer is negative: A processing operation also has to pass the threshold of (other Beings') control.

A processing by a Being will or will not happen depending on the control of (an)other Being(s) over a dataset. If a Being is able to allow or prohibit a processing operation by another, then that Being controls that processing. Control is exercised in the analogue and the digital worlds, it is external<sup>250</sup> and material (not imaginative or speculative) in the same way that any processing is material.<sup>251</sup> It either exists or does not exist with regard to a specific processing operation. It may not be exercised or it can

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250 Internal control, meaning self-restraint (ultimately, choice) by humans falls under the domain of morality.

251 See Chap. 4, par. 4.

be delegated,<sup>252</sup> but it is not immaterial information (a thought, a feeling or a wish): it is the concrete ability by a specific Being to allow or prohibit a specific processing operation by another.<sup>253</sup>

Although in practice countless variations are possible, for example a processing operation may only be allowed by certain Beings or under certain conditions or may be prohibited unless a particular event occurs,<sup>254</sup> it is the fact of the control itself that is important here: ultimately, it is control that decides whether the information processing on a specific Being or Thing will or will not take place.

Obviously, control is exercised (a) with regard to a Being, over processing operations by other Beings on it, but also over processing operations carried out by it (on other Beings and Things), and (b) with regard to a Thing, over processing operations carried out by other Beings on it (a Thing cannot process information itself).

## 2. Total control is impossible\*

Control is relevant to a processing (a processing operation that takes place results in control<sup>255</sup>), not to a dataset. A Being cannot exercise control over a dataset (a Thing or another Being), but only over certain processing operations on it (by other Beings). In other words, total control is impossible:<sup>256</sup> myriad processing operations are possible on any dataset, and any attempt to control them all is inconceivable (precisely because they are possible, meaning unforeseeable, as the analogue world was not designed by humans<sup>257</sup>).

However, for the sake of brevity, whenever control over a Thing or a Being is claimed in this analysis, it denotes control over a certain processing operation on it—in fact, on the majority of its attributes.<sup>258</sup>

Although total control is impossible, Beings strive towards it: they strive to control all processing possible by and on a Thing or another Being, to

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252 See par. 7.

253 See also Chap. 16, par. 2.

254 Ultimately, the question of which controls apply each time is political, i.e. it is an issue decided and applied by the government.

255 See par. 4.

256 Except for by the state, see Chap. 16, pars. 2 and 3.

257 On the digital world, which is designed by humans and thus could theoretically enable total control, see Chap. 16, par. 6.

258 See par. 5, and also Chap. 4, par. 7.

become sovereign<sup>259</sup> over them<sup>260</sup>. This is not a matter of seeking control for its own sake but the result of information processing in the analogue world.<sup>261</sup>

### 3. There is no dataset without any control exercised over it

Similarly inconceivable is a dataset over which no Being has control. There can be no dataset (Being or Thing) in the analogue or the digital world over which no control is exercised (meaning that there is no Being that is able to allow or prohibit processing on it by others) whatsoever.

This is easier to explain for humans or Things within a state, because they are controlled by that state.<sup>262</sup> The same is true for organisations and artificial Beings—they are controlled by the humans who created them (and, in turn, by these humans' state).

What happens, however, with Things that are outside a state (for example, in unexplored parts of the universe, or are new and as yet undiscovered particles or, in the past, were unexplored parts of the planet or uncatalogued animals)? Although conceivably they may exist, waiting to be discovered<sup>263</sup> and are as yet uncontrolled by any human, in practice, immediately when they become perceivable, and thus processable (materially) by humans, they are controlled by them—by the first human to ever process their information (who, in turn, belongs to a state etc.). Therefore, even if conceivably there are still Things and perhaps also Beings over which no control is exercised, from the Unique Human Observer Perspective<sup>264</sup> they are controlled as soon as they become known to humanity, that is, information about them becomes processable by humans.

Of course, the above points address only the question of why control exists over any dataset, that is, why there exists no dataset over which no control is exercised; the question of why a specific Being controls a specific

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259 See Chaps. 16, par. 5, and 24, par. 7.

260 In the same way as a Being strives to execute an already started processing operation; see Chap. 23, par. 4, on why should we keep promises.

261 See par. 8.

262 See Chap. 16, par. 2.

263 Therefore, when it is claimed above that there can be no dataset in the analogue or the digital world over which no control is exercised, this refers to datasets that have already been discovered by humans—undiscovered Nature (which is, however, also a Being) is exempted, as it is as yet unknown to humans.

264 See note 1/1/1.

Being or a Thing (or whether this control is justified or not) is a matter of politics (i.e. decided by the government).

#### 4. Control over new or first-processed information\*

Because the processing of already existing information leads to the creation of new information,<sup>265</sup> whenever the Being with control permits another Being to process information on a dataset, new information is created as a result.<sup>266</sup> Of course, this new information may remain immaterial (i.e. a thought, a feeling etc.). If, however, this new information materialises in the analogue or the digital world (e.g. if someone is allowed to read a book or process a material and, as a result, produces a new book or a new artefact), then its creator exercises control over it—notwithstanding the issue of whether this control constitutes property<sup>267</sup> or whether other Beings, most notably the Being that allowed the previous processing, and, of course, the state, also exercise control over this new information.

The same is true of new, previously unprocessed information (which exists in Nature); the first Being to process it exercises control over it—again, notwithstanding whether other Beings at the very same moment are acquiring control over that same information too. For example, in the case of a scientist discovering a new particle or a new planet, that scientist acquires control over it, that is, he or she is able to allow or prohibit certain processing operations on it by other Beings (for example, as regards its naming, the circle of people this discovery is announced to or even the announcement of the discovery at all). At the same time, however, that scientist's state, and the rest of humanity, also acquire some control over it—for example, they are able to discuss the discovery.

Control acquired in this manner is not necessarily a deliberate act; it is the natural result of information processing regardless of whether a Being consciously intended or did not intend at all to acquire control of this new or first-processed information for itself.

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265 See Chap. 1, par. 7.

266 Of course, from a different viewpoint, as Beings start processing as soon as they come into existence and stop only when they are no longer able to do so (thus becoming Things), they acquire control over information throughout their lifetimes.

267 See Chaps. 24 and 24.1.

### 5. Attributes of a dataset

The controls,<sup>268</sup> the list of the processing operations that can or cannot happen over a dataset, form its attributes. The attributes of a dataset can be the result of anything from its nature (i.e. the way it was created) to temporal and spatial (i.e. the time and state in which it exists).

All datasets have attributes (the controls both exercised and possible over them, i.e. the processing operations that can or cannot happen to them) regardless of whether they are Things or Beings (also, with regard to Beings, regardless of whether they are aware of the fact or not).

Again, in the same way that total control is impossible,<sup>269</sup> construction of a complete list of all controls over a dataset is similarly impossible (as is total awareness of such list's true extent to Beings, even with regard to themselves as a dataset). It is only in theory that such a list exists. However, a Being becomes aware of another dataset's attributes that concern it as soon as it attempts to process it, that is, as soon as it starts a specific processing operation on a Thing or another Being.

### 6. Access\*

Control also settles the matter of access to a dataset—it decides whether access exists (and to what extent) from the non-controlling Being's perspective.

The way control is exercised, meaning whether a Being will decide to allow or prohibit processing for whatever reason, although at all times subject to need and opportunity, refers to choice, and thus morality, and is therefore beyond the scope of this analysis.

### 7. Control can be delegated\*

It is practically impossible for any Being to directly exercise control over the myriad of information processing operations that take place each second and which lie under its control. Beings can therefore delegate control to other Beings, in a hierarchical system.

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268 Control, like processing, is material, it exists in the analogue and the digital worlds.

269 See par. 2.

Evidently, if we wish to examine who actually controls a processing operation, we would have to move up the ladder; at the top is invariably a state.<sup>270</sup>

### 8. Control is not pursued for its own sake\*

Control (whether a certain processing will happen or not) is not pursued for its own sake. No Being needs control.

Control is a result of information processing, because a Being can and will process information and any such new processing will invariably produce some type of control by that Being over the information processed.<sup>271</sup> Control, therefore, is not a need or a purpose as such, in and of itself. The ability to control a Being or a Thing is the result of processing undertaken by Beings to serve their (other) needs.<sup>272</sup>

However, in practice control is sometimes considered a pursuit for its own sake: some individuals seek control over as many datasets as possible, or sovereignty<sup>273</sup> over the ones they control already. Why is that? It is because datasets in the analogue world are finite. Control over one of them, therefore, is exercised by an individual or another Being to the exclusion of others.

When it comes to humans, control allows to those exercising it to augment their information processing compared to others. When it comes to other Beings, it either serves their purpose better (for non-biological ones) or helps them to survive (animals). Because information in the analogue world is finite, control is finite too; one has it to the exclusion of others.

However, in the digital world information is infinite.<sup>274</sup> Therefore, any control by a single individual over a dataset is not an obstacle to the processing of others—an individual can carry out as much new processing as he or she likes, foregoing, of course, information already controlled by others (i.e. that specific dataset). Individuals do not need to fall under the decision-making power of those in control. Perhaps, then, control will

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270 This is because it is states that create the information processing environments in which humans (and other Beings) live (see Chap. 11, par. 3), taking into account, of course, at all times that states do not have a will themselves, but rather their governments do (see Chap. 11, par. 8).

271 See par. 2.

272 And thus it is itself an ability, the result of need (see Chap. 5, par. 8).

273 See par. 2.

274 See Chap. 1, par. 16.

## 6. Control

cease to be visualised in the shape of a pyramid, as is the case today, and take the shape of a square, where individuals will race one another<sup>275</sup> to create (instead of acquire, as is the case in the analogue world) as much information as possible.

## 9. Power\*

Control is not necessarily effective. The fact that control over a processing operation is exercised by a Being, which may prevent another Being from carrying out that operation, does not necessarily mean that that particular processing will not happen after all. The other Being may be able to ignore the prohibition and carry out the processing operation anyway. This is the meaning of power: it is the ability to ignore controls.<sup>276</sup>

Of course, power is exceptional (and, hence, coveted): if many Beings acquire power, then this becomes the new control (or lack thereof). In other words, if an initially prohibited processing operation is in practice carried out by many, in spite of the prohibition, then control changes accordingly (in regulation), from prohibited to allowed.<sup>277</sup>

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275 Comparison being natural to them, see Chap. 5.1, par. 9.

276 In practice, prohibitions. The reverse, to impose processing on an unwilling Being, is a matter ultimately connected with morality.

277 See also note 0/1/13.

## 7. State definition: States are information platforms for their citizens

*'If you leave this problem unsolved it will hardly be possible to solve the ones which come next.'*

Cicero

**Synopsis:** States are information platforms for their citizens (1–4); States store, create and disseminate information on their citizens (5–6); States create the processing environment necessary for their citizens to live in, (7–8); States are Beings (9); Other questions that blur the picture (10).

### 1. \*

States are information platforms for their citizens. Basically, at their core, they are information processing infrastructures, individualisation mechanisms,<sup>278</sup> that make each and every human uniquely identifiable throughout space and time.

States are Beings that can and will process information;<sup>279</sup> they are organisations that have materialised in the analogue world.<sup>280</sup>

This definition applies as much today, when the digital world is taking shape and challenging the assumptions and understandings of the analogue world, as it did in the depths of human history, from the moment when humans first became self-conscious, developed language and started communicating with each other.<sup>281</sup>

Regardless of any other context or role (artificially) ascribed to them throughout human recorded and unrecorded history, states are, and always have been, first and foremost information platforms for their citizens.

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278 See Chap. 11, par. 3.

279 See Chap. 2, par. 9.

280 See Chap. 9.

281 With none of these actions taking place in any particular order, see Chap. 8, par. 1.

2.

States are information platforms for their citizens in the sense that it is (only) on their platform<sup>282</sup> that the processing of information on<sup>283</sup> and by<sup>284</sup> their citizens is made possible.

3.\*

How is this definition best visualised? In essence, whenever any two individuals communicate, a third, silent interlocutor is implied. This is the state, which warrants their communication. The state warrants that, for example, John is John and Maria is Maria, so as for John and Maria to be able to communicate. Unless this assumption is made, there is no way for these two individuals (unless they are within the same family and therefore already know each other) to be certain that the other party is actually who he or she claims to be. It is the silent, omnipresent<sup>285</sup> third party, the state, that warrants this, and thus makes any human contact, and meaningful<sup>286</sup> human life, possible.

4.\*

The mechanism through which this is accomplished is so common that it is perhaps overlooked. Immediately at birth every human is given a name. Who gives this name? Most likely, his or her parents. But who is it that makes this name possible?<sup>287</sup> It is the state that this human is born into. In other words, the state is the indispensable registry<sup>288</sup> for a name, any name, that allows it to function as it is meant to,<sup>289</sup> to uniquely identify an individual.

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282 On the choice and use of the term see Chap. 7.1.

283 See par. 6.

284 See par. 7.

285 But not omnipotent, see Chap. 16 pars. 2 and 3, as well as Chap. 12 par. 10.

286 As in the human life we all know and, hopefully, appreciate (hence, 'meaningful'; see also Chap. 8, par. 1 and note 8/1/3), and not, for example, the life of an animal, an organisation or an artificial Being; see also Chaps. 1, par. 9, and 2 pars. 6 and 12.

287 See also Chap. 8.1, par. 3.

288 .A ledger, or in contemporary computing terms, a blockchain; see also Chap. 8.1, par. 5.

289 Using, of course, human logic, see note 1/1/1.

Without a state, a name as an identification mechanism is useless: because many may share it, it is unusable outside the strict limits of that human's family (or close circle of people who know him or her from birth). It is the state that warrants a name's uniqueness and continued existence, so as for it to uniquely define a specific human throughout space and time. In this way this personal<sup>290</sup> information is co-created<sup>291</sup> between the human (his or her parents, acting on his or her behalf) and the state.

At the same time, meaning at birth, every human is provided with a citizenship. The state that made the naming possible also provides its citizenship to that same human. This is the second, equally indispensable, part of (humans') unique identification: a name needs to belong to a, similarly uniquely identifiable,<sup>292</sup> registry.<sup>293</sup>

Without these a human cannot exist; a nameless or stateless human being is unthinkable. In this way, through the state's provision of a name and citizenship, a human becomes an individual. Likewise, in this same way, every human is born into, informational, chains.

## 5. \*

Once in place, these two pieces of information are subsequently (tacitly or expressly) warranted by that state each time the individual communicates with other individuals. In other words, whenever John talks to Maria (and neither belongs to the same family), it is their respective states that make this communication possible, warranting that John is John and Maria is Maria. Without this intervention any communication between John and Maria would be impossible.

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290 See note 1/8/1.

291 Because, however, the part played by parents is arguably the less important in this procedure (they basically select a name from a list, subject to approval by the mechanism that in any event makes this procedure possible), the 'co-' part will be removed from the remaining of this analysis, i.e. states create information on their citizens.

292 Thus, states also need a registry for themselves, hence the archipelago (see Chap. 19).

293 The name of the ledger (or of the blockchain) itself (see footnote 289).

## 7. State definition: States are information platforms for their citizens

Accordingly, once John or Maria has been given a name, whatever new processing of information either one of them carries out<sup>294</sup> is warranted by (registered with, created on) the information platform that is their state.

Importantly, once a human is individualised in this manner, it becomes impossible for any other human to ignore the fact. One<sup>295</sup> cannot choose to ignore, refuse or challenge it: a name and a citizenship is granted at birth to a specific human and one has no choice other than to acknowledge the fact. It may be that one will never interact with that person, whether out of choice or out of chance. However, should any individual initiate communication with another Being, that other Being has to react to the communication (in any way it pleases, of course) on that basis, taking the assumption of a name and a citizenship, that is, of a specific unique identification, for granted.<sup>296</sup> In other words, in the above example, Maria may choose to ignore a contact request from John, but she cannot ignore the fact (or avoid making the assumption) that it is John who contacted her.<sup>297</sup>

## 6.

Therefore, states create, store and disseminate information on<sup>298</sup> their citizens.

## 7.

States also create the processing environment necessary for their citizens to live in,<sup>299</sup> in which information can be processed by them.

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294 The processing of information leading to the creation of new information, see Chap. 1, par. 7.

295 A human, or any other Being for the same purposes.

296 The cases of forced name changing in recorded history being the precursor to the committing of horrendous crimes against the victims of this (dehumanising, because it is de-individualising) practice.

297 In stark difference to state relationships, where a state may simply ignore the name (and existence) of another (see Chap. 19, par. 2, where it is clarified that states are still found in a 'state of nature' (in terms of human development)).

298 Not 'for', see Chap. 1, par. 6.

299 See Chap. 8.1, par. 4.

States make it possible for the humans that participate in them,<sup>300</sup> that is, their citizens, to augment their information processing (thus fulfilling a need specific to humans<sup>301</sup>).

8. \*

A state's citizens ('its' citizens), means the citizens registered with it, whose citizenship they hold. Other categories of residents are, of course, possible (travellers, immigrants, etc.), but each requires a detailed (in terms of time and location) analysis (never forgetting that name and citizenship, once granted, are permanent for the individual concerned, their bond is unchangeable and unbreakable<sup>302</sup>).

9.

States are Beings, they will process information because they can. As such, they will process information on other Beings (i.e. animals, organisations and artificial Beings, including, of course, their citizens), as well as, on Things.

10. \*

The question 'what is the state' (its definition) must remain separate from other questions that may be relevant but could blur the picture, such as 'what is the state for?' or 'how does a state develop?', or the quintessential questions of 'how is it best to govern a state?' and 'what is the optimal type of government?'<sup>303</sup> All these are related, and extremely important, questions, but they are not the same as the first one. They have been used either to assist in the definition of the state ('if we understand what it is for then we can understand what it really is') or as substitutes for a definition from a pragmatic point of view ('it is fine if we cannot define it; it is not necessary because we all know what it means, so let us focus on the questions that really matter, such as what it is for or what is the best

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300 See Chap. 2, pars. 6 and 7.

301 See Chap. 5.1.

302 See Chap. 8, par. 6.

303 See also note 0/1/6.

*7. State definition: States are information platforms for their citizens*

political system’). Nevertheless, these approaches leave the matter wanting: only once we have provided a satisfactory definition of the state will we be able to provide adequate answers to (or, at least, shed new light on) questions regarding what the state is for or how it is best governed.

## 7.1. Information platforms

*‘On ne pense que par image.’*

*Albert Camus*

**Synopsis:** *Information platforms in the analogue and digital worlds (1–5); The state as a digital platform? (6); In what way, then, are states information platforms for their citizens? (7).*

### 1.

What are ‘information platforms’? The term is used here to define the state; however, it is itself in need of some further explanation because, unlike the state, it has been coined only recently.<sup>304</sup>

### 2. Platforms in the analogue world\*

Platforms are well-known in the analogue world. The term literally denotes a ‘flat raised area or structure’ or ‘a raised level surface on which people or things can stand’.

In practice, today platforms can best be viewed at sea: they are raised structures constructed like artificial islands, floating and visible from afar, anchored and not moving—and therefore independent and self-sufficient, but also in need of interconnection with the rest of the world. Platforms, however, can also be found on shore, for example, in the context of politics: they denote both the raised structure for a politician and his entourage to stand on so as to make a speech, as well as, metaphorically, a politician’s principles and ideas. All those who share these principles and ideas are considered to belong, politically, to the same platform, to view the world through the same political lens.

Platforms, therefore, also have a metaphorical meaning in the analogue world. Both these meanings are helpful for visualising the state as an information platform.

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304 This, however, does not affect the timelessness of the definition of the state (see also Chap. 11), but rather has (only now) made it visible.

### 3. Platforms in the digital world\*

It is with regard to the digital world, however, that the term is mostly discussed today. For the past few years online digital platforms have caught the public eye, be these private (i.e. belonging to individuals) or public (i.e. belonging to governments).

Online platforms today are digital-born informational infrastructures that offer certain functionalities. Initially their offering was social, meaning that they offered interaction opportunities among individuals in the digital world ('online social networks') in the form of a digital agora or forum. It was not long before financial opportunities were added to their functionality (transforming the agora into a market).

Today, online platforms are enclosed communities, 'gated gardens' or informational islands in the ocean of the digital world (admittedly, with each one serving only a single or a few purposes), where individuals may participate, usually for free, within an entirely new, and until recently unheard-of, business model, wherein value (and strength) lies in user numbers and not (directly, at least) in transactions (with profit made indirectly, by selling the details of these individuals' use of the platform to advertisers).

#### 4.

Online platforms eventually attracted the regulators' attention, admittedly long after their invention and development by large, multinational private actors. For the moment the regulator views them not as competitors to the state but rather as a new field of human activity (one that has already been undertaken and thus freely chosen by the creators of the platforms).

Usefully, however, the newly formed regulations have provided us with the first formal definition of what we can consider to be information platforms: 'service providers that store and disseminate information at the request of their users'.<sup>305</sup> This bland definition, obviously skewed towards the private sector, will have to do for now.

#### 5.

Regardless of the unavoidable specificity of regulation (and therefore its preordained expiry date), it is likely that the way in which information

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305 Article 3, point (i) of the Digital Services Act.

platforms have developed so far is explainable within the context of the advent of a new reality for humans, that of the digital world.

Parallels could be drawn between the digital world, which is only a few decades old, and the prehistoric, imagined, period when humans first had to form (larger) communities—hence the focus of online platforms on user numbers. Similarly, belonging to an online platform is the only way for most humans to understand and make some use of the vast new and unexplored world in front of them, that is, the digital world.

Once formed, these digital communities zealously guarded their members—and tried to sustain themselves in any way possible.<sup>306</sup> Unlike in the analogue world, however, newcomers did not have to fight to remove older inhabitants, or compete for access to limited resources in a first-to-arrive, life-or-death competition. On the contrary, because information in the digital world is infinite,<sup>307</sup> any new platform is set up alongside existing ones, only competing with them for users.<sup>308</sup> And users are happy to oblige by joining the new platform, because they are able to belong simultaneously to more than one—which also explains why individualisation and unique identification remain an issue today for humans in the digital world.

Crucially, however, information platforms in the digital world are, today, private. In other words, it is not humans and their states that are trying to process information in a (pre-existing) reality (i.e. Nature), but part of them (the private sector) that is opening up new fields of human activity. It is for this reason that the stage of development of the digital world that we are currently in should not, therefore, be paralleled with the original, common to all, prehistoric period when humans and their groups started from zero. Rather it corresponds with a point in time when some engaged with the world better prepared than others, meaning not everyone was on the same level. This is why parallels should instead be drawn with colonialism<sup>309</sup> and company-states in order to visualise, and to better understand, the reality of today's online information platforms.

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306 One must not forget that the for-profit online platforms of today succeeded the large 'forums' of the first days of the Internet, which perished as soon as the money dried up.

307 See Chap. 1, par. 16.

308 On the transformation of individuals (and citizens) into users, see Chap. 17, par. 11.

309 See also Chap. 17, par. 14.

## 6. The state as a digital platform?

The digital world may have made the definition, and true nature, of the state finally visible, but has it also affected it in any significant way?

Although private online platforms strive to mimic state functions within their (digital) territories (through the unique identification of their users and creation of their digital ecosystem), they have affected the relationship between the state and its citizens only superficially. Private online platforms may individualise and identify their users; however, they do this on the basis of credentials issued by these users' states and, in any case, not uniquely—in the sense that a user can have many profiles on the same platform.

In addition, although individuals may well live large parts of their lives today on online platforms (for work, study or entertainment), humans are still anchored in the analogue world not only biologically (i.e. digital money earned on a digital platform is still needed to buy groceries in the analogue world), but also socially (i.e. humans still interact physically with each other on a daily basis).

Therefore, for the moment, at least, neither the state's definition nor the state's nature<sup>310</sup> has been gravely affected by the digital world. In essence, the digital world affects the government<sup>311</sup> more than the state: because the state is natural to humans and it is humans that had the will to create, and live in, the digital world, their relationship with their states remains intact.

## 7. In what way, then, are states information platforms for their citizens? \*

All of the above points provide useful and relevant visualisations of a state as an information platform. Platforms are distinguishable both in their literal and in their metaphorical sense. One can see them (when physical) or understand their existence (when metaphorical) from outside or from within. They thus have a territory (in which they are sovereign) and borders. These circumscribe the information platform that is the state.

On a platform, people, or things, can stand; in states as information platforms people can carry out their lives, processing information pertaining to other people and things. On political or other metaphorical platforms people share beliefs in ideas; states as information platforms function under

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310 See Chap. 11.

311 See Chap. 12, par. 10.

common rules (regulations). Platforms' inherent flatness is also relevant; all can stand on them and all, at a specific point at least, are equal, having an equal footing on them,<sup>312</sup> regardless of the fact that this equality only lasts for a moment.

The information platforms that are states can be visualised as informational islands in a vast sea (our planet). Some of these islands may decide to come closer together and form larger constellations, to form archipelagos. The EU is the first such archipelago, the precursor of things to come, as will be seen.<sup>313</sup>

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312 See Chap. 22, par. 7, on equality as a platform right.

313 In Chap. 19.

## 8. States are natural to humans

*‘There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says “Morning, boys. How’s the water?” And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes “What the hell is water?”’*

David Foster Wallace

**Synopsis:** States were formed naturally, automatically and immediately at the moment when humans gained self-consciousness and started to communicate using language, and are the only universal and natural human individualisation mechanism (1–2); There is no distinction between modern and ancient states (3); States are the first organisation humans are acquainted with immediately at birth (4); Society (5); The relationship between a state and its citizens is unchangeable and unbreakable (6); Do wolves (or dogs) have a state? (7).

### 1. \*

States were formed naturally, automatically and immediately at the moment when humans gained self-consciousness and started to communicate using language.

In essence, states are informational individualisation infrastructures that turn humans into individuals,<sup>314</sup> the only universal and natural human individualisation mechanism. States also create the processing environment necessary for (their) humans to live in,<sup>315</sup> making it possible for them to live a meaningful<sup>316</sup> life. Individualisation is natural to humans, and necessary for them to satisfy their need to augment their information processing.<sup>317</sup> States are a necessary part of human existence, in the sense that without them human life as we know it or as has ever been known, would be impossible.

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314 Through a name and a citizenship, see Chap. 7, par. 4.

315 See Chap. 11, par. 3.

316 See Chap. 7, par. 3.

317 See Chap. 5.1.

States are neither artificially created by humans (under, for example, social contract or any other theory) nor the result of a gradual development within human history. There was no state (or society<sup>318</sup>) before individuals, and no individuals before the(-ir) state(s); both were formed simultaneously, at the very same time.

## 2. \*

States have been information platforms for their citizens since the day any type of human group (be it an extended family or tribe or any other type of prehistoric organisation) was formed. Adherence to a group and the provision of a name for each individual within it have accompanied humans since their beginning (or, at least, since the day they acquired consciousness).

Why did states individualise humans in this way? Why did humans individualise themselves at all? Why did humans not remain humans, yet another animal in Nature, forever? Why did humans choose to form ever larger groups, leaving the confines, and limitations, of families or small tribes, and creating the states in which we still live today? After all, dinosaurs ruled the planet before humans without having any use for states.

As has been seen,<sup>319</sup> this is due to human nature. Humans need to augment their information processing, to continue processing new information for as long as they live, and they need to do this individually, for their own sake, not cumulatively (i.e. for a hive). They do not process information for the sake of the group but for themselves. Hence individuality, and states as the sole natural mechanism to accomplish this process of individualisation, are natural to humans.<sup>320</sup>

### 3. **There is no distinction between modern and ancient states\***

There is no distinction between modern and ancient states. Whichever means and methods were available to humanity in any given period of time, they were invariably used by humans to carry out their information

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318 See par. 5.

319 In Chap. 5.1 par. 7.

320 Natural rights theory or religion notwithstanding, because individuality of the human is necessary regardless of which (human rights or sin) applies; see also Chap. 8.1, par. 1.

## 8. States are natural to humans

processing, shaping their states in the process. After all, it was usually for state purposes that these information processing tools were invented (for example, in the case of writing or the Internet).

Any increase in the information processing capabilities of humans within their states led to the identification of new needs, in an ever-expanding process (most likely, a virtuous one, but in any case one that demonstrated historical progress<sup>321</sup>) that has continued until today and shows no signs of abating.

### 4. \*

States are therefore the first organisation humans are acquainted with immediately at birth.<sup>322</sup> They are also the only organisation that remains necessary for humans' (meaningful) existence throughout their lives.<sup>323</sup>

## 5. Society\*

Society is a group of individuals that are individualised by a specific state.

However, society and state are not the same thing, because the state is an information processing platform and society is a group of individuals. One cannot exist without the other, they are inseparable, but they are not the same thing.

## 6. The relationship between a state and its citizens is unchangeable and unbreakable

The bond between a state and its citizens by birth is an unchangeable one. Although change may come from both directions (state succession on the state's part<sup>324</sup> and change<sup>325</sup> of citizenship by the individual), the original bond remains, because it is a natural one.

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321 To no known end, or destination, however.

322 Together with their family, see Chap. 2, par. 9.

323 Unlike their family (see previous footnote).

324 See Chap 15.

325 Replacement (not merely addition); see also Chap. 17, par. 5.

In practical terms, the personal information of any individual is never deleted or altered by the individuals' state of birth.<sup>326</sup> Regardless of the state or personal circumstances (which may differ throughout human history), that information remains. This is a natural creation, one that human will or regulation or a change in government or state cannot affect.<sup>327</sup>

### 7. Do wolves (or dogs) have a state? \*

Are states natural only to humans? If they are natural individualisation mechanisms, do animals (which, like humans, have been biologically created and are not artificial<sup>328</sup>) also have states?

From an informational point of view, all pack animals have states: their pack is their state. Within it each individual can be uniquely identified by the others, and the pack itself is also distinguishable from any other.

While individualisation tasks are performed, for instance, within a wolf state, what is important to note is the method of individualisation. In this case it is by smell or the other natural characteristics of each wolf, and not by language, that is, a name, as is the case for humans. Natural characteristics, however, are an inadequate means of individualisation in view of their limitations: first, we are not certain that they are actually unique (for each of the thousands of wolves on earth, not to mention the billions that have walked the planet). Second, each individual in the pack (i.e. each wolf) can presumably only remember so many (i.e. packs are composed of only a few dozen individuals at most), so it may, for example, know that another wolf does not belong to its pack but it cannot know to which pack it belongs (or, to go further, identify it individually within that other pack). Similarly, communication is certainly possible among wolves, but only on rudimentary, survival-related topics.

Language, therefore, is the critical part of human, and state, development. Because humans developed language, identification and individuali-

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326 See Chap. 15, par. 6, on state succession.

327 Evidently, when we travel to another state we carry with us the individualisation of our own state and the two states, through bilateral agreement recognise this and exchange the necessary information (see also Chap. 17, par. 5, as well as Chap. 19, par. 13).

328 See Chap. 2, par. 2. As far as non-biological Beings are concerned, organisations are individualised by humans after they have been created (for example, in business registries or government gazettes etc.) but, for the moment at least, artificial Beings (specifically, computer programs; different is the case with money and language) are not.

sation became not only possible but also necessary for everyone, and hence states came to be.

What is also important is that humans accomplished this themselves, by their own means. For example, dogs have names and recently have been registered with states. This has led to their individualisation, in the sense that they are now uniquely identifiable in space and time, like any human. However, this has not led (for the moment, at least) to any dog increasing its information processing compared to in the past. Individualisation does not seem to lead to a dog culture. The new possibilities enabled by the individualisation of each dog have not been used by them. Why is that? It may be that not enough time has passed; humans have created states and processed information for thousands of years. However there is another difference: humans have individualised dogs to suit their own (human) nature, that is, it was done by humans for dogs. As far as we can tell, dogs have no internal need to individualise themselves uniquely in space and time.

This example, in spite of its oversimplification and arbitrariness,<sup>329</sup> is used for illustration purposes only: humans' individualisation of animals or other Beings is only humans' way of understanding them, of better processing their information within the human need to augment their own information processing. It does not serve the need of the Beings on the receiving end of the humans' individualisation process.

Similarly, awarding legal personality or other rights to Beings (including, significantly, computer programs) does not change their own processing conditions, only those of humans. If they ever need it, these Beings will have to develop information processing mechanisms (individualisation or any other) of their own, to serve their own needs.

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329 It should be clear that this example only relates to domesticated dogs that live outside of their packs (or, that have formed packs with their humans), to name just one of the countless limitations of this example.

## 8.1. Names

*'ODYSSEUS: What shall I call him, Circe? Who was he when he was human?*

*CIRCE: What relevance does that have? Call him Gryllus, if you like.'*

*Plutarch*

**Synopsis:** *Names of humans (1–2); It is states that make the naming of humans possible (3); Names of Things (and non-human Beings) (4); An identification algorithm requires a registry; it is the information platform that is the state that provides that registry (5); The use of names as an individualisation mechanism is a way of giving meaning and creating understanding that is peculiar to humans (6); Individualisation in the digital world (7); Logins and passwords (8); Domain names (and other unique naming attempts) (9); Names of computer programs (10).*

### 1. Names of humans\*

Names serve to individualise humans. They are used to refer to specific individuals, differentiating them from any other human on the planet before or after them. They uniquely identify a human in space and time.

Names are created and used as a result of human language. Other animals have individualised distinct characteristics (e.g. smell, external look etc.) that are discernible both to members outside and within their group, but they carry no names, they have no linguistic expression of this uniqueness.<sup>330</sup> Names are a quick and certain way to refer to a specific human.

Why do humans have names? Simply because they are humans.

### 2.

Names have become more complex over time (presumably, as human numbers grew and communication increased). Last names were added

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<sup>330</sup> A particular smell or look is not, ultimately, unique in space and time (see also Chap. 8, par. 7).

as recently as the Middle Ages in Europe. In antiquity only first names were used, followed by the name of the state whenever needed. The latter was the case, however, only occasionally, for just a very few individuals,<sup>331</sup> given the locally restricted lives that the vast majority of humans lived until very recently. Within small, closed communities individuals would have been known by a single name, perhaps followed by other, more relevant identifiers. This is visible today within workplaces (e.g. John from Marketing, Mary in Geography class) or in other small and close-knit groups of individuals.

In the Middle Ages the state lost its explicit inclusion in the name of an individual and moved into the background, although it continued to be implied on each use (locality still being relevant in human lives). It has remained in the background ever since, a silent but ever-present third party whenever any two humans interact.<sup>332</sup>

### 3. \*

It is states that make the naming of humans possible. A human's name may have been created by language, but without a state to grant and warrant it each time the specific individual it refers to interacts with another, it would be unusable.<sup>333</sup>

A name is granted to any newborn human in accordance with a state's regulations, both in terms of content (choice of name) and in terms of procedure. Name-giving, although usually a small-circle ceremony, is necessarily followed by (some type of) registration of that name with the individual's state; it is through registration that the name actually comes into existence, with immaterial information thus materialised in the analogue world.

### 4. Names of Things (and non-human Beings)\*

States not only make possible the naming of humans, who in this way become individuals (and state citizens), but also create the processing

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331 For example, authors; see, for instance, 'Thucydides of Athens wrote...'

332 See Chap. 7, par. 3.

333 See also Chap. 7, par. 4.

environment necessary for their citizens to live in.<sup>334</sup> It is on states, as information platforms, that humans name Things and other (non-human) Beings (first at the category level, and then sometimes as individuals within these categories), so as for these to become processable information by them (these names are usable only on that platform that is their state). In other words, it is states that make human language possible.<sup>335</sup>

This is the result of human individualisation. Once individualised and (already having been) equipped with language skills, humans were able to serve their need (of all needs) to augment their information processing.<sup>336</sup> Enthusiastic information processing in the analogue world (which has never stopped and is unlikely to do so in the future) created new words for Things and Beings, be they artificial, human-made or found in Nature. As soon as an individual assigned a name to an invention or a discovery that name was used to describe this new information in the individual's state, which was warranted and made possible by that same state.<sup>337</sup> Subsequently, this name may have seen widespread use if individuals in other states, on becoming aware of it, adopted it too, either translated into their own language or used in the original form.

Languages were therefore created and developed within states, by their citizens. Language is the information processing tool of individualised humans, the only way for them to materialise their immaterial information, to understand and give common meaning to the analogue world, and to accommodate their ever-expanding information processing needs. As such, it lies at the base of the information platform that is the state—but could not have existed without it.

## 5.

The use of names, therefore, is an identification mechanism, an algorithm for that purpose (identification), that is used by humans to serve their need to process information. An identification algorithm, however, requires a

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334 See also Chap. 11, par. 3.

335 After, of course, language (i.e. human names) gave birth to states; on their intertwined relationship see note 8/1/4.

336 See Chap. 5.1, par. 2.

337 See also Chap. 6, par. 4.

registry; it is the information platform that is the state that provides that registry.<sup>338</sup>

It is up to humans to decide how far identification goes, that is, whether certain categories of Beings and Things (animals, organisations, boats etc.) after being named as such, also need to have specific names for their individual members (and to what extent), so as for them to become uniquely identifiable in space and time among their kind; for example, planets are individually named; ships, too; elephants are not;<sup>339</sup> only some drones are.

## 6.

The use of names as an individualisation mechanism is a human trait and development, one which is not found in any other Being. While it is true that organisations have names, these are given to them by humans, they were not developed by themselves—in the same way that dogs, for example, are given names in some parts of the world.<sup>340</sup> Things, of course, do not process information themselves,<sup>341</sup> however they are sometimes given unique identifiers by humans.

The use of names as an individualisation mechanism is a way of giving meaning and creating understanding that is peculiar to humans. For the moment, at least, no other Being<sup>342</sup> has used names—assuming, of course, that our way of understanding and processing information is their way too.

## 7. Individualisation in the digital world\*

Individualisation is critical for human understanding and information processing. But at least for the moment, it is a matter of debate in the digital world. Although the information platform that is the state also extends into the digital world,<sup>343</sup> in the digital world individuals have been transformed from citizens into users.<sup>344</sup> From this point of view, the equivalent of the digital world today can be found in the colonial era of the analogue world,

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338 See Chap. 7, par. 4.

339 See also Chap. 8, par. 7.

340 See also Chap. 8, par. 7.

341 See Chap. 3.

342 Only Beings can and will process information, see Chap. 2.

343 See Chap. 17, par. 12.

344 See Chap. 17, par. 11.

as it is mostly private actors that are expanding (and giving meaning) to it.<sup>345</sup>

Early as it may be in the history of the digital world, however, some preliminary remarks can already be made with regard to names (as individualisation mechanisms).

## 8. Logins and passwords

As soon as the digital world emerged, human identification in it came about through the use of ‘credentials’, composed of a ‘login name’ and a ‘password’. Thus humans had to become individuals in the digital world too, to be able to continue the augmentation of their information processing unhindered. In the analogue world each individual is identified by a name and citizenship; in the digital one, by a login name and password.

Of course one might ask how, if states are natural to humans, as argued in this analysis, the digital world has worked for humans so far, and is able to keep expanding? After all, it is not states that give out the credentials needed to (identify) individuals in the digital world.

However, we need to be careful before making any assumptions: in the digital world, credentials from the state have, for the moment, been replaced by those provided by the private online platforms.<sup>346</sup> Any credentials today are valid for a specific platform only, they uniquely identify an individual only on it. When using the platform, they are necessary for humans; outside of it, they are of no use. In other words, while the digital world’s credentials (login name and password) correspond to an individual’s name in the analogue world, that individual’s citizenship (to complement the unique identification mechanism used in the analogue world) is implied in the digital one: it is the platform on which these credentials are valid.

The above-described mechanism for unique identification in the digital world is easily viewable in the structure of email accounts: the @ symbol<sup>347</sup> specifies, in essence, citizenship (individuals are allowed to choose their name in the first part). Similarly, even when so-called anonymous communications are allowed in the digital world, individuals’ aliases are registered with and work only on each specific online platform.

345 See also Chap. 7.1, par. 5.

346 On digital territory (whereby private online platforms are themselves found in the (digital) territory of their respective states), see Chap. 17, par. 12.

347 Meaning ‘at’, as in ‘of’, see, for example, “Thucydides of Athens wrote ...’ or ‘Herodotus of Halicarnassus ...’, see par. 2.

In recent years the situation of having multiple digital world credentials has increased to the extent that, first, specialised software was developed to manage them (humans being able to remember only a limited number of passwords) and, subsequently, centralisation occurred, as is the case with the option to ‘log in with Google’ or ‘with Facebook’ or other popular private online platforms. When this latter option is replaced with ‘log in with your state’s credentials’, states will have moved decisively towards claiming the digital world for themselves.

### **9. Domain names (and other unique naming attempts)\***

Very few internationally coordinated (non-state run) unique naming attempts have been noted so far in the digital world. These offer informative examples of the requirement for individualisation and the, ultimately unavoidable, need for state involvement. The first is the registration of domain names.<sup>348</sup> In the early days of the Internet this task was undertaken by private parties, centrally at first (in the US) and then allocated per country to the rest of the world. Soon enough, however, states took over either directly (domain names in the vast majority of national cases are managed through regulation) or indirectly (by appointing state agencies to control the relevant activity).

Other attempts to uniquely and authoritatively identify individuals in the digital world have been made on an as-needed basis, for example, in the cases of celebrities or researchers. In both these cases increased use of the digital world by such categories of individuals means that their digital identity needs to be officially warranted. Tellingly, while private online platforms have taken over this task, what they do in practice is use the analogue-world information of the persons concerned to ‘lock’ an online profile to them.

### **10. Names of computer programs\***

As previously noted,<sup>349</sup> names are necessary for humans to understand and process information around them. They are therefore assigned to identify categories of Things and other Beings, as well as to individualise humans

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348 Themselves digital-born information, see Chap. 1.1, par. 17.

349 In par. 4.

themselves and the few other specific Things or Beings that humans thought it was necessary to individualise. Importantly, however, so far in history, when humans have interacted with another Being, they do so on an individualised basis, meaning as an individualised human with another individualised other human or, even, with a similarly individualised organisation. Of course, humans may also interact with individualised Things (for example, the planet Mars or the ship Titanic or long-gone states or empires that became Things after their demise) but this has always been a one-directional interaction, that is, Things do not process humans' information in return (as is the case with other humans or organisations). Artificial Beings (languages, money, computer programs), in spite of their in-between nature, did not escape this treatment by humans.

However, there is a recent, specific case, among computer programs, that does not follow this rule, that of the AI assistants developed by software companies and installed on our personal information processing devices (mostly phones, but also computers). Today each one of us can communicate with 'Siri', 'Alexa' or 'Cortana', or even with 'ChatGPT'. Importantly, these are non-individualised, essentially nameless<sup>350</sup> Beings: they are whatever each of their creators decides to make them each time they are used.

This is a first, for humanity. Siri (to denote collectively all AI assistants) is different from an organisation or another human (including slaves), or even domestic animals. All of these Beings are named and individualised as the only imaginable way for humans to interact with them. Siri, however, is a nameless (non-finite) artificial Being (a computer program) that claims to single-handedly carry out personalised interactions with each and every one of us—the same single personal assistant for billions of humans.

It is this realisation that helps explain the fear that AI has instilled in humanity. Until now, humans have communicated only with humans or other Beings, with all their identifiability and also their known characteristics and limitations. A nameless and essentially unaccountable counterpart would previously have been unheard of. A centuries-old way of communication, and society-building, is being challenged from the ground up—its very premise—and needs to be carefully rethought and reassessed.

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350 Siri is not a dataset, because it is not set (see Chap. 1, par. 2). Basically, Siri is not a name but a characterisation—, essentially the same as God.

## 9. State formation: from word of mouth to the modern state

*‘For though the society we have described seems to me to be the true one, like a man in health, there’s nothing to prevent us, if you wish, studying one in a fever.’*

Plato

**Synopsis:** *State formation (1–4); The transactional and territorial state, (5–6); Is there order in the state? (7).*

### 1. \*

The state was born naturally in humans’ minds as soon as they gained self-consciousness and started speaking to each other, and it materialised immediately in the analogue world through the spoken word.<sup>351</sup> For ages (for hundreds of thousands of years) this was the only form the state took in the analogue world, a verbal-only presence. However, at some point this was not enough for humans, it no longer met their information processing needs. There is only so much information processing that humans can do, even collectively, when unassisted by any tools. As the number of individuals within the first tribes or extended families increased (presumably, when agriculture was invented), names had to be recorded for practical reasons (taxation and military records). Writing was invented. States took shape, taking on the form that is basically still with us today, in the analogue world.

### 2.

States were not artificially created by humans for the purpose of individualisation (or for any other purpose for that matter—for example, under social contract theory, for security purposes or for the protection of property). Humans did not create them consciously, deliberately or intentionally to

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351 See Chap. 1.1, pars. 1 and 5 on information materialisation.

serve a specific purpose, as is the case for all other organisations.<sup>352</sup> On the contrary, states emerged naturally, first through human communication and spoken language and then, once writing was invented, as the administrative and bureaucratic mechanisms still known to us today.

### 3. \*

It was writing, therefore, that made it possible for the state to take the functional, administrative and bureaucratic form known to us in the analogue world.

Once writing was invented and up until the present, the state took the form that was possible in relation to the information processing capabilities of humans. At first, only names were processed, for tax and military purposes. Family information was quickly added to the list; however, it took states several centuries to reach the point of keeping professional, academic or medical records for each of their citizens. From that point on, however, things accelerated at a feverish pace, to reach today's wealth of record-creation and -keeping on their citizens that is performed by the information platforms that are states.

Nevertheless, in the digital world, the next milestone in humanity's development after the invention of writing,<sup>353</sup> the state's final form is yet to be seen.

### 4.

State formation, in terms of information processing on<sup>354</sup> its citizens, should not be confused with the creation of the information processing environment suitable for its citizens to live in by the information platform that is the(-ir) state.<sup>355</sup>

The processing environment was created immediately, as soon as humans developed language and identified each other with names. Presumably they then continued to name<sup>356</sup> the Things and Beings around them, at first verbally and then in writing. The more humans processed information

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352 See Chap. 2, pars. 6 and 9.

353 See the Prologue, par. 6.

354 See Chap. 7, par. 6.

355 See Chap. 11, par. 3.

356 See Chap. 8.1, par. 4.

in the analogue world, the more they added to the information platform that was their state, expanding their information processing environment—a process that has not stopped since and will not stop in the future because of humans' need to augment their information processing, that is, to constantly keep processing new information.

### 5. The transactional and territorial state\*

State formation as an administrative mechanism in the analogue world, which occurred after the advent of writing, had two consequences that remain with us today.

First, the state became transactional. It was no longer only a human individualisation mechanism (materialised through the spoken word) that created an information processing environment suitable for individuals to live in, but, having expanded its information processing capacity exponentially, it took on a form that individuals could, and had to, transact with.

Second, the state became territorial.<sup>357</sup> It no longer only resided in the minds and (spoken) words of its citizens, but from that point on occupied a territory, which was the area in which the information processing infrastructure was installed. Accordingly, as soon as an infrastructure was created (given also the crude means it employed, meaning clay tablets etc.) it could no longer be moved around. States could no longer be nomadic.<sup>358</sup> From that point on states occupied specific places in the analogue world, their territory.<sup>359</sup>

### 6. \*

Both of the above consequences have been challenged by the advent of the digital world. As regards the transactional state, in ever-increasing parts of their lives, individuals are no longer obliged to transact through their states: today they can work, buy things, or acquire services and study

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357 Meaning, physically installed in a specific location; on how state territoriality actually works, see Chap. 17, par. 4.

358 No longer nomadic, but not, however, necessarily meaning not movable (see, for example, the Mongol empire – obviously, for the Mongols themselves, not for the conquered peoples who continued to live in the, conquered, states of their own, see also note 7/1/1).

359 On state territory, see Chap. 17.

entirely in the digital world, avoiding any state involvement if they wish—a proposition unheard of since humans first walked the earth.<sup>360</sup>

As regards territoriality, for the first time since writing was invented, state records do not necessarily reside in the territory of a state. Digital-born information on their citizens may be stored, and processed, by states anywhere on the planet.<sup>361</sup> This is a unique, unheard of challenge to (the traditional notion of) state sovereignty.<sup>362</sup>

### 7. Is there order in the state? \*

The increase of states' information processing capacities once writing was invented and thereafter meant that the application of an organisational system for all this processing, a specific way for it to be carried out, became necessary.

Clarifying first and foremost that this has nothing to do with a state's government,<sup>363</sup> this system was (for the vast majority of cases that we are familiar with, at least) hierarchical, because hierarchy is the basic human organisational principle, that is, it is natural to humans.<sup>364</sup> From this point of view, there is order in the state—and, therefore, the state can be characterised as an 'organisation' (after all, states are Beings (organisations)<sup>365</sup>).

Nevertheless, the fact that some order exists in the state's information processing says nothing about that order's efficiency or sufficiency for any purpose. In other words, while hierarchy may come naturally to humans, it is not certain (and this is not examined in this book) that it is the best option (assuming, of course, that alternatives were possible).

In the same vein, there is no pre-ordained, imagined order that states have striven to reach historically, through linear development.<sup>366</sup>

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360 See also Chap. 12, par. 10.

361 See also Chap. 17, par. 8.

362 See Chap. 16.

363 See Chap. 12, par. 1.

364 See note 6/7/1.

365 See Chap. 2, par. 9.

366 See Chap. 11, pars. 9 and 5.

## 10. What states need

*'The grand, leading principle, towards which every argument unfolded in these pages directly converges, is the absolute and essential importance of human development in its richest diversity.'*

Wilhelm von Humboldt

**Synopsis:** *What states need (1–3); Not a matter of politics (4); States and individuals' (their citizens') interests are aligned, not conflicting (5); A material, not a sentimental relationship (6); States need all of their citizens to augment their information processing (7).*

### 1. \*

What do states need? This question is not unwarranted. All Beings have needs;<sup>367</sup> it is their nature that sets their needs, in an unbreakable bond.<sup>368</sup> States, therefore, because they are Beings, must have needs too. But, what are they?

States are organisations;<sup>369</sup> however, unlike any other organisation they have no specific purpose. Therefore, no need can be derived from that point of view, that is, there is no need to serve a purpose (or any purpose).<sup>370</sup> States do, however, share organisations' other characteristics: they are human-centric and human-dependent, that is, without 'their' individuals (meaning their citizens), states perish.<sup>371</sup> States, therefore, need their humans, meaning their citizens, the same as any other organisation. Their citizens, as humans, need to augment their information processing, this is their need of all needs.<sup>372</sup> Consequently, states need their citizens to do exactly that, to augment their information processing.

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367 See Chap. 5, pars. 1 and 2.

368 See note 5/2/1.

369 See Chap. 2, par. 9.

370 This is the case in social contract theory.

371 See Chap. 2, par. 7 and Chap. 15, par. 4.

372 See Chap. 5.1, par. 2.

As with any other organisation, states need their citizens to augment their information processing through them, that is, to keep using their information platform.<sup>373</sup> The difference between a state's needs and any other organisation's needs is that other organisations need 'their' humans to augment their information processing through them but are constrained by their specific purpose, whereas states, because they have no specific purpose themselves, need exactly the same thing ('their' humans to augment their information processing through them), but this processing can be for any purpose whatsoever.<sup>374</sup>

## 2. \*

Consequently, states need their citizens to augment their information processing through them, through their information platform. They need their citizens to continue living, communicating and creating on their platform.

If citizens cease to process in that manner information made available to them by their states, these states will cease to exist—they will become Things, whereby only the processing of information on them, but no longer by them, is possible.<sup>375</sup>

By contrast, a state does well when its citizens do well in augmenting their information processing, because in this way the information processing possible on the platform that is their state is also augmented (opening up a virtuous circle, whereby this causes these same citizens to further augment their information processing and so on<sup>376</sup>).

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373 See Chap. 2, par. 7. Theoretically, as is the case for any organisation, it would be enough for states for their citizens simply to keep processing information through them, i.e. not to augment it. However, this is not what humans need. Humans need to augment their information processing, to ever increase it (the use of names, see Chap. 8.1, being an example in this regard), not simply to mechanically process (the same) information each day (see Chap. 5.1, par. 3). Therefore, while in theory simple processing would suffice, in practice this cannot be, and thus augmentation of the information processing is necessary.

374 See also Chap. 2, par. 9.

375 See Chap. 2, par. 3, also keeping in mind that this does not mean that organisations have a need to survive (they do not, see Chap. 2, par. 20). On state succession, see Chap. 15.

376 Assuming the usual, multidimensional mix and spread of their citizens' information processing, i.e. excluding for example single-purpose monastic states.

3.

Augmentation of the information processing carried out by their citizens is a condition for the (continued) existence of states, a need similar to air or food for humans.<sup>377</sup>

4.

If and how states facilitate their citizens' augmentation of information processing is irrelevant. Responses to such questions are political. How best (or if at all) to satisfy a need, once identified, is a matter of politics. In extreme cases, it is possible that a government<sup>378</sup> may choose not to assist a state's citizens at all in the augmentation of their information processing, for example, either by affording them minimal restrictions over their information processing (a non-interventionist approach) or by introducing as many restrictions as possible (a fully interventionist approach).<sup>379</sup> In similarly extreme cases, an aggressive (or oppressive) government may either engage in wars to assist its citizens (because information is finite in the analogue world<sup>380</sup>) or guide them exactly (forcing them) towards the path it considers to be the best one for them to augment their information processing. It is important therefore, at this stage at least, to avoid making any assumptions.

**5. States and individuals' (their citizens') interests are aligned, not conflicting\***

From this point of view there is no confrontation between individuals (citizens) and their states. The state does not confront its citizens, in fact it lives in them. It is the government that may appear confrontational to some, or even to the majority, of a state's citizens, not the state itself.<sup>381</sup>

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377 See Chap. 5, par. 3.

378 The issue of which controls are exercisable on any dataset is political anyway (see Chap. 6, par. 1).

379 In cases of anarchical and authoritarian states respectively, the two extremes meeting in this regard, see also Chap. 26, par. 7.

380 See Chap. 1, par. 16.

381 See Chap. 12, par. 8.

6.

A state needs its citizens in a material, not a sentimental or immaterial manner. A state does not reside in the hearts and minds of a certain group of individuals.<sup>382</sup> On the contrary, a state is a Being that processes information in the analogue world—first and foremost it is an identification and individualisation mechanism. In other words, the state performs material acts that produce material results—and it does this and continues to do this for as long as it remains in existence.

7.

Equally important is the clarification that states need all of their citizens to augment their information processing. This is not the same as the need to augment the total information processing carried out on an information platform that is a state by its citizens. The latter implies that systemic inequality is embedded in states: at the extreme, if this were the case, one citizen could carry out almost all of the information processing within a state, leaving all others with very little processing to do (given that information is finite in the analogue world).

While this may be or may have been the case, inequality<sup>383</sup> should not be perceived as condoned systemically within the above reasoning. Instead, the need is for each citizen to augment his or her information processing. Should some (or a few) do so in certain pursuits more successfully than others, the extent to which this is or is not acceptable in any given state is a discussion on the optimal form of government, and thus falls into the political realm.

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382 A 'sentimental', only dreamt-of state may perhaps be a Thing (at best, if a group of people commonly refer to it) but not a Being, it cannot process information.

383 Although natural to humans, see Chap. 24, par. 12.

## 11. *The nature of the state*

*'Philosophy cannot give us a satisfactory theory of man until it has developed a theory of the state. The nature of man is written in capital letters in the nature of the state.'*

*Ernst Cassirer*

**Synopsis:** *The nature of the state is set by what the state is, what the state has and by what the state does (1); What the state is (2–6); What the state has (and does not have). The state has no purpose (7–9); What the state does (and does not do) (10–11).*

### 1. \*

The nature of the state is set by what the state is (and is not), what the state has (and does not have) and by what the state does (and does not do).

### 2. What the state is\*

The state is an information platform for its citizens.<sup>384</sup> It is a Being, in fact an organisation,<sup>385</sup> that is natural to humans, formed immediately when humans gained self-consciousness, and thus names, and started communicating with each other using language. The state is an identification, individualisation mechanism, the only natural one to humans, and one that is indispensable for them to live a meaningful<sup>386</sup> life.

The state remains a Being for as long as its citizens process information on its platform; it therefore needs its citizens to augment their information processing, which is something that is in accordance with human nature.

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384 See Chap. 7.

385 See Chap. 2, par. 9.

386 See Chap. 7, par. 3.

## 3.

The state is the information processing infrastructure that creates the processing environment necessary for its citizens.<sup>387</sup> It is therefore, in fact, not *an* information platform for its citizens, but *the* information platform for them (in the analogue world, at least for the moment).

Specifically, however, the state is actually not the information platform itself, but the informational infrastructure, the mechanism, that created the information platform and underlies and supports it. It is the nucleus of the information platform, the informational seed that gave birth to all and is found at its centre.

Distinguishing between the two, however, is impossible: the informational mechanism, although based on the simplest of algorithms, is a self-referential one ('every human will be given at birth a unique identifier composed of (a) a name and (b) a citizenship, of which, however, (b) is the name humans give to the mechanism itself'<sup>388</sup>). Subsequently, every information processing operation carried out by that uniquely identified human is warranted by and registered with the same mechanism that made the identification.<sup>389</sup> The information platform that is the state, through the information processing carried out by its citizens on the basis of these self-referential algorithms, continuously expands. It is in view of this understanding that the two terms are equated.

4. **What the state is not\***

The state is not a corporation, an association or a union, an organism, a political organisation (or institution), a service provider or a public sector. It is not a pawn, a cipher or a network. More precisely put, the state may appear to be any of those things (or all of them together) only because it is first and foremost is an information platform for its citizens. All of the above are appearances originating from its actual nature, which is an information processing infrastructure for its citizens. Once states were formed, as natural individualisation mechanisms as soon as any two humans started

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387 See also Chap. 8.1, par. 4.

388 So, either humans naturally think in this way, in terms of individualised names and individualised families, tribes etc., or an out-of-Nature entity, e.g. God, created the mechanism for humans (i.e. made humans think in this way).

389 See also Chap. 7, par. 5.

## 11. *The nature of the state*

using language, all of the above appearances became possible—prior to that, this was not the case.

In addition, the state is not the sum of its citizens or of its citizens' information processing.

Finally, the state is not an actor or a structure—or, better phrased, it is both an actor and a structure at the same time.<sup>390</sup>

Most certainly, and clearly, of course, the state is not (its) government.<sup>391</sup>

### 5. \*

Modern states, meaning the states in which most of us live (i.e. centralised nation states) are not the product of evolutionary development towards a particular end. They are not an improvement on previous forms of state that historically appeared from time to time (e.g. empires, city-states etc.). Modern states are not the product of a linear development—this is true even though their next level of organisation, meaning the formation of archipelagos, is already in sight, in the form of the EU.<sup>392</sup>

On the contrary, modern states are the result of changes in the information processing capabilities of humanity. Need and opportunity are very visibly at play here: individuals need to augment their information processing and will take advantage of whatever opportunities to do this come their way; states need their citizens to do exactly that. Whichever technical tools (e.g. information technology) and organisational measures (e.g. centralised administration) are available at any given time are used to the fullest extent possible.

While the use of technical tools is self-explanatory, why this process culminated (today) in the centralised state perhaps needs some more explanation.<sup>393</sup> Individuals need to augment their information processing and they thus invent tools (from language and writing to computers) to achieve exactly that. Any increase in their information processing is translated into increased processing by their state, which also has to keep up.<sup>394</sup> Any increase in the information processing by the state leads to greater

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390 On the transactional state, see Chap. 9, par. 5.

391 See Chap. 12, par. 1.

392 See Chap. 19.

393 On why this has culminated in the nation state, see Chap. 18, par. 3.

394 Therefore, it is individuals that create a drag on the state and not vice versa—causing a lag that can be witnessed today in the digital world.

centralisation, in a cycle that can be interpreted in many ways, but which seems (historically) inevitable.

## 6. The state is timeless\*

The state existed as soon as humans started using language and has never ceased to exist since. Humans have never been, and can never be, found outside of a state. States are therefore agnostic of (i.e. not an expression of) nations and nationalities, ethnic differences, ‘national characters’ or ‘national souls’, or any other distinctions ever placed upon humans. Although it would be foolish to deny their existence, it is important to note that these distinctions are the result of politics<sup>395</sup> (politics being the result of the existence of states as information platforms for their citizens and individuals competing to augment their information processing in the analogue world where there is a finite amount of information<sup>396</sup>).

What is important to keep in mind is that any human ever born once humans gained self-consciousness and invented language, was born into a state. How that particular individualised human and that particular state fared (or fares) on our planet is a matter of politics, not of existence of the state itself.

Having said that, it is also important to remember that, once established, the link between each individual and the individual’s state is unbreakable.<sup>397</sup> Individuals may find themselves in different states during their lifetimes or experience grave changes within their states for whatever reason and in various contexts; however, all of these situations are the results of political (or personal) decisions that do not affect the (continuous) existence of their state.

## 7. What the state has (and does not have). The state has no purpose\*

The state has no purpose. It serves no purpose, it is not aimed at anything specific, it has no preset objectives that it needs to achieve, no end towards which to strive. (Nor, for that matter, does it have any historically predetermined destiny that it will inevitably reach.)

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395 See Chap. 18.

396 See Chaps. 12 and 12.1.

397 See Chap. 8, par. 6.

## 11. *The nature of the state*

The state was not created, it emerged naturally, as soon as humans started using names. Because it was not intentionally created (it is therefore neither a Thing that is an artefact nor an organisation incorporated by humans), it has no specific purpose.<sup>398</sup> As is the case for family,<sup>399</sup> the state emerged naturally, as the necessary mechanism for using the names of humans in the way humans needed, without any specific planning or intentional thinking on the part of humans.

In other words, states were not artificially created by humans for the purpose of individualisation (as is claimed, for example, under social contract theory for the purposes of security, property or justice), that is, humans did not have the conscious intention to create them as an alternative to other individualisation mechanisms that were available to them or as the result of a conscious choice to augment their information processing as an alternative to not doing so.<sup>400</sup> Rather they emerged naturally, as a necessary part of self-consciousness and human language. (After all, the definition of the state in this book has emerged only now after thousands of years, and as a result of the arrival of the digital world which has made such a perspective possible, thus further evidencing how natural states have appeared to humans so far in their history.)

### 8. \*

Similarly, the state has no consciousness of its own, nor a will (other than the will to process information, of course). It therefore does not do anything consciously; most importantly it does not exercise control<sup>401</sup> over its citizens (or over the Beings and Things on its platform)—it has no will, no need,<sup>402</sup> to do so.

(Attempted) control over a state's citizens (in fact, over all Beings and Things on its platform) is exercised by the government.<sup>403</sup>

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398 See note 5/2/1 and 5/2/2.

399 See Chap. 2, par. 9, and note 8/2/1.

400 As is the case for all other organisations (see Chap. 2, par. 7).

401 See Chap. 6, and also Chap. 16, par. 3.

402 See Chap. 5, par. 2.

403 See Chap. 12, par. 8.

### 9. **The state does not have a pre-ordained order\***

There is no imagined level of order (or rationality) that states strive to attain in linear historical development or progress (nor is there historical inevitability that progress is made, for that matter<sup>404</sup>). The fact that states, regardless of whether tribes or empires or how far apart they were geographically or chronologically, ultimately resembled each other organisationally says nothing about the states themselves but rather about their citizens' information processing capabilities at any given time. States may appear today to have 'progressed' towards increasingly centralised, and complex, information processing infrastructures, but this is only because their citizens have continuously augmented their own information processing.<sup>405</sup> Whatever order or organisation states have reached today or acquired over time only reflects their historical and cultural development as caused by chance and opportunity in the information processing of their citizens, not by any imagined rational end for states themselves—whatever that could be.

### 10. **What the state does (and does not do)\***

The state is a Being; it can and will process information. However, it does not think, it does not process immaterial information. The state, also, does not see—nor does it express its citizens' will or wishes.

## 11.

Similarly, the state does not reason. Although the state is a Being that can and will process information, actually using Reason in its processing,<sup>406</sup> it does not think in the same way a human does or use Reason to reach a conclusion or some level of, imagined (by humans), order or perfection—or even to make (any) sense to its citizens. In other words, the state is not a person (much less, a humanised, Hobbesian giant-like anthropomorphic one).

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404 See also Chap. 9, par. 7.

405 See par. 5.

406 See Chap. 4.1, par. 2.

## 12. The government

*'Sir Humphrey: "Bernard, if the right people don't have power, do you know what happens? The wrong people get it!"*

*Yes Prime Minister, Series 2, episode 5*

**Synopsis:** *A state is different to its government (1); What is a government? (2); The (only) purpose of the government is to control the state (3); How did governments acquire this purpose? (4); How did governments come to be? (5–6); Governments are natural to humans (7); Controlling the state (8–9); On the digital world breaking down governments' control over the(-ir) states (10); A beginning-of-time model fundamentally and irreversibly eroded: Leviathan's demise (11).*

### 1. A state is different to its government\*

Despite widespread (even prevalent, in certain cultures) confusion, a state is different to a government. The connection in the hearts and minds of people (most frequently in times of emergencies, as in 'the state should deal or should have dealt with this') that leads them to treat the two practically as synonyms needs to be dispelled once and for all. A state is not the same as a government—and should not be treated as such.

The state is a Being, an organisation that individualises humans and creates a suitable processing environment for them to live in.<sup>407</sup> The government is also an organisation, but one that is different from the state—in fact, it is the Being that controls the state.

### 2. What is a government?

A government is a Being, it is an organisation that exists in both the analogue and the digital worlds.<sup>408</sup> It will process information because it can. As with all organisations, it needs 'its' individuals, meaning the individuals

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407 See Chap. 11.

408 See Chap. 2, par. 6.

participating in it, to augment their information processing through it<sup>409</sup> in order to serve its singular purpose.

### 3. The (only) purpose of the government is to control the state\*

As has been noted,<sup>410</sup> non-biological Beings have no inherent purpose (they process information because they can, but this is not their purpose) other than the one artificially given to them at the time of their materialisation. This is easily visualised in the case of modern organisations, the purposes of which are outlined in their deeds of incorporation. However, the same is true for governments, too. As organisations, governments have a single, specific purpose: to control the state.

This is the only purpose of a government. Other purposes given to it from time to time (to serve God, the state's citizens, the nation etc.) are given to it as a result of politics. All of them follow the necessary, but tacit, assumption that a government already controls a state—how else could all these grand purposes be achieved? These are therefore after-the-fact purposes, not the actual purpose of the Being, the organisation that is government. Its purpose, its *raison d'être*, is to control the state.

### 4. How did governments acquire this purpose? \*

Although today governments (just the same as any other organisation) benefit from written constituting documents, this has not always been the case. Today the purpose of governments is written down in constitutions, but constitutions came to be only recently in human history. Governments (chieftains, kings, emperors, governing councils, etc.) existed long before them, presumably since the beginning of humanity. How then, did governments materialise in the analogue world and acquire this purpose so early in history?

### 5. How did governments come to be? \*

Governments, in the form of chieftains or heads of (larger or smaller) families or governing councils, existed and were controlling their states

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409 See Chap. 2, par. 7.

410 See Chap. 2, par. 11.

(basically, extended families or clans) long before writing was invented. Why did governments exist at such an early stage? How did they come to be? Are they, like the state, natural to humans?

Governments came to be because the state, which was formed immediately when two humans named themselves and started talking to each other, is itself a dataset (a Being, in fact an organisation), and all datasets are subject to control by a Being. There is no dataset, Thing or Being, in the analogue or the digital world that is not under the control of a Being.<sup>411</sup>

Therefore, once a state was formed a Being immediately controlled it, in line with that Being's need and opportunity.<sup>412</sup> It was that Being that formed the first government, establishing a relationship between a state and its government that has never since ended (writing, once invented, merely formalised the relationship).

## 6. \*

It is impossible to say how (or much less, why) that particular Being became chieftain, king or ruler over the first state. It is possible that decisions (most importantly, what to call themselves, i.e. what to call their state) were made by the stronger or the cleverer or the older individual in the state, or, perhaps, collectively. Whatever the case may be, that Being (regardless of whether it was an organisation of one person or one made up of multiple individuals) became the government of that state.

Two things are important to note, however. First, that decision-making was internal, within the state. The naming of the state (and of its individuals) was performed internally, within that state, and not externally, by other states (as, for example, is the case today with humans naming dogs<sup>413</sup>). This self-naming is the result of the self-consciousness acquired by humans, which led to the formation of the state as the only natural way to warrant it (their self-consciousness).

The second point of note is the fact of the decision-making itself. A decision was made by a Being and it was applied within the state. Decisions are, of course, the norm among all pack animals, and made by their leader, but these are sustenance-relevant. In this case, the decision made about the name of the state (and thus the name of each of its citizens),

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411 See Chap. 6, par. 3.

412 See Chap. 5.

413 See Chap. 8, par. 7.

other than revealing self-consciousness, went much further—it initiated a decision-making relationship (that was unavoidably hierarchical<sup>414</sup>) that continues to this day.

### 7. Governments are natural to humans

The creation of governments therefore immediately followed the formation of states, as a natural result of their (the states') existence. In this sense governments are themselves natural to humans: there can be no state without a government.<sup>415</sup>

### 8. Controlling the state

What does it mean, that the government controls the state? It means that the government has the ability to allow or prohibit processing operations both on the state and by the state.<sup>416</sup>

The former means that the government has the ability to control processing operations by others (other Beings) on the information platform that is the state. This it does by basically prohibiting (i.e. monitoring) all of these operations to the best of its ability, securing exclusive control over the information processing carried out in a state for itself.<sup>417</sup>

The latter means that the government can allow or prohibit any processing operation by the information platform that is the state, regardless of the fact that the state is natural to its citizens and necessary for them to live a meaningful life. Moments of both inhuman atrocities and of exemplary humanism throughout history are the result of governments and their decisions (i.e. of politics), not of the state.

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414 On hierarchy as an organisational system natural to humans, see note 6/7/1.

415 Anarchy is, of course, a kind of government, not of state.

416 But the government cannot destroy the state; hence it has no property rights over it (see Chap. 24, par. 1).

417 See, however, par. 10, and also the analysis on sovereignty in Chap. 16, par. 4.

9.

The state has no specific purpose<sup>418</sup>—and the government does not offer it one. It is easy to confuse the decisions of the government with setting the purpose of the state. The government, because it controls the state, may decide to set any purpose for the state's processing, that is, for the information processing carried out by it.<sup>419</sup> This does not, however, make these purposes the purpose of the state. The state preceded the government and itself has no purpose—or, at least, not a specific one.

In fact, the government, as a Being, has needs and it is these needs that it serves through the information processing made possible to it through control of the state.

**10. On the digital world breaking down governments' control over the(-ir) states\***

Because a government controls its state, it can allow or prohibit any processing operation on its (the state's) platform.<sup>420</sup> This it does to the exclusion of any other Being. A government, having as its sole purpose the control of the state, zealously holds on to its privileged position; it does not share control with any other party. Although it can be claimed that this absolute and exclusive internal control by the government over its state was introduced only after the emergence of the Westphalian<sup>421</sup> state, this is not the case: no government (chieftain, king, city council or emperor) has historically ever accepted sharing control of its state with anyone. Simply put, a government does not, and will not, share control of its state—not willingly,<sup>422</sup> at least.

How is such control attained in practice? Myriad information processing operations take place, both on the information platform that is the state and by the state itself—how can a government monitor and control all of them?<sup>423</sup>

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418 See Chap. 11, par. 7.

419 After all, this is the case for any organisation—except the state; see Chap. 2, par. 9.

420 See par. 8.

421 See note 16/1/3.

422 Cases of state succession are meant here (see Chap. 15), rather than cases of internal political strife that might lead to replacement of the government by another.

423 Total control is impossible anyway (see Chap. 6, par. 2)—it is an unreachable and unattainable aim of government (see Chap. 16, par. 5).

In essence, until the advent of the digital world, control was achieved factually, in practice.<sup>424</sup> Until only a few decades ago, all information processing carried out by a state's citizens was performed locally, on the information platform that is their state. Individuals created families, studied, worked and transacted within closed, physical state borders. Although travel or relocation (for shorter or longer periods) was possible, there was in fact no way for anyone to transact across borders without their state's involvement, and thus the control of its government, either in the form of products physically crossing borders with the relevant paperwork and paying import/export taxes, or individuals crossing them using passports, visas and other travel documents. Challenges to this process have certainly occurred throughout human history (e.g. from religious organisations, company-states etc.), however none have survived the clash with the government. This was as true in the distant past as it was until a few decades ago, when the digital world (in essence, the Internet) emerged.

Governments were therefore able to control most<sup>425</sup> processing operations on the information platform that is the(-ir) state, because the state was a necessary party to all information processing carried out by its citizens. In other words, the state knew everything (was omnipresent) and the government, through its control of the state, was able to control everything (was omnipotent<sup>426</sup>).

Governments were therefore able to provide security and protect the rights of their citizens because they controlled their information flows. They basically controlled the flow of money and people through control of the relevant information—and used this control to serve any purpose they wished. Governments could impose internal order and undertake large-scale projects by using this information and could protect themselves from external enemies by being able to mobilise resources (people and material) over which they had control.

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424 See also Chap. 17, par. 5.

425 On the true meaning of control see Chap. 6, par. 2; specifically, then, the government controlled the majority of the attributes of Beings or Things on the information platform that was its state.

426 The state could not be omnipotent, because it has no will of its own, see also Chap. 16, par. 3.

### 11. A beginning-of-time model fundamentally and irreversibly eroded: Leviathan's demise\*

The digital world today has eroded this age-old model by removing exclusive control of information from the reach of the state. Now individuals (who have become users<sup>427</sup>) transact over online platforms, bypassing the mandatory state controls (borders, customs etc.) of the past. They study online and acquire certificates from organisations that are not necessarily nationally accredited or supervised. They create cross-national communities and exchange information or carry out common projects without any state involvement. They have direct access to information generated outside their countries' borders, completely unmonitored by their states. Governments that had previously comfortably controlled the flow of the personal information of their citizens through control of the state now face competition from private online platforms (which are controlled by and form the territory of competing states<sup>428</sup>). The age-old, beginning-of-time model of government control over the (its) state, and the state's control over its citizens, is being fundamentally challenged.

A brief examination of the frontispiece in Hobbes's *Leviathan* is revealing for the purposes of this argument. In it, a giant crowned figure is seen emerging from the landscape, towering high above the ground and clutching a sword and a crosier, beneath a quote from the Book of Job: '*Non est potestas Super Terram quae Comparetur ei*'.<sup>429</sup> The torso and arms of the giant are composed of over 300 people all facing inwards, away from the viewer. The giant is intended to represent the state, composed of its citizens. It provides security to them under social contract theory. How is it able to do that? Tellingly, by staying above the landscape, by seeing (and knowing) all, by exercising control over it.

However, the emergence of the digital world has changed everything—it is, in fact, threatening to drown the Leviathan, to bring it to its knees. The artist has decided that none of the people who comprise the giant should face the viewer; rather they all face the state. It is exactly this crucial detail that has fundamentally changed: today individuals have (individual, user<sup>430</sup>) faces, and are looking outwards, to the whole wide world, which

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427 See Chap. 17, par. 10.

428 See Chap. 17, par. 12.

429 'There is no power on earth to be compared to him.'

430 See Chap. 17, par. 11.

has suddenly been opened up to each one of us, for us to use without the need to relocate, in an unprecedented twist in human history.

## 12.1. The political system

*‘For the constitution of a state is in a sense the way it lives.’*

Aristotle

**Synopsis:** *The political system is the set of rules applied by the government while it is controlling the state (1–2); Two basic questions: who and how (3); Morality in the system (4–5); The response to the who: monarchy, oligarchy or democracy (6); The response to the how: the tacit assumption behind monarchy, oligarchy and democracy (7–8); The most basic assumption of all: the analogue world (9).*

### 1. \*

The political system is the set of rules applied by the government while it is controlling the state. It is the government’s rules of processing specifically for the state, that is, the way in which the government exercises its control over the state.

Because the question of how a Being exercises control over a dataset (regardless of whether in a haphazard or a rules-based way) is beyond the scope of this analysis,<sup>431</sup> here only the fact is noted that rules<sup>432</sup> on how governments control the state do exist.

Why is this fact important? Why should these processing rules be exceptional, of special interest? Why should they have a specific name, after all? Are they not similar to any other rules in place when a Being is controlling a dataset (e.g. the owner of a house or a company), which, as noted, are of no concern here?

It is the importance of the dataset concerned, that is, the state, that sets these rules apart. In other words, this set of rules (the political system) determines how the information platform that is the state functions in practice each time—how it runs, that is, what processing operations are

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431 See Chap. 6, par. 6.

432 This does not mean that the rules preceded the actual exercise of control, i.e. chieftains and kings (and, presumably, democracies) existed long before Plato categorised them.

allowed on it and by it. In other words, the political system is, basically, the state system, if one replaces the word ‘polis’ with the word ‘state’, as per the former’s original use.<sup>433</sup> (Similarly, in computing terms a political system can be visualised as an operating system: it includes, and provides, the rules under which any information processing happens.)

While the government, as a Being, interacts with other Beings (significantly, the citizens on the same platform, that of their state) and Things as well, it is only this specific relationship, the relationship of a government with its state, that is examined here.

## 2. \*

Although political systems were applied as soon as governments (and thus the state) emerged,<sup>434</sup> their forms varied widely, challenging categorisations even as broad as Plato’s distinction among monarchies, oligarchies and democracies.<sup>435</sup> How else can the hybrid systems of modern constitutional monarchies, the presidential system, or representative democracies be interpreted?

In other words, writing (and political philosophy) merely formalised (and continue to do so—in modern times, in constitutions<sup>436</sup>) what was, and is, practiced in the analogue world by governments in order to control the(-ir) states according to need and opportunity.<sup>437</sup>

## 3. Two basic questions\*

The government may be the Being controlling the (dataset, the information platform that is the) state, but nothing has been said so far about who (which Being(s)) control(s) the government. Because it is itself an organisation, it is subject to control by the humans that participate in or created it.<sup>438</sup> This can be anything from a single person to a large group of individuals (rotating into and out of roles of control or not)—broadly aligning with the concepts of monarchy, oligarchy and democracy.

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433 See note 0/1/7. On the use of ‘system’ in this analysis, see Chap. 1, par. 4.

434 See Chap. 12, par. 7.

435 The rule of one, of a few or of all, thus covering any conceivable alternative in the analogue world.

436 See also Chap. 22, par. 3.

437 See Chap. 5.

438 See Chap. 2, par. 7.

The humans controlling the government, as individuals, need to augment their information processing through the organisation they control. Although in the case of the government, because it controls the state, the advantages for 'its' individuals are plain for everyone to see,<sup>439</sup> the way in which it accomplishes this matters (because it is human nature to compare<sup>440</sup>) as this ultimately affects how a state is run by its government.

Political systems, therefore, basically address two questions: the question of *who* (who controls the government, i.e. who participates in it), and the question of *how* (how is control over the state exercised)—with political philosophy frequently adding a *should* to the mix, a mistake that will nevertheless be avoided here.

Obviously, these are not the only questions a political system needs to address. Because it formalises the most complex relationship on the information platform that is the state (that of the state and its government), a wide array of issues may, and do, occur. The list is long. For example, with platform rights being a given,<sup>441</sup> a political system needs to address the question of whether platform rights are to be respected and, if so, in what manner.

#### 4. Morality in the system

Political systems are inherently and unavoidably moral;<sup>442</sup> they reflect and are the result of a certain morality because they include a choice (in terms of which processing is allowed and which is prohibited).

As such, the ways in which any political system provides the answers to the above two basic questions (as well as to related questions, e.g. who drafts the regulations, and how and why), with the exception of the few observations below, are of no concern here.

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439 Therefore, the question of whether to keep or dissolve a government has never been an issue, as is the case for any other organisation, see Chap. 2, par. 7.

440 See Chap. 5.1, par. 9.

441 See Chap. 22, par. 5.

442 On whether morality can be avoided altogether see Chap. 23, par. 3.

## 5.

Although a political system should be considered natural,<sup>443</sup> the actual ways in which it responds on any given occasion to the questions of who and how<sup>444</sup> are anything but. All political systems are invented. They are the product of the human intellect, of human ideas and thoughts. While the existence of a political system is necessary for any state, the ways in which it responds to the above two questions are not predetermined, and nor do such systems make linear progress towards any preordained end—but are simply the result of need and opportunity.

Having said that, while addressing the questions of who and how, any political system necessarily takes into account the basics of an informational approach, which comprises the following elements:

- each and every individual (i.e. each one of a state’s citizens) needs to augment its information processing;<sup>445</sup>
- governments are Beings that need ‘their’ individuals to augment their information processing through them;<sup>446</sup>
- states are omnipresent, that is, they know everything because they are the necessary party to an(y) information processing on their platform,<sup>447</sup> but they have no purpose<sup>448</sup> (or rather any purpose ascribed to a state is artificially given to it by its government); and
- states need their citizens to augment their information processing.<sup>449</sup>

The way the above are taken into account (basically, whether preference is given to the individuals’ or to the government’s needs) determines the content of a political system.

An important point concerns the natural conflict between the needs of a government and those of its state’s citizens, which can never be reconciled.<sup>450</sup>

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443 See par. 2.

444 See par. 3.

445 See Chap. 5.1.

446 See Chap. 2, par. 7.

447 See Chap. 7, par. 3.

448 See Chap. 11, par. 7.

449 See Chap. 10.

450 See also pars. 7 and 8.

## 6. The response to the who: monarchy, oligarchy or democracy

A political system's way of dealing with the question of who comprises the government has given us the distinction between monarchy (one person), oligarchy (a few people) and democracy (all the people). Little has changed since Plato put these distinctions in writing (himself classifying what was already known to humans by that time)—but, of course, in reality, in the analogue world at least, no other conceivable options are possible.

## 7. The response to the how: the tacit assumption behind monarchy, oligarchy and democracy\*

A political system's way of responding to the *how* of government is not as straightforward as it is to the *who* (most likely because it is not as visible, and thus not as easy to confirm). A tacit assumption is made instead: whichever Being controls the government, it will use the state to serve its need to augment its information processing to the detriment of that state's citizens, given that information in the analogue world is finite. In the case of a monarchy this control is exercised by a single individual (the king or queen); in oligarchies by the (limited number of) individuals involved; and, in the case of democracy, by those in government at any given time.

This assumption has been vindicated time and again throughout human history. Although it may be easy to see in the various cases of monarchies and oligarchies (less so in constitutional monarchies), it is no less true in cases of democracies: although anyone could potentially participate in government, the fact remains that few actually do.

## 8.

Throughout human history a number of political systems have been devised to address the natural conflict between the government and its citizens, among which should be counted constitutional monarchies, systems following natural rights theories or theories of power separation, and systems of 'checks and balances', as well as political liberalism or individualism.<sup>451</sup> (On the other hand, political systems of communism/socialism or fascism, or those based on religion, have felt no need to apply any one of

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451 On its inherent conundrum, see Chap. 26, par. 5.

these models because they are based on ascribing a purpose to the state, to the government and, thus, also to the people; in a single-purpose state (a unity) no conflict is imaginable—or tolerated.)

### 9. The most basic assumption of all: the analogue world

Notwithstanding all of the above assumptions, theories and findings formulated over the thousands of years of (recorded) human history, what is important to note is that the most fundamental underlying assumption is that the political system is designed for, and will operate in, the analogue world. The digital world having a history of only a few decades, every system or thought humans have ever had about governance has been in relation to the analogue world. This includes not only those concepts relevant to the state and governance, such as borders and locality,<sup>452</sup> but also, more importantly, the idea that information is finite. In other words, whatever objectives these political systems had, be they liberal or not, and whatever premises they were built on, there was always the assumption that information is finite, and that therefore one's (e.g. the government's) information processing increase would lead to another's (in the same example, its state's citizens') decrease.

The creation of the digital world has overturned everything that the political systems of today are built on. Indicatively, information is infinite in the digital world;<sup>453</sup> digital (state) territories are eroding traditional notions of state sovereignty;<sup>454</sup> and a new kind of artificial Being, the computer program (on par with language and money), has entered the scene.<sup>455</sup>

With all humans' basic assumptions overthrown, the digital world is expected to put everything, all the political systems created and political thoughts had by humans so far, to the test. Everything will have to be re-thought and reassessed in view of the new reality.

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452 See Chap. 17, par. 4.

453 See Chap. 1, par. 16.

454 See Chap. 17, par. 8.

455 See Chap. 2, par. 12.

### 13. State justification

*‘This part of Philosophy is in the same situation as the public roads, on which all men travel, and go to and fro, and some are enjoying a pleasant stroll and others are quarrelling, but they make no progress. The single reason for this situation seems to be that none of those who have dealt with this subject have employed a suitable starting point from which to teach it.’*

*Thomas Hobbes*

**Synopsis:** *No particular justification necessary: states are natural to humans (1); Social Contract theory (2); Against social contract theory (3); Religion (4); Other state justification theories (5); Utilitarianism (6); Hegel’s Idealism (7); Marxism (8); The welfare state (9); State malaise (10); The digital world (11).*

#### 1. \*

Because it is argued that states are natural to humans, no further justification for states is necessary: states were formed naturally, automatically and immediately at the moment when two humans gained self-consciousness and started to communicate with each other using language.<sup>456</sup>

There is some merit, however, in examining a bit more closely (without daring to claim comprehensiveness) other state justification theories, which, after all, form the norm throughout human recorded history, in order to demonstrate how the approach advocated here differs from them and what advantages can be drawn from it (particularly in the digital world).

#### 2. Social contract theory\*

Social contract theory has been the dominant state theory for the past 2500 years, ever since Plato was the first to put it in writing. At its barest, it claims that the state is the result of an agreement among humans to form states in

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456 See Chap. 8, par. 1.

order to achieve a purpose (of some sort). Thus, because the agreement is artificial, a construct achieved by a group of humans, the state, it is argued, is artificial too.

Plato's epigones<sup>457</sup> never really got away from the 'agreement' idea. In essence, they either popularised and expanded, or viewed from a different angle the same, basic idea, namely that the state is an artificial association of humans, a group of humans deliberately formed on the basis of an underlying agreement among them for a particular reason and purpose.

### 3. Against social contract theory\*

Social contract theory is unsatisfactory simply because, assuming an agreement or a contract is in place (an idea that is not-so-easy to digest for many humans), if states are artificial constructions of humans, then one is obliged to examine their merits. Are they good enough? The best possible? For what purpose and under which metric? Could there, perhaps, be another, better, alternative? At the end of the day, if we are building (and building on) (theoretical) constructions that are in any way artificial, anything goes.

It is essentially at this exact point and for this specific reason, that the *should* entered political philosophy, never to leave it since. It is the artificiality of the state (according to social contract theorists) that explains how political philosophy, as soon as it was born, was basically transformed into political theory.<sup>458</sup>

### 4. Religion\*

Those not satisfied with a human-made, artificial explanation for the state may always find recourse to religion (in which, as a matter of faith, one believes in or does not). God (or gods) is the alternative explanation of state creation throughout human history. From the religious perspective, states originated not from humans but were God's will, they were created by God.

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457 These include almost every political philosopher ever since, including Aristotle, Cicero, St Augustine, Hobbes, Spinoza, Locke, Rousseau, Kant, Hegel, Schopenhauer, Nietzsche, Marx—practically everybody up until the days of Rawls, as well as, science-specific experts such as Weber, Kelsen and Hayek, but also empiricists such as Hume and Bentham. Regarding Aristotle, although he (alone) claimed that the state is natural to humans, he connected it with a purpose anyway (to secure the *good life*).

458 See note 0/1/3.

## 5. Other state justification theories

The above two theories have been the dominant state justification theories throughout human recorded history. Other alternatives have emerged from time to time: while they have never excluded the idea of ‘agreement’, and thus of the artificiality of the state, they have all approached it from different angles (rather than the purely contractarian). At any event, all of them have been heavily criticised and none have won widespread acceptance—outside, that is, a larger or smaller circle of people who found them useful for their political agendas of utilitarianism, idealism, and Marxism.

## 6. Utilitarianism\*

Utilitarian philosophers (Bentham, Mill, and, to a certain extent, Hume), perhaps trying to refute the social contract theory of their (immediate) predecessors (Hobbes and Locke), suggested that states are natural to humans on account of a habit of obedience. According to Bentham, ‘When a number of persons (whom we may style subjects) are supposed to be in the habit of paying obedience to a person, or an assemblage of persons, of a known and certain description (whom we may call governor or governors) such persons altogether (subjects and governors) are said to be in a state of political society.’ Notwithstanding that what is described here is the government and not the state, apparently this habit of obedience will continue for as long as the government maximises the greatest happiness of the greatest number—essentially placing agreement on the basis of the relationship, and thus not moving substantially away from social contract theory.

## 7. Hegel’s idealism\*

Hegel, adopting a basically Aristotelian viewpoint, suggested that the state is natural and not artificial, claiming that it is the ‘rational destiny of human beings to live within a state’. The state is ‘the ethical order in which individuals realize their capacities and potentialities.’

## 8. Marxism\*

Marxism (Marx himself admittedly having given relatively little attention to the state) has either followed the Hegelian approach of identification

between individuals and their states, ideally merging the two (an approach not foreign to Rousseau, either), or has treated the state as an ‘apparatus’, merely ‘a committee which manages the common business of the bourgeoisie’.

In any event, even one of the few systematic and structured attempts to examine the state under the Marxist toolset has produced few results: (unavoidably) focusing on the functions of the state (and thinking in terms of an Asiatic-Babylonian state, an ancient Greek state, a feudal state and a capitalist state), it concludes that ‘there is no general theory of the State because there can never be one’. For Marxists, the state remains an ‘undecipherable mystery’.

### 9. The welfare state\*

The welfare state is not a state justification theory but rather a purpose-of-the-state theory, that has, however, gained traction recently by insisting on increased public spending for whatever is (arbitrarily and high-handedly) perceived each time to be needed for the welfare of a state’s citizens.

### 10. State malaise\*

The above unsatisfactory theories to justify the existence of something as basic and evident in human lives as the state are responsible for a certain malaise that has been felt by humans vis-à-vis their states for the past 2500 years. This malaise has left individuals’ minds wanting—and wondering (if not, wandering): if the state is something unnatural to humans, something artificially constructed by them, perhaps there are other (better) alternatives? What if there is something out there that is better than living in states for us, patiently waiting to be invented in some distant future? What if our ancestors were simply wrong to have chosen states as their primary form of organisation?

State malaise is further aggravated by the pitting of individuals against their states,<sup>459</sup> as is, after all, bound to happen whenever a contract, and a contractual relationship, is involved (the confusion of the state with its

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459 See also Chap. 26, par. 8.

government,<sup>460</sup> although not caused by social contract theory *per se*, has not helped, either).

By contrast, if states are finally acknowledged as being natural to humans, because they are the only natural individualisation and identification mechanism that turns humans into individuals and makes possible a meaningful life, then our efforts can finally be focused at understanding, not questioning them (releasing, in this way, political philosophy from the shackles of the 'should').

## II. The digital world\*

Current state justification theories are not only unsatisfactory in the analogue world but are also unsuitable for the digital one too. If such fundamental matters as what the state is and why it exists have not been resolved in the analogue world, how can they apply or sound even remotely convincing in the digital? How can they solve the problems of non-territoriality, loss of individual identity or challenged sovereignty?

For the moment state justification remains jumbled in the minds of humans as a combination of social contract theory,<sup>461</sup> realistic findings ('there is no other alternative to living in states throughout human history anyway'), and a pragmatic way to manage current affairs ('states are the only mechanisms available to humans to manage major projects such as mitigating climate change, building large infrastructures or addressing inflation').

While the analogue world may have been served well by the above combination (excepting state malaise), the digital world will put all these theories to the test by challenging (if not reversing) all their basic assumptions. For example, if humans have allegedly agreed to a social contract in the analogue world because they can do little else to avoid a state of nature, does this extend to the digital world too? Significantly, in the digital world there is no state of nature, because it is artificial, made by humans, and thus, unlike the analogue one, entirely controllable.<sup>462</sup>

Or, alternatively, does Reason (in the sense employed by utilitarianism and others), as assumed in the analogue world, remain the same in the digital world too, even if all assumptions (i.e. about individuality, sovereignty, and, most importantly, the finite nature of information) are overturned?

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460 See Chap. 12, par. 1 (but also Chap. 12.1, par. 5).

461 Or Marxist (Hegelian) theory, depending on which part of the planet one lives in.

462 See Chap. 1, par. 17.

Inevitably, all of the above state justification theories, which have only barely held their ground until today on the basis more of pragmatic than theoretically sound arguments, will crumble under the challenge posed by the digital world.

## 14. State legitimacy

**Synopsis:** States create, store and disseminate information on their citizens (1); Creation of information (2); Storage and dissemination of information (3); Storage of information (4); Dissemination of information (5–6); State legitimacy: A state is legitimate when it is able to create, store and disseminate information on its citizens (7–8); Is control over these types of processing necessary? (9); States do not engage in this type of information processing consciously (10); Failed states (11); Does legitimacy give rise to platform rights? (12);

### 1.

States create, store and disseminate information on their citizens.<sup>463</sup>

### 2. Creation of information

As has been established,<sup>464</sup> at the time of his or her birth each human acquires a name and a citizenship. This makes that human an individual.<sup>465</sup> The creation of new personal information jointly by that individual and its state continues for the term of that individual's life, for as long as a human remains a Being.

### 3. Storage and dissemination of information

Each of the other two types of processing carried out by states on their citizens is also of paramount importance. Although they follow the creation of personal information, they are no less important for the individuals concerned. To carry out a meaningful life,<sup>466</sup> individuals need to have their personal information, first, safely stored for the rest of their lives and, second, transmittable at will to third parties by their states.

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463 See Chap. 7, par. 6.

464 See Chap. 7, pars. 4 and 5.

465 See Chap. 8.

466 See Chap. 7, par. 3.

#### 4. Storage of information\*

Individuals need to have their personal information stored securely by their state for the duration of their lives, that is, for as long as they remain Beings (and for a short period thereafter, even though they will have become Things, to make transactions by other individuals possible).

Individuals need this information to be consistent and not tampered with, in order to enable them to transact with any third party over the course of their lives. This information also needs to be kept securely to ensure their safety: if the records of the name or the citizenship of any individual are lost or altered without the individual's agreement then that individual would be in immediate, physical peril. Although storage of their personal information can be achieved individually (i.e. one can keep proof of identity in a safe location at home), such storage is insufficient because individual safekeeping is contestable and, significantly, information kept in this manner is perishable (as a result of natural disaster, war etc.).

#### 5. Dissemination of information\*

Individuals need their personal information, as created on them by their states, to be transmittable to third parties at their will, with the intermediation of their state granting validity to the transmission. Trust in human transactions is tacitly or explicitly provided by the state through validation (or even direct transmission) of the personal information concerned. Any contract between individuals implies that these individuals exist within a state. Sometimes state-issued unique identifiers (e.g., identity card or passport numbers, tax numbers, etc.) are needed too.

Unless personal information is authoritatively transmitted by the state, any transaction among individuals is impossible. It is not, therefore, simply a matter of contract execution, but of the existence of contracts at all.

This transmission is formal, at an individual's request. In this way it differs from the tacit, implied transmission seen in Chapter 7, that John is actually John and Mary is Mary. The latter is implied in any human communication and makes states natural to humans. The former is a processing operation, invoked each time by the citizens concerned. It may simply involve transmission of name and citizenship (for the simplest of transactions), but it usually goes far beyond this, to include any and all subsequently enriched personal information of the individual concerned (family status, health, education, employment etc.).

6.

Any alteration of the personal information that states create, store and disseminate on their citizens is impossible—at least from the citizens' end: their bond with their states is an unbreakable one.<sup>467</sup> They can, of course, ask for changes, even changing their name and their citizenship; however their original, at birth information will always be there, it will never go away. Nor can an individual be selective—for example, they cannot choose to create information but not to store it: all three processing operations are natural and necessary to them.

On the part of the state, any alteration of that personal information or any inability to carry out (any one of) these information processing operations is similarly impossible—or, at least, it is so important to individuals as to constitute a specific threshold, that of state legitimacy.

**7. State legitimacy\***

It is the ability to execute all these three processing operations (creation, storage and dissemination of information) that makes any particular state legitimate to its citizens. A state is legitimate when it is able to create, store and disseminate information on its citizens.

As long as a state is able to provide its citizens with a name and a citizenship at birth, and to subsequently store safely and transmit authoritatively this and any other enhanced co-created personal information whenever and to whomever required by its citizens, then legitimacy is warranted for the state concerned. By contrast, if this ceases to be the case for any one of these processing operations then legitimacy is lost (or was never achieved in the first place, in the case of new states).

State legitimacy is a fact, a concrete material finding that exists or does not exist in the analogue (and the digital) world.<sup>468</sup> A state is either legitimate for its citizens, because it carries out these three types of information processing, or it is not legitimate because it does not do so. State legitimacy is not a principle within any political theory connected to decision-making by a government, nor is it the purpose of a state or a justification for any subsequent action by a government or any other actor.

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467 See Chap. 8, par. 6.

468 See also par. 10.

## 8.

These three processing operations can be carried out only by states, at least in the analogue world. This is the situation with which humans have lived and been used to since the time they gained self-consciousness and started talking to each other.

However, the situation in the digital world today remains contested.<sup>469</sup> To the extent that humans are the users of the digital world within the digital territories of states,<sup>470</sup> states retain their monopoly. The role that the break-up of territoriality, as well as that of artificial Beings, will play remains to be seen.<sup>471</sup>

### 9. Is control over these types of processing necessary? \*

Control is the ability to allow or prohibit a processing operation.<sup>472</sup> Is it possible that a state carries out the above three types of processing operation but does not control them, that is, it carries them out at the instructions of another state?<sup>473</sup>

In most of the ancient world (with the notable exception of city-states and isolated states) this was actually the case. For example, the state of Nazareth existed within the Jewish Kingdom that existed under the Roman Empire. The idea of state sovereignty<sup>474</sup> came quite late on in human history, through the concept of the modern Westphalian<sup>475</sup> state (and this is perhaps the determining difference between modern and 'old' states in state theory today<sup>476</sup>).

Control of these three processing operations is therefore not necessary to warrant a state's legitimacy. A state may continue to carry out these

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469 See also Chap. 7.1, par. 6.

470 See Chap. 17, pars. 11 and 12.

471 See Chap. 17, pars. 9 and 13.

472 See Chap. 6, par. 1.

473 Specifically, of another government, the state having no (conscious) will of its own (see Chap. 11, par. 8).

474 Meaning of government sovereignty; the state is always sovereign on the information platform that it, after all, created; see Chap. 16 par. 2 and note 16/2/1.

475 See note 16/1/3.

476 See, however, Chap. 8, par. 3.

operations for its citizens without it (specifically, its government) having control over them, that is, another state may be able to affect them.<sup>477</sup>

## 10.

States do not engage in this type of information processing consciously. A consciousness is not assumed for them—a state is not a person.<sup>478</sup>

Of course, a state, because it is a Being, will process information because it can. While it can (and it does) engage in any other type of information processing, these three specific processing operations are the natural<sup>479</sup> result of personal information creation for its citizens from the moment they are given names at their birth and thereafter. They are not the result of some conscious decision reached after what might be perceived as rational thinking by the state.

A (or any) government's decision to affect these three processing operations in any manner (for example, by giving specific names to specific individuals (e.g. to slaves), or by prohibiting the transmission of information by certain individuals to certain others) ought not be confused with the processing operations which are carried out anyway, automatically and in the background, by the information platform that is the state.

## 11. Failed states

Can a state be legitimate to its citizens but not exist in the analogue world? This would appear to be an absurdity; a state is a Being and, if it is legitimate, processing is carried out by it and thus it exists (as a Being, not a Thing) in the analogue world.<sup>480</sup>

It may be the case, though, that other states do not recognise a state, that is, they prohibit the dissemination of information on its citizens to their own, they refuse to process its information.<sup>481</sup> In this case, a state may be legitimate with regard to its citizens but fail them in practice, that

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477 See also note 16/2/1.

478 See Chap. 11, pars. 11 and 8.

479 Meaning of logical, see note 1/1/1 (therefore, in this case, what is 'natural' is not based on need, see Chap. 5, par. 5).

480 See also par. 7.

481 Because states, with the exception of the EU, are still living in a state of nature, see Chap. 19, pars. 2 and 7.

is, it seriously reduces its citizens opportunities to augment their information processing compared to the opportunities afforded to the citizens of other contemporary states on the planet. Whether this would lead to the state crumbling from within cannot be determined (and certainly such a state would not be a ‘failed state’, which is an entirely political, and thus arbitrary, term).

## 12. Does legitimacy give rise to platform rights?

If the state carries out these three information processing operations (creation, storage and dissemination) as the natural result of personal information creation for its citizens,<sup>482</sup> and states are, themselves, natural to humans,<sup>483</sup> do these three types of processing give rise to any platform rights?<sup>484</sup>

In essence, they do—to the platform rights of equality, liberty and security.<sup>485</sup> The creation of personal information by the state means that all humans are born equal in the eyes of the state (because all humans are given a name and a citizenship by it). Similarly, because there are no intermediaries in the individualisation relationship between a state and its citizens, all humans are born at liberty (from other humans). This information also needs to remain secure, at least for the duration of their lives (security of information). All of the above are logical<sup>486</sup> inferences of the finding that states are natural information platforms for their citizens.

At the same time, however, the above does not imply that individuals are the same as their information, the sum of the information created, stored and disseminated on the information platform that are their states.<sup>487</sup> Although this may be the case in the digital world, it is certainly not so in the analogue.

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482 See par. 10.

483 See Chap. 8.

484 See Chap. 22, par. 5.

485 See Chap. 22, pars. 6–9.

486 See note 1/1/1.

487 See, however, Chap. 1, par. 1.

## 15. State succession

*'The history of art is sometimes described as the story of a succession of various styles.'*

Ernst Gombrich

**Synopsis:** *States are temporal (1–2); Never a void (3); How does a state die? (4); What happens to a state after it dies? (5); State succession (6).*

### 1. \*

No state has endured the test of time. Very few empires reached the thousand-year threshold; most city-states lasted far less time. The average life of a state does not exceed a few hundred years. Only a handful of modern states have a history longer than that.

States are, therefore, temporal. They may outlast several human terms of life, but that does not mean that an end is never to be expected (as preposterous as this idea may seem to citizens currently living in relatively peaceful, or powerful, states). Each and every state has its own term of life.

### 2. \*

There is no set way in which a state dies, any more than there is a set way in which a state is born.

After states took the form of administrative mechanisms in the analogue world<sup>488</sup> they succeeded one another over time, steadily but surely occupying every corner of the planet.

In essence, humans' recorded history can be read as the succession of states. Tribes and extended families formed larger, more established communities; empires swallowed up kingdoms or city-states; and kingdoms

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488 See Chap. 9.

or city-states emerged from disintegrating empires, in a timeline which appears to continue indefinitely.<sup>489</sup>

Violence, while present in most such changes, is not always necessary.

### 3. Never a void\*

What is important to note, however, is that because states are natural to humans, immediately when one ceases to exist another replaces it. In other words, there is never a void, humans were never and can never be found out of a state, in limbo.

Consequently, a constitution or any other formal method of forming a state (e.g. the appointment of a king, an emperor etc.) is an act of succession, not an act of creation. Citizens of the new state were already citizens of another state immediately before the new constitution was signed or the new king crowned. States are natural to humans, and no human can ever be, or ever has been, stateless.

### 4. How does a state die? \*

What is meant by saying that a state no longer exists? When it comes to biological Beings one can define the time (and cause) of death. The same is true for other organisations (corporations, state agencies etc.). But how does a state die?

As has been established,<sup>490</sup> a state is no longer legitimate when it does not perform the three information processing operations expected of it (the creation, storage and dissemination of the personal information of its citizens). A state can be legitimate but not sovereign, in the sense that it performs these three types of processing but has no control over them, that is, another state has the control.<sup>491</sup> But does either of the above cases (loss of legitimacy or loss of sovereignty) mean that a state is dead, that it no longer exists?

Neither loss of legitimacy nor of sovereignty<sup>492</sup> is the same as state death. A state may no longer be legitimate (let alone, sovereign), but it may contin-

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489 Or a cycle, depending on one's personal views.

490 In Chap. 14.

491 See Chap. 14, par. 9.

492 Indeed, as legitimacy can exist without sovereignty, this is even less of an issue.

ue to function, that is, to execute the three processing operations necessary for its citizens.

A state dies when it is devoid of citizens.<sup>493</sup> States are natural to humans, being necessary for humans to augment their information processing. If no individuals need their state in order to augment their information processing, then that state ceases to exist. History has given us many examples of possible variations of state existence (subordinate states, vassal states, due-paying states, isolated states etc.), but never a state without citizens (which, in itself, demonstrates that states are natural to humans).

By the same token, a state may continue to exist if it has citizens, even if (temporarily) it cannot process (in fact, exercise control over) their personal data—that is, a state may have a people but not a territory.<sup>494</sup>

### 5. What happens to a state after it dies?

After a state dies, as is the case for any other Being, it becomes a Thing.<sup>495</sup> Information about it can be processed by other Beings, but it can no longer process information itself.

### 6. State succession\*

If this is how states die, and if succession is automatic because states are natural to humans, what exactly is it that is succeeded, or created anew each time?

The deed of succession, if any, is usually a technical legal document of procedural importance. What is important, however, from an informational perspective, is that the three types of processing operations confirming state legitimacy are assumed by the state's successor. In practice, a state succeeds another when the creation, storage and dissemination of its citizens' information is assumed by it.

At least two informational risks may arise from state succession. The first is that the state's files may be used to persecute the population. The second is that state records may be tampered with for some purpose (in

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493 See also Chap. 10, par. 1.

494 See Chap. 17, par. 4. On states creating the information processing environment necessary for their citizens to live in, see Chap. 11, par. 3.

495 See Chap. 2, par. 3.

order to prove a point, build a narrative etc.) by the successor state. Because establishing the facts can be an impossible task (the successor state may claim that it was the previous state that had falsified the records), this situation offers a useful illustration of the practical use of the platform right to security of information.<sup>496</sup>

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496 See Chap. 22, par. 9 (and also Chap. 14, par. 12).

## 16. Sovereignty

*'But it does not require much effort to see that a virtual and always present entity is exactly the opposite of what is needed for the collective to be assembled: if it's already there, the practical means to compose it are no longer traceable; if it's total, the practical means to totalize it are no longer visible; if it's virtual, the practical means to realize, visualize, and collect it have disappeared from view.'*

Bruno Latour

**Synopsis:** *Sovereignty means control (1); An empty word for the state (2–3); Who else could claim sovereignty? The government (4); Why would the government strive for sovereignty? (5–6); Sovereignty in the digital world (7).*

### 1. Sovereignty means control\*

As has been established,<sup>497</sup> sovereignty means total control; in the context of a state, sovereignty means control over all information processing carried out within its territory.<sup>498</sup>

### 2. \*

As also established, control is both external and material;<sup>499</sup> it is the concrete ability of a specific Being to allow or prohibit a specific processing operation by another. In addition, it is the state that creates the platform, the information processing environment necessary for its citizens to live a meaningful life.<sup>500</sup>

Consequently, by definition, the state is sovereign on its platform (on its territory<sup>501</sup>), that is, it is able to allow or prohibit (any) processing on it by its citizens. How could it be otherwise? If it is the state that makes any

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497 In Chap. 6, par. 2.

498 On state territory, see Chap. 17.

499 See Chap. 6, par. 1.

500 See Chaps. 11, par. 3 and 7, par. 3.

501 See Chap. 17, par. 2.

information processing by its citizens possible, then how could it not, at the same time, be able to control it? If the state is the creator of the information platform on which we live, how could it not, by definition, control all of our processing on it?

From this point of view, sovereignty, meaning control over all information processing on the information platform that is the state, is an empty word, it has no meaning, because it is self-evident for the state—the mere existence of a state means that it is sovereign.<sup>502</sup>

### 3.

Of course, while the state is able to control any processing on its information platform, it will not of its own accord act upon this, because the state has no will<sup>503</sup> of its own. It is able to exercise control naturally, because it created the platform; it has no will (let alone a purpose) either to create the platform or to control the processing by any Being on it, but at the same time it cannot not do it—the state cannot avoid exercising control. Control over its information platform comes as the natural result of its creation.<sup>504</sup> It is not the result of any conscious action by the state.

The state has sovereignty over its platform, meaning that it can control all information processing on it, but this does not mean that it will actually act upon this control in any particular manner.

### 4. Who else could claim sovereignty? The government\*

Of all other Beings within a state (at least in the analogue world), only the government, because it controls the state, could raise a sovereignty claim over all the information processing happening in a state's territory.

The government controls the state; it has the ability to allow or prohibit processing operations both on the state and by the state.<sup>505</sup> The former, in particular, means that the government has the ability to control the processing operations of others (other Beings) on the information platform

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502 This does not, however, mean that another state (specifically, its government) cannot control the processing of that state; see Chap. 14, par. 9.

503 In the meaning of consciousness, see Chap. 11, par. 8.

504 See Chap. 6, par. 4.

505 See Chap. 12, par. 8.

that is the state. The state is always sovereign, because it is omnipresent, but it is up to the government to itself become sovereign,<sup>506</sup> that is, to control indirectly all information processing on the platform that is its state through its control over the state.

### 5. Why would the government strive for sovereignty? \*

In essence, the government does not strive for sovereignty, at least not directly. The government (which is a Being) merely controls a dataset (in this case, the state); control over a dataset means control of its processing and of processing on it.

If an individual (another Being) exercises control over a Thing, for example, a table, it controls processing on that table (the individual's own processing, as well as the processing carried out by other Beings on it). Similarly, if that same individual controls another Being (e.g. a corporation or a drone), it controls the processing done by the Being itself as well as that which is done on it: whatever processing is carried out by that corporation or that drone is also controlled by that same individual as the indirect result of its control of the corporation and the drone (which created the new information). By the same token, because the government controls the state, it controls the processing done by it and on it<sup>507</sup>—irrespective of the vast, immense scope of such processing.

Therefore it is not for its sake, in pursuit of sovereignty, that the government controls the state—control over the state is natural to the government, because the state (and the government) exists. Sovereignty (that is, the quest to control each and every processing operation happening on the information platform that is the state) comes as a natural result of the controlling nature of the relationship.<sup>508</sup>

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506 And, thus, omnipotent, because the government, unlike the state, has a will.

507 In principle, see par. 6.

508 In the same manner that, on an individualised basis, it is sought after by any Being exercising control over another Being or a Thing, see Chap. 6, pars. 2 and 8.

## 6. \*

However, we have seen that total control is impossible.<sup>509</sup> Myriad processing operations are possible on any dataset,<sup>510</sup> and any attempt by any single Being to (consciously<sup>511</sup>) control them all is inconceivable. A Being, or a Thing, cannot be totally controlled by another.

Consequently, if sovereignty is for the state an empty, meaningless word, for the government it is an (unreachable and unattainable) aim. Its control over the state can never be total. This does not, however, mean that the government will ever give up its efforts to achieve total control—on the contrary, it will increase its control over the state as much as possible.

Accordingly, because the state is what it is,<sup>512</sup> the government aims, but can never achieve, to control each and every processing operation by any Being on the information platform that is its state, with such control (as experienced by individuals and organisations, but also animals and artificial Beings) being the indirect result of its efforts above.

In practice, sovereignty for the government materialises on the information platform that is its state because the government controls the majority of its state's attributes, meaning the majority of the processing operations that take place on it.<sup>513</sup> It is in this way that the government governs. Historically, every increase in the information processing capabilities of humans (i.e. citizens) has led to an analogous increase in the sovereignty exercised by the government on the information platform that was its state—at least, this was the case until the advent of the digital world.

### 7. Sovereignty in the digital world\*

As seen previously, the digital world today, specifically in the form of contemporary, large and private online platforms, is fundamentally challenging the beginning-of-time model of government control over the state, and state control over its citizens.<sup>514</sup> However, it is the digital world itself that could ultimately give sovereignty renewed meaning.

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509 See Chap. 6, par. 2.

510 Which remain finite in the analogue world; see, however, Chap. 1, par. 16 on the digital world.

511 Therefore, unlike the state, see par. 3.

512 See par. 2.

513 See Chap. 6, par. 2.

514 See Chap. 12, par. 11.

Because the digital world is artificial, constructed following preset specifications, total control could theoretically be possible, embedded into the system. For example, in the analogue world a state, and more so a government, cannot control (unless with disproportionate effort) the action of one of their citizens grabbing an apple (regardless of for what purpose the apple is grabbed). However, in the digital world apple-grabbing (and its outcomes) must be predesigned and installed into the system as a potentiality to enable such an action to be possible. Otherwise it simply cannot occur. Purpose, and the means to achieve it, therefore have to be built into the system.<sup>515</sup>

In other words, in the digital world information processing is predetermined and thus controllable. It remains to be seen whether new, in the sense of unpredicted, processing can take place in it, or whether its users (humans and artificial Beings alike) will only be able to act in specific predetermined ways—whether new creation is possible within that which has been created already.

At the same time, in the digital world, in stark difference to the analogue, state territory is dynamic—it is the information processing environment in the digital world that has been created by that state's Beings.<sup>516</sup> Although appearing to be dominated, for the moment at least, by large online private platforms (in a way that draws parallels with the company states of the colonial era<sup>517</sup>), governments may in the future decide to stake their sovereignty claims more forcefully, particularly taking into account the transformation of (their) citizens into users.<sup>518</sup>

Sovereignty, then, will acquire a new meaning for states and governments alike. States may need to share their unique identification function, at least in the digital world. Governments may see the achievement of sovereignty move further away from their grasp. Or the exact opposite may prove to be the case: states may claim the digital world as they have the analogue world, with governments finally achieving sovereignty in the digital world because of its artificiality. Whatever the case may be, the concept of sovereignty, particularly within the context of the state, which has been the dominant preoccupation of humanity for the past few centuries, is bound to change fundamentally in the digital world, perhaps beyond recognition.

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515 See also Chap. 1, par. 17.

516 See Chap. 17, par. 11.

517 See Chap. 7.1, par. 5.

518 See Chaps. 17, par. 10, and 12, par. 11.

## 17. Territory and borders

*‘Whether you can observe a thing or not depends on the theory which you use. It is the theory which decides what can be observed.’*

*Albert Einstein*

**Synopsis:** *The territory of a state is its information processing environment (1–2); Territory in the analogue world (3); How state territoriality really works: site-specific locality is irrelevant (4); Moving around in the analogue world (5–7); Territory in the digital world (8–9); The link between control and location; the path from humans to individuals (and citizens) and to (today’s) users (10); Users (instead of owners) (11); The digital territory of a state (12); What about artificial Beings? (13); Borders (14); Interoperability and data portability (15); State security and cybersecurity (16).*

### 1. The territory of a state is its information processing environment

The territory of a state is its information processing environment. It corresponds to those parts of the analogue and the digital worlds where information processing is controlled by the state, where the state is sovereign.<sup>519</sup>

Accordingly, a state’s borders lie at those points in the analogue and the digital worlds where an information processing environment (i.e. a state) ends and other information processing environments (i.e. that of another state) begins, that is, where information processing environments meet.

### 2.

Territory is connected with sovereignty. As has been established,<sup>520</sup> sovereignty means control over all information processing carried out within a state’s territory—within, therefore, that state’s information processing environment.

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519 See Chap. 16, pars. 2 and 3.

520 In Chap. 16, par. 1.

### 3. Territory in the analogue world\*

The territory of a state is not simply the geographical part of the world that has been allocated to it. It is not a matter of partitioning the planet. The territory of a state is the processing environment that has been created by that state, a processing environment that has been made suitable for its citizens to live in,<sup>521</sup> and that makes a meaningful<sup>522</sup> life possible for them.

The territory of a state in the analogue world is not simply a portion of the land, sea and air of this planet, but the information processing environment covering these parts of the planet that has been created and is maintained by that state, and within which its citizens live.<sup>523</sup>

Until the present (or rather until the digital world emerged), states coincided with a specific location, a site in the analogue world, because this is where they installed themselves, where their information processing infrastructure, developed after the invention of writing, was (materially) placed. This was the point in history when states became territorial.<sup>524</sup>

Although the state does not create the territory (territory, as land, exists in Nature), the state creates its territory.

### 4. How state territoriality really works: site-specific locality is irrelevant\*

It is important, therefore, to understand how territoriality (basically, the information platform that is the state) really works<sup>525</sup> in order to disentangle this from a state's analogue-world location and locality (i.e. the specific place on the planet where a state is located today), as these only create confusion.

The analogue world (i.e. Nature) was not created by states (any more than the digital world was). However, the state is the necessary medium through which humans understand and use it (again, this is the same for the digital world), that is, through which humans are able to process Nature's information. It is through states (through the information platform that is the state) that humans become individuals, and it is through states

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521 See Chap. 11, par. 3.

522 See Chap. 7, par. 3.

523 See also Chap. 9, par. 4.

524 See Chap. 9, par. 5.

525 On how it was really created, see Chap. 11, particularly par. 3.

that meaning and action (within the context of a meaningful human life<sup>526</sup>) are made possible for humans.

States therefore create, maintain and expand<sup>527</sup> the information environment in which each human lives (or has ever lived). Within this environment states are sovereign—they completely control it, because it is their creation.

Crucially, the fact that states' information processing infrastructures had to be installed somewhere on the planet as processing needs expanded (specifically, after writing was invented), has nothing to do with the above. Installation in a specific territory was simply the next step, the second milestone in humanity's development,<sup>528</sup> exactly as is now happening with the digitisation of information, and hence the disentanglement of state-necessary infrastructures from location<sup>529</sup> (in theory at least, unless politics intervenes). In other words, the state essentially does not need a territory—a territory is the result of the unavoidable installation of information processing infrastructures (as a result of humanity's processing capabilities).

### 5. Moving around in the analogue world\*

Nevertheless, states are not and have never been insulated, entirely and completely isolated from other states, no matter where or when they have existed on the planet. Products and people move from one state to another. How does territoriality (i.e., the information platform) work in such cases?

In the case of products (Things, specifically artefacts), this was, at least until the advent of the digital world, straightforward: a vase or a table manufactured by a citizen of one state could be sold to a citizen of another state, and control would pass from the territory of one to the territory of the other. The same is true for all Things, even the more complex ones (e.g. cars or other machinery): although a relationship with the manufacturer might continue (e.g. for servicing), control (property) was passed from the territory of one state to that of another. Relocation happened in the analogue world, and it was accompanied by a change of control.

In the case of non-biological Beings (specifically, organisations), the situation was different—but not entirely so. Even if incorporated in one state,

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526 See Chap. 7, par. 3.

527 See Chap. 9, par. 4.

528 We are currently living in the third, in the form of the advent of the digital world; see the Prologue, par. 8.

529 See par. 9.

if an organisation wished to transact (i.e. process and create new information) in the territory of another, it had to establish itself in that other state's territory too. As with Things, relocation happened in the analogue world, accompanied by a change of control (to the new territory's local subsidiary or agency etc.), even if the decision-making process was not relocated.

The case for humans, however, is different; citizens of one state when found in another still carry their state with them.<sup>530</sup> Basically, their state acts like an information sphere, a (meaningful-)life-support mechanism: it is needed to interact with other humans,<sup>531</sup> to transmit personal information to other humans<sup>532</sup> and to be able to process information on the information platform of any other state through the filter of meaning made possible by their own state platform.<sup>533</sup> Essentially, when humans relocate they still live in an information bubble of their state, no matter where they are on the planet. Control over them does not change, it is not passed to the new information platform that is the (other) state that they have happened to find themselves in.<sup>534</sup>

Of course, whenever relocated, whatever new information the citizens of a state create (whether a Thing or a Being) is controlled by the new state, the state in whose territory they happen to be. Their own state, although providing them with the information sphere, does not retain control over Things or Beings they may create (in other words, over their actions) in the territory of another state.

## 6.

Location and locality in the analogue world, in terms of state territoriality, are distracting, if not illusory. They only (identifiably) came into being around 5000 BC, leading to the dividing up of the planet due to the fact that state information processing infrastructures, until very recently,<sup>535</sup> had to be installed somewhere physically.

However, Things and Beings relocate ceaselessly in the analogue world, moving in and out of state territories. It is important, nevertheless, to note

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530 Unless, of course, they change (replace) their citizenship—and name. See also Chap. 8, par. 6 on their unbreakable bond.

531 See Chap. 7, par. 3.

532 See Chap. 14.

533 See Chap. 8.1, par. 4.

534 Of course, various stages of relocation, from tourist to permanent resident, or immigrant must be taken into account.

535 See par. 9.

that what they basically do each time they relocate is change information platform, thus affecting the exercise of control over them—the fact that the change of information platform coincides with a change of location is incidental.

7.

The term ‘territory of the state’ does not have a static meaning. In the distant past it included only the land; much later the sea and then the air were included in its meaning. What is included with each of these additions (i.e. minerals, airwaves etc.) also became included in the same notion. These additions do not alter the definition of state territory, they only increase the state’s information processing; the more humans expand their reach, the more the territory of (their) states increases and the information platforms that are their states are broadened.

### 8. Territory in the digital world\*

The analogue world (Nature) is natural to humans,<sup>536</sup> hence the information processing environment created and maintained by the state for them is similarly natural, necessary to live a meaningful life. The digital world is not natural to humans,<sup>537</sup> at least not yet. At present humans do not need to live in the digital world to have a meaningful life. From this point of view (or until this becomes the case), any digital state territory is artificial, not natural to humans.

Neither the analogue world nor the digital world was created by states. Humans, however, live in both; therefore there is no question that states exist in the digital world as well (because states are natural to humans<sup>538</sup>). The analogue world has become what it is today after hundreds of thousands of years of human presence and information processing on it. The digital world has a history of only a few decades; however, it already makes new perspectives possible, including with regard to state territory.

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536 See Chap. 1, par. 10.

537 See Chap. 1, par. 11.

538 See Chap. 8.

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The most obvious way it makes a new perspective possible is through the digitalisation of information.<sup>539</sup> First, this has meant that information has become easily movable—it no longer has to be kept on paper (or clay tablets, for that matter). Second, information and its processing infrastructures have been separated—they no longer need to be physically connected. In the past, information and the tools used to process it were installed on the same physical site. This is no longer the case: information has become digital (and digital-born), meaning that it may be stored anywhere and transported to be processed anywhere. Similarly, information processing infrastructures may or may not be installed next to the information or even within a state's analogue world territory.

This breakdown of the natural, analogue-world territoriality link between a state and its information continues in full swing today: it started with data globalisation and has continued with data nationalism and the quest for (political) digital sovereignty. Political considerations notwithstanding, however, the fact remains that the link between a state and an analogue-world territory as the (obvious) location for the installation of its information processing infrastructure has been irreversibly broken.

**10. The link between control and location; the path from humans to individuals (and citizens) and to (today's) users**

The less obvious new perspective made possible by the digital world relates to the transformation of humans to users. This is the latest step in human development. It is the result of the digital world breaking down the traditional models of location and control that have been known to humanity since the beginning of time. As seen above, in the analogue world, control over Things and Beings is, more or less, retained by the information platform that is their state, even in the event of relocation. Spatial, analogue-world relocation decides (or, at least, affects) control. How does this translate in the digital world?

The digital world is artificial; therefore Things and Beings in it are created from scratch by specific identifiable Beings (individuals and organisations). It is these Beings, and consequently their states, that retain control

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539 See Chap. 1.1, par. 15.

over their creations, as is (and has always been) the case with anything new created in the analogue world.<sup>540</sup> However, here lies the critical, fundamental difference between the analogue world and the digital world: as seen above,<sup>541</sup> in the event of relocation, control in the former follows the Thing or Being, it moves from the territory of one state to another. By contrast, control in the digital world (for the moment, at least) remains with its creator-Being and originating state.

In other words, in the analogue world information on a Thing, if moved from one state to another, is processed only (or mainly) in the latter's territory and is therefore controlled by the latter. The same is true for a Being (an organisation) that decides to process information in another state (to relocate). By contrast, in the digital world a Thing or a Being never leaves the territory of the state where it was created: it can process information, or information can be processed on it, from a(n) (analogue-world) distance, from far away, from (or in, as the case may be) the territory of other states. The age-old link between control and location has been irreversibly broken.

## II. Users (instead of owners)

Where does this leave the billions of individuals who are processing information in the digital world today? Basically, they have become users<sup>542</sup>—the latest step in humans' (political philosophy) development. Starting simply as humans (i.e. animals), humans became individuals through their states, and citizens thereof (around 200.000 years ago), and today they are users (in the digital world). A user is an individual, citizen of a state, who processes information in the digital world, of course within the (digital) territory of its state, but importantly also in the territories of other states without ever physically leaving his or her own territory. A user of digital information differs from a user of analogue-world information due to the fact that the need for locality is removed—a physical presence in order to process (to act) is no longer necessary.

Why use a different name? It is necessary to denote the grave difference between control in the analogue world and in the digital world. In the analogue world, location-decided control meant that a state was able to

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540 See Chap. 6, par. 4.

541 In par. 5.

542 See also Chap. 1.1, par. 18.

award property rights to its citizens<sup>543</sup> unhindered. In the digital world, control is retained by the originating state, meaning that property rights are affected, that is, reduced. In other words, an individual processing information in the analogue world, and acquiring property rights while doing so, is not able to do the same in the digital world. Control has been eroded, because the individual's state's control (sovereignty) over its territory has been similarly eroded.<sup>544</sup> This is why 'user' is a more appropriate term—it denotes the significant change to (property-like) control in the analogue world, which has been understood by humanity since the beginning of history.

This is a huge, 200,000-year jump. In the few years that have passed since the advent of the digital world, we have already seen every traditional, familiar notion about individuals (e.g. relating to location, accountability, property, identity etc.) seriously and irreversibly affected. The digital world, because it is artificial and, in theory at least, completely controllable, in total contrast to the analogue, turns the focus onto use, rather than creation. State territories will never be the same again.

## 12. The digital territory of a state\*

The territory of a state in the digital world is, therefore, the information processing environment in the digital world created by that state's citizens (or, more accurately, that state's Beings<sup>545</sup>).

In this case, in stark difference to the analogue world,<sup>546</sup> any (perceived) moving around in the digital world does not affect control, that is, the state of the citizens that create any information in the digital world retains control over these citizens and their creations, meaning their creations add to its territory, not to any other state's (digital world) territory.

## 13. What about artificial Beings?

Because they are created by (individualised) humans, artificial Beings belong to the state territory of their creators. Specifically as regards the digital world, computer programs are controlled by their (their creators') state,

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543 See Chap. 24, par. 6.

544 See par. 13.

545 See also par. 13.

546 See par. 5.

and their own information processing adds to that state's (digital world) territory.

#### 14. Borders\*

Borders within an informational context are the points where two different information processing environments (states) meet. In the analogue world these are visible (or can at least be drawn on a map).

In the digital world, because its development still remains unclear, specifically delineated state borders do not (yet) exist. Instead, because the territory of a state in the digital world is the information processing environment created by that state's Beings, digital state borders are dynamic, following<sup>547</sup> this development.

In both cases borders are the points where state sovereignty<sup>548</sup> ends and the sovereignty of another state begins. They are the points where a specific information processing environment ends, the point where a state no longer controls the information processing operations in either the analogue or the digital world.

Obviously, in the digital world some state borders extend well into (make forays into) what would otherwise be perceived as the (analogue-world) territory of another (that state's citizens, located in its analogue-world territory, having become users). This is modern-world (digital) colonialism.<sup>549</sup>

#### 15. Interoperability and data portability\*

Borders are, in essence, points of communication. In the analogue world they are points of interaction and exchange. In the digital world, in spite of its as yet undecided form, communication among different processing environments (information platforms) is achieved through interoperability and data portability.

Interoperability warrants that information is exchanged and used by Beings on two different information platforms. Data portability is the ability

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547 And protecting, see par. 16.

548 On sovereignty, see Chap. 16.

549 See also Chap. 7.1, par. 5.

for individuals to receive their personal information and transmit it to a different information processing environment (platform) at will.<sup>550</sup>

In the analogue world interoperability is achieved through international law and bilateral agreements among states.<sup>551</sup> Data portability is achieved through (certain) governments' (political) will to allow this type of information processing to their citizens (to varying degrees and based on various conditions each time).

For the moment, in the digital world both notions are achieved, if at all, through regulation, which is perhaps inevitable given the digital world's artificiality.

## 16. State security and cybersecurity\*

Security of the state in the analogue world (not to be confused with the security that the state provides to its citizens) means protection of its territory and borders from external enemies.

(Cyber)security of the state in the digital world means protection of the state's digital territory, the information processing environment controlled by it because it has been created by its Beings.

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550 See also state legitimacy (Chap. 14, par. 5), whereby information dissemination is one of the three information processing operations that supports it.

551 See also Chap. 19, par. 12.

## 18. Nation

*'He was a simple man – a Swiss (a people little given to vanity and lying).'*  
Michel de Montaigne

**Synopsis:** *Nation a political and arbitrary term (1–3); Nationality (4); Are nations human-specific? (5).*

### 1. Nation\*

Because states are natural to humans, nations play only a peripheral, temporary role in their development. After all, the concept of a nation state is only a recent development in human history; prior to this nations did not coincide (at least to any great extent, as is the case today) with the states that existed. Although today we take this connection for granted (and it is this finding that accounts for this chapter) and are ready to discuss state legitimacy on those terms, this is contemporary thinking that is only a couple of centuries old.

### 2. \*

Nation is a political, hence arbitrary, term. Although commonalities are identifiable in the processing methods (morality, reason) of groups of individuals as distinguishable from others, it is impossible to say whether this was a development that originated from the bottom up (meaning from the individuals themselves, for reasons such as climate or geography) or from the top down (meaning imposed by an institution, specifically their governments). Hence it is also impossible to say whether the formation of nations was a natural or an artificial development.

After all, most humans throughout history have identified themselves in (at least) two ways, meaning as citizens of a state and as members of a (usually wider) nation—and many still do.

### 3. \*

Although discussion of how modern (nation) states emerged is beyond the scope of this analysis, the fact remains that a centuries-long procedure seems to have culminated, today, in the formation of nation states.<sup>552</sup> Why is that? It is possible to provide an explanation from an informational viewpoint: individuals need to augment their information processing and their states also need them to do exactly that. The long process of state succession is explainable through exactly this lens: each time individuals felt their need would be better served through (the formation of) a different state, they pursued that path. Today (and for the past 200 years) an understanding has been reached by humanity that nation states better serve individuals in augmenting their information processing, at least better than any known alternative so far—the digital world and, most importantly, archipelagos<sup>553</sup> notwithstanding.

In spite of the above, regardless of the theory, state-making seems to be an unfinished business.<sup>554</sup> If one suggests that nation states are the culmination of a development that has been happening since the existence of the ancient states, then there is no reason to suggest that this development will not also continue (in whatever new direction) in the future. Similarly, if one considers that modern states emerged because certain factors were in place, it cannot be imagined that new factors will not appear (or may have already appeared) that will lead to the next step.

### 4. Nationality

Nationality, the connection of any individual with a nation, is different to citizenship<sup>555</sup> because only the latter, in the meaning discussed in this book, is necessary for an individual to live a meaningful life (for a human to become an individual). By contrast, nationality is subjective, political, and time-specific.

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552 On their centralisation see Chap. 11, par. 5.

553 See Chap. 19.

554 See also Chap. 15.

555 See note 7/1/1.

### 5. Are nations human-specific? \*

Could artificial Beings (specifically, computer programs) form nations as well? As has been established, nations are separate from states; therefore this question is separate from that of whether artificial Beings need states, that is, for individualisation.<sup>556</sup> Notwithstanding that both nations and individualisation are viewed from the Unique Human Observer Perspective, the question remains as to whether artificial Beings, after they have been created, could form commonalities that would, perhaps, group them and distinguish them from other artificial Beings, albeit artificial Beings of the same kind.

There is perhaps some merit in examining the situation of other non-biological Beings, namely organisations. Organisations, despite their centuries-old presence, have not formed commonalities, even if a certain 'ethos' may sometimes distinguish organisations (corporations, foundations etc.) originating from one state from those of another.

As regards artificial Beings, their connection with a specific state being unavoidable,<sup>557</sup> as a minimum they are likely to create (imaginary or actual) commonalities, similar to organisations. Any development beyond this would call into question the basic assumptions about what it is to be human, such as identity or self-consciousness.

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<sup>556</sup> See also Chap. 8, par. 7.

<sup>557</sup> As part of its digital territory, see Chap. 17, pars. 12 and 13.

## 19. Archipelago: where do the information platforms that are states live? The EU

*'I would first of all like to say something about archipelagos. I think the idea of the archipelago – as a place where we can begin to understand and resolve the contradictions of the world – should be propagated. The archipelagos of the Mediterranean must encounter the archipelagos of Asia, and the archipelago of the Antilles. These archipelagos must encounter each other because, across their many islands, interdependence and difference coexist – and, in this way, they carry the energy that is necessary for our whole globe, our whole world.'*

Edouard Glissant

**Synopsis:** *Where do the information platforms that are states live? If the information platforms that are states can be visualised as informational islands living in a vast ocean, meaning, our planet, some of them have decided to come closer together and form larger constellations, that is, to form archipelagos: information platforms for the information platforms that are states; The EU is the first such archipelago (1); States are still in the 'state of nature' (2–3); International law and the UN (4–7); The EU as the platform for platforms (8); Cosmopolitanism, and other (utopian) alternatives (10); The EU (11); Interoperability versus integration (12); What the EU is and what it does (13–15); Archipelagos enlarged (16); Are archipelagos natural? (17–20); The differences between an archipelago and a federation—or an empire (21).*

### 1.

Where do the information platforms that are states live? Within their respective platforms each state individualises its citizens and makes it possible for them to live meaningful lives<sup>558</sup>—in fact, giving (human) life, meaning.<sup>559</sup> However, states do this internally, within the confines of their infor-

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558 See Chap. 7, par. 3.

559 See Chap. 8, par. 1.

mation platforms, their borders.<sup>560</sup> Where do these platforms themselves live?<sup>561</sup>

In human development terms, states are still living in a ‘state of nature’, where life is precarious and recognition by others, if any, is bilateral and conditional. For humans, this was the stage when, having just acquired self-consciousness and developed language, they presented themselves to the other members of their tribe or the community they lived as a separate individual with a new name that they had chosen for themselves, and asked for recognition as such. These are unquestionably distant, prehistoric times.

More specifically, these are the times when, out of this prehistoric soup, the first states emerged, in the sense of self-conscious separately named groups of individualised humans, that is, the first tribes or extended families to call themselves by a name different from that of the others around them—the first states that were created out of the fact that each of its members had his or her own name. It is these groups that allowed the newly self-conscious, language-using humans to individualise, to uniquely identify themselves in space and time.

In the same manner, the EU is the first state of states, the first named constellation of states, within which individual states retain their self-consciousness and individuality while having their own names, warranted each time in the relationships among them by the EU.

In other words, if the information platforms that are states can be visualised as informational islands living in a vast ocean, meaning our planet, some of them have decided<sup>562</sup> to come closer together to form larger constellations, that is, to form archipelagos. The EU is the first such archipelago, the information platform for information platforms that are states, a state for states, and the precursor of things to come.

All of the above will be elaborated in the paragraphs that follow.

## 2. States are still in the ‘state of nature’ \*

It is in what we can imagine as far-distant, prehistoric times in terms of human development that states are found today. States are thousands of years behind in their development compared to humans. In other words,

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560 See Chap. 17.

561 In the sense that they are Beings, they therefore can and will process information, see Chap. 2, par. 9.

562 Acting through their governments—an assumption that is made throughout this chapter. On the relationship between a state and its government, see Chap. 12.

humans may have developed within their states to the level of human civilisation we are living in today, but the states themselves have been left behind, in the time of the prehistoric soup from which human civilisation emerged.

### 3.

One needs only to think briefly about the 3,000, or fewer, years of human recorded history before the reality of this finding hits. State individualisation, in the way that states individualise ‘their’ citizens, had never occurred until very recently, with the emergence of the EU.

The empires of the past, be they Iron Age ones, Imperial Rome or even the empires of the nineteenth century, never looked or asked for the recognition of anybody. Confident in their power and might, these empires self-identified, decided on their own name and insignia, and imposed these on others. Nor was this only the case for imperial powers: city-states from Athens to Florence did not ask for recognition from others either—even when they were troubled by neighbouring empires. They too chose a name for themselves and imposed it on other states, even when they were conquered.

### 4. International law and the UN\*

The situation changed only a little with the emergence of international law and the establishment of the UN. International law was first introduced in Europe some 400 years ago to regulate matters of war and management of the seas—these being matters not regulated internally by states. This was the first time that (more than a few neighbouring) states realised that they could work together.

International law resulted in the world we live in today, in the Westphalian nation state<sup>563</sup> (the Westphalian peace was entered into in 1648, shortly after the initial cooperation mentioned above). The Peace of Westphalia warranted that states existed (as named in its text and acknowledged by their peer states), and that their internal matters were managed by themselves alone.

Of course, the Peace of Westphalia only included some of the states in Europe. It took hundreds of years for its system to expand to cover all

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563 See also Prologue, par. 4.

of the planet, to create the system in which we live today in the form of the UN. Effectively, however, the same system is more or less still in effect today, based on the same basic principles: states enter an international (cross-state) treaty, recognising each other and warranting certain rights among them (with the right of non-interference still much contested).

5. \*

If, however, one were to remove the grand and impressive veil of the UN and the system of international law, one would quickly realise that states are still effectively in a 'state of nature'. In essence, the UN and international law are permanent *fora* for cooperation, providing formalised, permanent opportunities to discuss and to collaborate,<sup>564</sup> not mechanisms that provide firm state identification and individualisation—no such thing exists (other than the EU).

If accepted in the UN, a state may, perhaps, discuss with others and, potentially, enter into case-specific agreements (on human rights, citizenship etc.), potentially subjecting itself to international law. Other states which also participate in the UN may or may not accept part or all of the above, and may perhaps enter into bilateral agreements with the first state. Incentives<sup>565</sup> to participate (in anything from loans and bailouts to military assistance) are introduced; however, participation is ultimately voluntary.

Similarly, no one, no state that is, is obliged to accept the (self-)identification of any other state simply because it has joined (or has not joined) the UN. No state is obliged to interact with that state on the terms of its self-identification (or UN membership) or to accept that it exists at all. It is entirely possible (as is frequently the case) for a state (or a group of states) to refute everything about another, self-proclaimed state, to deny its existence altogether.

Therefore, as far as states are concerned, there is no individualisation mechanism in international law today that automatically grants them recognition as separate and distinct entities, uniquely identifiable in space and time, in the way that states do this for their citizens. Instead, states (and

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564 Therefore, no *agora* of a *demos*, but rather a *Hyde Park Speakers' Corner*.

565 These naturally being self-serving for the same international order.

empires) come and go, deciding for themselves how to be named and identified, and may be unrecognised and potentially even ignored by others.<sup>566</sup>

## 6.

However, it is not only an individualisation mechanism for states that is sorely missing. Language, and thus common meaning, among them is missing too. Whatever common language there is today among states has been developed through international treaties in a technical and case-specific manner. Today international law is the only way for states to collaborate, that is, to speak a common language, to understand each other. For example, in order to agree that a ship is a ship (including their various categorisations) or that a book in one state is also a book in another (so as, for example, to protect books through regulation), a specific international legal treaty is needed each time. Evidently the same is true for every other aspect of human activity—hence the scarcity of international legal treaties and other instruments, because of the tremendous effort required each time to achieve common meaning among states.

## 7. \*

Thus states are self-conscious, but without any individualisation mechanism in space and time, and without any substantially developed language to communicate: this is their stage of development today. As has been said, in human development terms this would be the equivalent of finding humans deep in the prehistoric soup from which they emerged as individuals through the assistance of (their) states.

## 8. The EU as the platform for platforms

The first state for states to emerge out of this prehistoric soup, hundreds of thousands of years after humans formed states for themselves, was formed in the 1950s. The EU is an informational superstructure where states can

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<sup>566</sup> Or, as is also frequently the case, later historiography not recognising them in the way that they self-identified (for example, the Byzantines identified themselves as Romans, but we do not).

live a meaningful life<sup>567</sup>—it is the information platform for the information platforms that are states, and a precursor of things to come.

## 9.

Essentially, states are like humans; they are, whether they like it or not, social (indeed, political) Beings.<sup>568</sup> They need to collaborate with the other states around them—or at least, even if enemies, need to share a common language and a common understanding (of such basic things as borders, peoples, acts of aggression or goodwill, etc.). An isolated, insulated, lonely path for any state is (and always has been) impossible.<sup>569</sup>

If this is, however, the case, then why have states stayed in a ‘state of nature’ for so long, so immensely outdone by their own citizens, who (relatively) quickly turned themselves from humans into individuals through their states?

This is because states are Beings and need to process information, but do not themselves need to augment their information processing—they just need their own citizens to do so.<sup>570</sup> Therefore, whereas humans quickly moved from self-consciousness to individualisation, states did not follow; it was enough for them to simply continue to exist, to remain alive. There was no need for them to individualise, to be uniquely identifiable in space and time. Whenever they were outdone in their usefulness for their citizens, in terms of the processing opportunities offered to them, they were succeeded by another state,<sup>571</sup> following need and opportunity. In the meantime, whatever limited (because of similarly limited processing capacity) common meaning it was necessary to develop for cross-border transactions was imperceptibly gradually achieved, because exchanges occurred anyway among neighbouring (territorial<sup>572</sup>) states. (Tellingly, huge clashes of understanding occurred when states expanded across oceans, for example.)

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567 *Mutatis mutandis*, the same as for humans (see Chap. 7, par. 3): each (humans and states alike) having no specific purpose, the conditions necessary for the fulfilment of any purpose are in place.

568 .And thus there cannot be only one, see par. 10.

569 See also Chap. 17, par. 5.

570 See Chaps. 10 and 5.1.

571 See Chaps. 15, and 18, par. 3.

572 See Chap. 9, par. 5.

## 10. Cosmopolitanism, and other (utopian) alternatives\*

With the advent of the digital world, states can no longer operate as information processing silos, fortified informational castles or closed gardens, as was the case in the past.<sup>573</sup> They can no longer rely on bilateral, unarbitrated<sup>574</sup> relationships, within which each party must on every occasion first convince the other bilaterally of its existence: the formation of informational archipelagos is thus the only way forward.

Before, however, elaborating upon informational archipelagos, one ought first to examine possible alternatives. What about humans having only one state—could only one state exist on the planet (i.e. following the concept of cosmopolitanism)?

Discussions about a single-state planet are certainly not new; however, nothing of the sort has come to fruition—or is ever likely to do so. This is because it is unnatural, in the sense that it is contrary to the nature of the state itself: a state has always been defined through its juxtaposition with another, a necessary other. Individuals belong to one state<sup>575</sup> and not to another (neighbouring one), this is how they self-identify.

In technical terms, in a single-state planet one of the two basic components of identity (citizenship) would be abolished (there cannot be a group or a category, as in Aristotelian categorisation, if only one group exists overall). Therefore another individualisation mechanism would have to be discovered to replace it, a mere name not being nearly<sup>576</sup> enough. While this may sound technically feasible, one ought not forget the tremendous change the introduction of any such (necessarily invented and artificial) mechanism for identification (unlike states, which are natural to humans) would bring—reversing the human way of thinking since we first set foot on the planet (or in any event acquired self-consciousness<sup>577</sup>).

The same would be the case for archipelagos: why not have one state individualisation mechanism on the planet, perhaps using the EU as its

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573 See also Chap. 12, par. 10.

574 Unless they voluntarily submit to international arbitration mechanisms, which are themselves voluntary—and thus effectively unarbitrated.

575 And, for that matter, family (see also Chap. 2, par. 9).

576 Hence today, long after surnames, parental names and other characteristics are also added (see also Chap. 8.1, par. 2).

577 This also accounts for why there can be no two states for the same individual—no two digital and analogue world citizenships: what happens in practice is that the second, or additional, states take the identification information from the state of birth; see also Chap. 8, par. 6.

blueprint? This, however, would also not appear to be a viable option, even taking into account the transitory stage (towards archipelago formation) that humanity is living in. This is because, similar to states, archipelagos are defined through their juxtaposition with other archipelagos and, more importantly, with the ocean. An archipelago, such as the EU, will always be defined through its juxtaposition with other archipelagos (and any remaining states)—otherwise, a new way to define it, and the states that are individualised through it, would have to be invented, which would, as above, most probably be an invention too many for humans to bear.

## 11. The EU\*

It was certainly not realisation of any of the above that led to the formation of the EU in the 1950s. The EU was formed out of need, the need for Europeans to end the wars among them that had lasted for 2,000 years, from the moment Julius Caesar decided to move north. By the 1950s certain states in Europe had a history of around 1,000 years and Christian dogma, which was common among them, had an even longer history. It was need and opportunity that led to the formation of the EU.

Whatever its cause and original purpose may have been, the EU assumed a life of its own once established. From modest beginnings emerged a unique structure, an (informational, virtual) environment for its member states to live in without forfeiting their individuality. In this way, the first information platform for all other information platforms was formed. In other words, European states, which can be viewed as separate and independent islands (as is the case for other states too), decided to form an informational archipelago.

However, none of the above ought to be understood as invoking a linear development (e.g. as in Aristotle, from family to city-states, in the sense of moving from simpler to more complex forms) or an evolution, by selection or otherwise, that led to the EU. There was no following of rational steps on a state-formation ladder or any grand-scale design that caused the EU to come to be; rather, need and opportunity were in play here too.

## 12. Interoperability versus integration\*

One can visualise and quickly understand what it is that the EU actually does and how it differs from contemporary international state order if the notions of (system) integration and (system) interoperability are compared.

Interoperability is the ability of systems to communicate with each other to a larger or smaller degree. While it is a notion developed in computing (and enforced by regulation), it can be seen as the dominant principle in international law today. States, as information platforms, have become able to interact with each other, that is, they have developed throughout human history in a way that enables them to, at a minimum, communicate with each other. For example, the unique identifiers of one state (identification numbers, tax numbers, business registration numbers) are recognised as such, by means of bilateral agreements, in another state, even if the other does not internally have an exact equivalent. However, this is as far as communication goes, and can go. Each state continues to function independently, with each information platform developed within its confines. Whenever the need arises for more communication (for example, through the development of more complex regulation as in intellectual property law or more complex accounting systems) then the list of functions that are interoperable expands. Nevertheless, communication is always on an *ad hoc*, case-specific (and thus fragmented) basis, through small, restricted and closely guarded access points.

By contrast, system integration means that systems share components, and thus the boundaries between them are removed. While retaining their individuality, they no longer communicate through specific, identifiable (and thus controllable) access points, as in the case with interoperability, but through the sharing of resources, information, meaning and understanding. In the example above, the unique identifiers provided in one state are not only recognised by another but they are common or matched—they also exist in that other state. The issuing authority may change (each state continues to provide its own name and citizenship to its citizens) but datasets, and their attributes, are basically the same.

### 13. What the EU is and what it does

In essence, the EU is an informational archipelago, a network composed of separate, individual (peer) information platforms (islands), meaning its member states, which have been individualised and uniquely identified by it. The EU warrants that communication among the member states is seamless without any losing its individuality, despite being integrated into this new super-platform. Having formed the archipelago (i.e. the network having been established), system integration among the various individual information platforms that are its member states is what the EU actually

does, while each member state continues to function as an information infrastructure for its citizens—that is, it continues to grant to each of them at birth a name and a citizenship, to issue regulation, to maintain a language or an official morality (religion), and so on.

In effect, the EU is the tacit interlocutor when two of its member states talk to each other. In the same way that a state does this for its citizens, it is the EU that, silently and in the background, intervenes whenever two of its member states interact, warranting that the other state is who and what it claims to be in order to enable the communication to proceed seamlessly.

For example, if Belgium and Italy are interacting, the EU is silently present each time, warranting<sup>578</sup> that each party is who it claims to be in order for the interaction to continue as intended (essentially, as if the countries were a single state). However, were they not EU members, for example, if Belgium and Canada interacted, each one would first nervously try to validate the other, be it through bilateral agreements or a third-party validation mechanism (e.g. the UN and/or any other international system), before the interaction could take place. Furthermore, even if this validation occurred, the interaction would always be restricted by the boundaries of the validation mechanism used (the terms of the bilateral agreement or the international treaty/-ies signed by each party<sup>579</sup>).

In the example of John and Maria in Chapter 7, if they happen to be citizens of different states, the interaction between them can go in either one of two directions: if both of their states are EU member states then, through the identification mechanism described above (essentially, with three silent parties present), the interaction can take place as if both John and Maria belonged to the same state; understanding and meaning is common to both. However, if their states are non-EU member states, then the two silent parties present (their states) will have to check if, bilaterally, they accept the existence of the other (and on what terms and to what extent): interaction between John and Maria is thus always framed under the terms of this tacit but ever-present check.

In other words, from a state point of view, an EU member state cannot ignore, refuse or challenge the existence and self-identification as such of

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578 Of course, for the purposes of communication, within its own borders each party can be whoever it claims to be (this equivalence, however, not working in terms of individuals and their states).

579 In reality the situation today is even more complicated than that because the EU also conditions the bilateral agreements of its member states, but there is no need to complicate the example any further given the difficulty of the scheme already.

another EU member state. It must be treated as one of their kind and taken at face value as irrefutably existent, in the very same way that citizens within a state (as well as when crossing borders) treat one another. State individualisation and unique identification are achieved in this manner through the EU, the state for states. In addition, through the *acquis*, understanding and meaning is common among all of them: any one EU member state citizen is to understand and treat all Things and Beings in exactly the same way as another EU member state citizen, as if they existed on the information platform that is their own state.

This state-within-a-state condition, unique to humanity,<sup>580</sup> is caused and warranted by the EU. All states are created<sup>581</sup> equal with regard to the EU, the platform for platforms, if they are its member states. All others, unfortunate enough not to be individualised and uniquely identified by any mechanism, have to undertake a bilateral struggle to convince others of their uniqueness and existence, until such time as a relevant mechanism is established for them.

#### 14. \*

In terms of datasets,<sup>582</sup> the EU is a Being, specifically an organisation. However, in the same way as states and unlike any other organisation,<sup>583</sup> an informational archipelago has no specific purpose. It has only a function, which is present simply because of its existence: system integration for its member states. This is both an impediment and an opportunity. The former, because the EU is not itself a state, and it therefore cannot assume state-like functions, that is, it will always follow what first and foremost preoccupies its member states and their citizens, whatever purposes they set for themselves to each time. At the same time, however, it is an opportunity because, liberated from state-like preoccupations (internal politics and strife prominent among them), it can carry out its function unhindered.

For the larger part of its life so far, the EU has given priority to market considerations out of expedience: what better (in the sense of quicker) way to avoid war, if not by financially integrating the previously conflicting parties? Having accomplished this quick, superficial fix, the EU has recently

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580 On its differences with already known formations (e.g. federations, empires), see par. 21.

581 In fact, admitted; on whether the EU is natural see par. 17.

582 See Chap. 1, par. 2.

583 See Chap. 2, par. 9.

moved in the direction of influencing the formation of values, thus establishing a distinct 'European way of life' and a morality of its own, a project that remains underdeveloped.

The question, however, remains: how can the component parts best be integrated without damage?

For the moment, the solution intuitively (and understandably) adopted replicates the state-individual relationship, along the lines of liberalism:<sup>584</sup> individuals have a core with which the state should not interfere, and this model seems to be followed at the EU level too (through the triple effect of its principles of subsidiarity, proportionality and EU legal supremacy). Is this the best way forward? Could what has effectively not been satisfactorily resolved for humans after more than 2000 years of intense thinking<sup>585</sup> work for states? Essentially, the same problem remains: states know everything because they are the necessary individualisation mechanisms for their citizens, and the EU (its system integration ever-expanding) is on its way to becoming exactly the same thing for its member states.

## 15.

As such, today the EU archipelago is unique, the first of its kind and clearly distinguishable from all the other information platforms that are states and that can be found around it (or within it).

This accounts for the bizarre effect still caused by it with regard to interstate relationships. Non-EU states find it strange that they have to communicate at the same time with both a member state and the EU. This is understandably confusing for all the parties involved. Because the EU breaches the prehistoric model, being the first of its kind, it is bound to create confusion for some time longer.

## 16. Archipelagos enlarged\*

On the other hand, informational archipelagos need not be geographically located; the fact that the EU emerged, out of need and opportunity, as a localised entity does not mean that it cannot include member states that

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584 See Chap. 26.

585 See Chap. 26, par. 5, on the inherent conundrum that individualistic theories have to deal with.

are not in Europe. Archipelagos should not be viewed literally, spatially; because they are informational, they transcend space, unhindered and unperturbed by analogue-world limitations.<sup>586</sup>

### 17. Are archipelagos natural?

As it has been claimed that states are natural to humans, should archipelagos be considered natural (to states) as well? States formed naturally, so as to individualise humans, to uniquely identify them in space and time. Because the first archipelago is doing the same for states, should they be considered natural to them, in the same way that states are natural to individuals?

At first sight this would appear a counter-intuitive question: the EU was established through a treaty signed on a specific date and in a specific place—nothing can be more artificial than that. How could it ever claim to be natural to its member states? Such considerations should, however, be quickly put aside: in the case of housing, despite the fact that the field of architecture is constantly expanding, houses are still considered natural to humans. As has been established,<sup>587</sup> it is the idea behind them (houses for humans, like nests for birds) to which attention should be paid.

Is there a need, then, for an individualisation mechanism for states, as there was for humans, who needed states in order to augment their information processing as soon as they gained self-consciousness?

Again, intuitively, the reply would have to be negative: if it is natural to them, why did it take so long for such a mechanism to emerge? And, furthermore, being the result of need and opportunity, for totally unrelated reasons (to avoid war, instead of state individualisation)? It is, however, exactly in this pivot that an answer can be found as to why (following the arrival of a more recent need and opportunity) this mechanism emerged (or rather, is developing into an ‘ever closer union’): because of the advent of the digital world.

As has been seen,<sup>588</sup> in the digital world states can no longer afford to operate as information processing silos. They can no longer rely on bilateral relationships where each party first has to convince the other of its

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586 See also Chap. 17, on (state) territory.

587 In Chap. 5, par. 5.

588 In par. 10.

existence on each occasion. Mere interoperability<sup>589</sup> is no longer enough. Informational archipelagos are the way forward, specifically because the digital (state) territory transcends analogue-world borders and humans have become users.<sup>590</sup> From this point of view, archipelagos are natural to states because, similar to humans who needed to become individuals to augment their information processing, archipelagos are sorely needed.

## 18.

However, the answer to whether archipelagos are natural to states cannot rely only on *ad hoc* problem-solving. After all, while need and opportunity may motivate humans, if no pattern emerges out of their combination, no specific need (in the form of an underlying idea) can be identified—only the one that has gone before it.

In the case of states, because they are Beings, they need an individualisation and identification mechanism—all Beings have one. Humans have their states, animals their packs or herds (or their humans, as the case may be), organisations are individualised through regulation. This is a matter that ultimately relates to the Unique Human Observer Perspective, to the way in which we view and understand Beings. However, such a mechanism will not emerge until it is needed. In the case of states, it has now emerged, dragging states out of their ‘state of nature’ slumber. (In the case of artificial Beings, specifically computer programs, which have only recently come into existence, their ‘state of nature’ is perhaps only just beginning.)

## 19.

Of course, this leaves open the question of whether this is a process without end, *ad infinitum*: if archipelagos individualise states, what will individualise archipelagos?<sup>591</sup> Following the reasoning of paragraph 17, a post-archipelago-level development seems imaginable but unforeseeable, taking into account the thousands of years it took for the individualisation mechanism for states to emerge. However, as long as there is a need for unique identification mechanisms, for humans or other Beings, there

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589 See par. 12.

590 See Chap. 17, pars. 11 and 12.

591 Of course, taking into account that there can never be only one, see par. 10.

seems, from the Unique Human Observer Perspective at least, to be only one way to address it.

## 20.

Even if this realisation is accepted, what can possibly be done about it? As has been seen,<sup>592</sup> in state-making change frequently, but not necessarily, comes through violence. The same is true of the EU: violence is exercised not in the form of war but through regulation. The formation of its archipelago has not been achieved through geographical but informational conquest. The EU *acquis* has, in essence, a double meaning, it is a modern Janus of sorts: new member states must adopt it in full and adhere to it.<sup>593</sup> There is violence in regulation, just as in war, but one that hurts humans infinitely less.

## 21. The differences between an archipelago and a federation—or an empire\*

The above paragraphs<sup>594</sup> also serve to showcase the differences between an archipelago of states, such as the EU, and a federation. Within a federation, the individuality of its component parts, of the states forming it, is lost. In practical terms, names and citizenships are granted by the new, super-state and not by the individual parts. States within a federation are absorbed into a new entity, a new information platform that replaces them. In contrast, states within the EU retain their nature as information platforms for their citizens.

Could archipelagos, then, constitute modern empires? The great empires of the past mostly left their component (conquered) states untouched, allowed to mind their own business as long as they complied with the empire's authority. This may of course have been the result of expedience, because effective control by the (new) centre could not be exercised due to a lack of information processing abilities. If so, have need and opportunity

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592 In Chap. 15, par. 2.

593 This is not unprecedented—it was anticipated in Europe by the Napoleonic codes, which long outlived their instigator. Of course, even in that case, his example followed that of Imperial Rome and, in any case, was that of a lawyer following legionaries or grenadiers, and not vice versa.

594 See particularly par. 13.

led to the creation of a modern-style empire, in the form of the EU? The obvious difference (voluntary participation, rather than conquest by war) aside, the EU differs from an empire because there is no centre, there is no dominant state, there is no EU nationality coveted (or abhorred) by the nationals of its member states. In this respect the EU is unlike, for example, Imperial Rome, which privileged its citizens and granted Roman citizenship to non-Romans only as an exceptional gift. By abolishing the dominant centre,<sup>595</sup> the EU avoids any likeness with an empire, holding the role of a precursor of things to come rather than that of an updated and modernised relic of the past.

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595 Most likely as a result of Christian dogma.

## 20. Law

*‘The word law (lex) in an absolute sense signifies that, in accordance with which, each individual thing, or all things, or all things of the same kind, behave in one and the same fixed and determined way, depending upon either natural necessity or a human decision.’*

Baruch Spinoza

**Synopsis:** *The law is the written list of processing operations that can or cannot happen on a dataset (1); Many laws? (2); No law? (3); No eternal law (4); Regulations (5–8); The digital world differs; A controlled environment (9); Regulations are organised hierarchically (10).*

### 1.

Control is exercised over each and every dataset on the information platform that is the state;<sup>596</sup> the law is a materialised, written list of its attributes.<sup>597</sup>

The law is the written list of processing operations that can or cannot happen on a dataset. In effect, the law specifies whether a(ny) specific processing operation is allowed, and under which conditions. And, just as the construction of a complete list of attributes would be impossible,<sup>598</sup> the law cannot be exhaustive.

### 2. Many laws? \*

Law is not met only within the legal (i.e. regulatory) context; we also come across the laws of Nature or laws of science (physics, mathematics etc.). This is because the term simply denotes a concrete, written-down list of controls, of processing operations that can (or cannot) happen. This list, however, may come from anywhere, be it Nature (including the sciences) or human creation (regulation).

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596 See Chap. 6, par. 3.

597 See Chap. 6, par. 5.

598 Ibid.

While the difference between the two basic sources of law (Nature or humans) is significant, ultimately the result (law) comes down to a single, concrete list (no matter how long). In the case of Nature, law has to be discovered; in human-made law, it has to be invented. Nevertheless, the fact remains that what has not yet been discovered is not law. The same can be said about law that has not yet been invented by legislators. No unwritten law exists.

### 3. No law? \*

As has been acknowledged,<sup>599</sup> the law has to be discovered or invented, but it cannot be that there is no law. This is because controls over datasets are natural on the information platform that is the state;<sup>600</sup> therefore cataloguing and expanding them is also natural to humans (who need to augment their information processing<sup>601</sup>).

As regards Natural law, controls over datasets are natural because Nature itself is a Being<sup>602</sup> and therefore exercises control over the datasets found on it. States giving (human) meaning to Nature,<sup>603</sup> individuals on them (on the information platform that is their state) need to discover these controls so as to augment their information processing (i.e. to control Nature).

As regards invented law (regulations), for each new dataset discovered or created by humans, control over it by the creator or first processor is immediate.<sup>604</sup> This control later expands through rules that regulate the access of all other humans (individuals on the information platform that is their state) to these new datasets—thus forming regulation. This process, although applied throughout human history, is uniquely demonstrable today because of the advent of the digital world: because it is entirely new to humanity, new regulations by each state aim to exercise control over it.

Human history concurs: until the Enlightenment (the brief exception of ancient Greece notwithstanding), religion was the human way to catalogue Nature's laws; writing was invented in order to bring into material format (i.e. make known more widely) human regulations (for taxation and military purposes).

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599 In par. 2.

600 See Chap. 6, par. 3.

601 See Chap. 5.1.

602 See Chap. 1, par. 10.

603 See Chap. 8, par. 1.

604 See Chap. 6, par. 4.

#### 4. No eternal law

Although law is inevitable,<sup>605</sup> it is at the same time relative. No eternal law exists—the list of laws on each information platform that is the state is the result of, and is related to, its place in space and time.

The list of laws expands (and deepens) keeping pace with humanity's increase of knowledge, of information processed. However, this should not be taken to mean that progress is linear or simultaneous among states.

#### 5. \*

A few more clarifications need to be made on invented law (regulations)—because, after all, Nature's laws are not artificial.

For the moment attention will be paid only to the existence of regulations, as an inevitable, and relative,<sup>606</sup> part of states. Crucial questions such as how any specific regulation came to be, who made it, who it is aimed at, how it is imposed, whether it is effective and so on, will not be discussed at this point.

#### 6. \*

Regulations are not created by states. Their existence may be inevitable on the information platform that is the state; their actual content, however, is anything but. In practice, the content of regulations is formed by the government.<sup>607</sup>

Accordingly, the state cannot be defined through regulation, because it precedes and predates it, that is, regulations become possible on the information platform that is the state and not vice versa. Regulations cannot therefore define the state, much less bring it to life.

#### 7. \*

Regulations are functional and operational, providing the rules for a processing operation, but they are also descriptive: the attributes of a dataset,

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605 See par. 3.

606 See par. 4.

607 See Chap. 12.

the list of processing operations that can or cannot happen on it,<sup>608</sup> are to be found in them.

## 8.

Of course, while the applicable regulation may allow an individual to carry out a processing operation, the individual may still choose not to execute it, in spite of that individual's will (as caused by need) and opportunity. As has been seen,<sup>609</sup> the choice of which processing operation to carry out each time, that is, the prioritisation of each individual's purposes, falls under the domain of morality. In other words, the fact that a regulation allows (or even prohibits) an action does not mean in practice that this action will happen (or not happen) accordingly.<sup>610</sup>

Choice, however, refers only to whether to carry out a processing operation or not (for example, drive a car, get married, build a house etc.). If the choice is to do the operation, then the relevant regulations (driving, marital or construction, respectively) must be applied, otherwise consequences follow. These consequences invariably reduce the information processing opportunities available to the individuals concerned (to varying degrees, from a fine to loss of life). In effect, regulation creates a yes or no situation, unless there will be consequences; if a third option exists (that is, it is a situation with nuanced consequences, thus requiring a choice) then we enter, once again, the domain of morality.<sup>611</sup>

## 9. The digital world differs; A controlled environment\*

It is at this point that a stark difference between the analogue and the digital worlds can be noted. In the analogue world regulation may prohibit a processing (an action); however it does not, and cannot, control whether the processing will take place or not—individuals may break the law. For example, a driving speed limit may be imposed, but cars allow drivers to go over it; if they do, the law intervenes only after the act (if at all, meaning if it ever learns of it).

The situation in the digital world is different, however. In the digital world there is always a way to prohibit a certain processing operation from

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608 See Chap. 6, par. 5.

609 In note 5/2/2.

610 See also Chap. 6, par. 9.

611 See Chap. 23; and also 'power' in Chap. 6, par. 9.

ever happening—in the example above, this would be to simply not allow a (digital) car to travel faster than the speed limit on a (digital) street. Or an artificial Being could be stopped from having access to a prohibited processing operation.

In effect, choice<sup>612</sup> is inherent for biological Beings in the analogue world (regardless of the endless nuances surrounding it); in the digital world, however, because it is artificial, there is a way (for the humans who design it) to remove choice altogether. In other words, regulation in the analogue world is enforced retrospectively, while in the digital world it can be enforced proactively.

This is, ultimately, the difference between a controlled and an uncontrolled processing environment. The information platforms that are states provide their citizens with a suitable information processing environment in which to live a meaningful life<sup>613</sup> and, by so doing, have a way of knowing all of the processing operations (actions) carried out by their citizens.<sup>614</sup> The key here is that this is just *a way* of knowing. States *can* know, but they do not *actually* know unless they (meaning, the government) actively try to know.<sup>615</sup> The analogue world is basically an uncontrolled environment. By contrast, the digital world is a controlled environment, in which states or whoever is controlling it have real-time knowledge.<sup>616</sup>

Concepts such as accountability or liberty, with which humanity has been struggling for centuries (and which still largely remain undefined) will need to be rethought and revisited. The same is true of pragmatic considerations, such as power:<sup>617</sup> should the ability to ignore a processing prohibition be embedded in the digital world's system, because it is practiced in the analogue world?

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612 Whether or not to break the law is not to be confused with permitted choice in morality; see Chap. 23.

613 See Chap. 7, par. 3.

614 See Chap. 16, par. 2.

615 See Chap. 16, par. 4.

616 See also Chap. 1, par. 17.

617 See Chap. 6, par. 9.

**10. \***

Regulations are organised hierarchically, because hierarchy is the preferred organisational system for humans, allowing them to process information more effectively.<sup>618</sup>

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618 See also note 6/7/1.

## 21. Rights

*‘The light dove, in free flight cutting through the air the resistance of which it feels, could get the idea that it could do even better in airless space.’*

*Immanuel Kant*

**Synopsis:** *Rights are not claims but permissions (1–3); Rights are material (4); Rights, as materialised in regulation on each information platform that is the state, are specific each time to certain categories of individuals (5).*

### 1. Rights are not claims but permissions\*

A right is a permission for a Being to process information on a dataset (another Being or a Thing).

A right is not a claim to do something, a request for a specific processing of information to take place. Because Beings<sup>619</sup> have a permanent will to process information,<sup>620</sup> a claim to process is considered present each time, that is, it is a constant—it is not something that can be used to distinguish between two conditions (i.e. a claim and a non-claim by an individual). In other words, individuals, as Beings, will always want to act, to process information.<sup>621</sup> Whenever allowed (and able<sup>622</sup>) to do so, they have a right to do so.

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619 Rights are primarily addressed to humans, as individualised through their states. As far as other Beings are concerned, organisations can have rights and are afforded to them in regulation; animals whenever afforded ‘rights’ fall under the category of protected Things, below; while the issue of the rights of artificial Beings remains, as yet, undecided. On the ‘rights’ afforded in certain states to Things so as to protect them, i.e. to prohibit certain types of processing on them that would otherwise be possible, see Chap. 25, par. 5.

620 See Chap. 5, par. 2.

621 Of course, not all individuals for each instance of processing but one or more individuals for each: not everyone wants to eat something at the same time and not everyone wants to build on a specific plot of land, but someone at any given moment does.

622 See par. 3.

## 2.

Rights are permissions that are, in effect, afforded<sup>623</sup> by the information platform that is the state. Because the state controls all information processing taking place on its platform, all permissions for its citizens to act, all rights come from it and are controlled by it.

Of course, control can be delegated,<sup>624</sup> which allows for rights to be (seemingly, only in appearance) afforded by one individual to another.

## 3.

Therefore, from the individual's point of view, a right is the actual<sup>625</sup> ability to act, a permission granted to process information, and thus ultimately connected with liberty.<sup>626</sup>

A right gives access<sup>627</sup> to a dataset—and, in turn, enables the processing that creates new information.<sup>628</sup>

## 4.

Rights are material.<sup>629</sup> They are materialised on the information platform that is the state through regulation.<sup>630</sup>

## 5.

Rights, as materialised in regulation on each information platform that is the state, are specific each time to certain categories of individuals (for

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623 Meaning that their existence is made possible by the state—whether they are afforded (or rather which ones are afforded, with none not being an option for humans) is a matter of politics (see Chap. 20, par. 6).

624 See Chap. 6, par. 7.

625 See Chap. 5, par. 8.

626 See Chap. 25, par. 8.

627 Of course, if seen from the point of view of that dataset, be it a Being or a dataset over which another Being has already established control (as is invariably the case, see Chap. 6, par. 3), such granting of access is an obligation. In other words, one Being's right is another's obligation. On access, see also Chap. 6, par. 6.

628 See Chap. 6, par. 4.

629 As are control and processing; see Chaps. 6, par. 1, and 4, par. 4.

630 See Chap. 20.

## *21. Rights*

example, adults, employees, children, consumers etc.). In contrast, human rights are horizontal, they apply to all citizens indiscriminately.<sup>631</sup>

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631 See Chap. 22.

## 22. Human rights

*'The fortunes of ideas, like those of men, depend as much on accident as on their own worth and character'*

*Elie Kedourie*

**Synopsis:** Rights which apply to all citizens indiscriminately on the information platform that is their state are human rights (1); Human rights, as is the case for rights, are permissions afforded by the state (2); The constitution (3); Human rights may or may not be afforded within a state (4); Platform rights (5–6); Equality (7); Liberty (8); Security (of information, not of the person) (9); Needs do not give rise to a respective platform right (10); Platform rights and natural rights (11); Some clarifications on platform rights (12–13); Human rights in the digital world (14).

### 1. \*

Rights<sup>632</sup> which apply to all citizens indiscriminately on the information platform that is their state are human rights. As has been established,<sup>633</sup> rights are normally specific to certain categories of citizens (for example, adults, employees, children, consumers etc.). By contrast, human rights are those rights that are applicable to all, at all times, without distinction.

In practice, from the point of view of individuals, human rights describe what can (and cannot) happen to them, or, conversely, what these individuals are allowed to do on the information platform that is their state.

### 2.

Human rights, as is the case for rights, are permissions afforded by the state.<sup>634</sup> It is the state that grants the permission to all of its citizens to carry out specific types of processing on datasets (other Beings and Things).

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632 Permissions to process; see Chap. 21.

633 In Chap. 21, par. 5.

634 See Chap. 21, par. 2.

## 22. Human rights

In other words, it is the state that allows its citizens, for example, to hold property, to have families, to process any religious information they wish (freedom of religion), to materialise their every thought (freedom of expression) and so on.

Unlike other rights, however, human rights are not delegated. While other rights are customarily delegated by the state to its citizens,<sup>635</sup> human rights are managed by the state itself.

### 3. The constitution\*

As is also the case for other rights,<sup>636</sup> human rights are material, materialised on the information platform that is the state through regulation—usually at the highest level possible in the hierarchy of regulations for that specific state<sup>637</sup> so as to affect all citizens indiscriminately.

The constitution, which is designed to sit at the top of the regulatory hierarchy in each state, is the obvious place in which to list human rights (and thus to materialise them).

### 4.

Of course, human rights may or may not be afforded within a state, meaning their materialisation is a political decision (as is the case, after all, for all rights<sup>638</sup>).

As history has proven time and again (also taking into account that the cataloguing of human rights, preferably in constitutions, is a relatively recent policymaking exercise that still lacks unanimity), whether all or some citizens enjoy many, a few or any human rights at all depends on the government and the political system<sup>639</sup>—the state merely makes this choice possible.

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635 Ibid.

636 See Chap. 21, par. 4.

637 See Chap. 20, par. 10.

638 See Chap. 21, par. 2.

639 See Chaps. 12 and 12.1, respectively.

## 5. Platform rights

Notwithstanding that their acknowledgement in regulation in any given state is a matter of politics, are there any human rights that are inherent on the information platform that is the state, simply by means of its existence?

In other words, does the finding that states are information platforms for their citizens (in essence, individualisation mechanisms for humans) lead to the logical<sup>640</sup> inference of any human rights?

If yes, then these (human) rights could be named platform rights, because it is to information platforms that they owe their existence and it is throughout the information platform that is the state<sup>641</sup> that they would<sup>642</sup> apply.

## 6. \*

Although logical<sup>643</sup> inferences can be drawn from any finding (proposition), there are certain human rights that can be inferred logically, simply because of states' existence (as information platforms for their citizens).

These pertain to<sup>644</sup> equality, liberty and security (of information).

## 7. Equality\*

Because all humans receive a name and a citizenship from their state, all humans are born equal towards their state.

However, it is important to note that all humans are born equal only with regard to their state. All humans are not born equal among them, each

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640 See note 1/1/1.

641 Essentially, in any and all states, today and throughout human history.

642 'Should' effectively belonging to political theory (see note 0/1/3).

643 See note 1/1/1.

644 Although one cannot hope to construct a complete list of all platform rights derived logically from the finding that states are information platforms for their citizens, any list is expected to be short (or at least shorter than perhaps hoped for), because it is only direct logical relationships that give rise to them (so, for example, equality does not also give rise to, for example, human dignity or to freedom of expression, in spite of these rights stemming logically from it).

having varying abilities and health, and different characters, even before political systems and governments step in.<sup>645</sup>

## 8. Liberty\*

Because all humans get a name and a citizenship (directly) from their state, all humans are born free from control by other humans, that is, all humans are born at liberty. Because there are no intermediaries in the individualisation relationship between a state and its citizens, no human is born controlled by (much less, the property of<sup>646</sup>) another human.

All humans are thus born at liberty from other humans and not from their states, because it is their state that turned them into individuals, given that states are natural to humans.<sup>647</sup>

With regard to the processing operations available to them, all humans have (some) control over all Things and Beings within their state—at the very least they can talk about them. In essence, this is what states do, they make possible the processing of information to individualised humans on their (information) platform.<sup>648</sup> Consequently, all citizens on that platform can process, and thus control in some way, all information on that platform (of course, the types of control that each citizen can actually exercise vary vastly).

## 9. Security (of information, not of the person)\*

Because all humans receive a name and a citizenship from their state (and are thus individualised), this information needs to remain secure, free from any tampering, at least for the duration of the human's life (and for a short time thereafter<sup>649</sup>).

Security of information<sup>650</sup> may cover, particularly in developed societies, all information about the person, the creation of which was made possi-

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645 Meaning, even before the particular circumstances of family or state increase even further the inherent inequality among humans, see also Chap. 2.1, par. 4.

646 See Chap. 24, par. 5.

647 See Chap. 25, par. 1.

648 See Chap. 8, par. 1.

649 See also Chaps. 14, par. 4, and 15, par. 6.

650 See also Chap. 14, par. 12.

ble<sup>651</sup> by the state; not only name and citizenship, but also family life, academic and professional achievements, and so on.

Importantly, however, security of the person ought not to be considered a platform right; no logical justification for the protection of human life comes as a result of a state's existence<sup>652</sup>—as history, unfortunately, has time and again proven most emphatically (and horribly).

## 10.

As has been seen,<sup>653</sup> the list of platform rights is short: most notably, needs, even the need to survive, do not give rise to a respective platform right (or to any other right for the same purposes, although they do, of course, lie at the root of a(ny) right, in the sense that it is need that creates the will to process<sup>654</sup>).

## 11. Platform rights and natural rights\*

Platform rights lie close to so-called natural human rights and their related theories. The fundamental difference between them, however, is that natural human rights are based on and derived from a theoretical assumption, a fiction (they are believed to exist in Nature and be discoverable through Reason, or to come from God), while platform rights come from a logical finding based on fact (states are individualisation mechanisms for humans).

## 12.

Needless to say, platform rights may or may not be granted to individuals within any given state—it is a matter of politics whether to grant them or not, as is their extent or the circumstances under which they apply.<sup>655</sup>

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651 Personal information, see note 1/7/1, and also Chap. 14.

652 Therefore, an individual (a person) is not its information, see also Chap. 14, par. 12.

653 In par. 6.

654 See Chaps. 21, par. 1, and 5, par. 2.

655 See also par. 4.

13.

Platform rights apply only to humans, because states are natural only to them (and not to animals or organisations—or to artificial Beings, at least for the moment<sup>656</sup>).

**14. Human rights in the digital world\***

In the digital world the basic assumptions about human rights need to be reclaimed. As has been seen, human rights apply to individuals and are afforded by their state. These rights are, however, analogue-world-specific, the culmination of a process with its roots deep in human history—crucially, within an environment of scarcity (remembering that information in the analogue world is finite<sup>657</sup>). Both assumptions (that human rights apply to individuals and are afforded by their state) are being gravely challenged today in the digital world.

Even if these assumptions also remain in the digital world (notwithstanding that information in the digital world is also infinite<sup>658</sup>), it is far from certain that the list of human rights in the analogue world will also work in the digital. In other words, simply adding the word ‘digital’ next to any human right acknowledged today will most likely not work.

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656 See also Chap. 21, par. 1.

657 See Chap. 1, par. 16.

658 Ibid.

## 23. *Morality*

*'Who are you?  
The new number two.  
Who is number one?  
You are number six.  
I am not a number! I am a free man!'*

*The Prisoner (1967), Opening Titles*

**Synopsis:** *Morality is the ability to choose whether to carry out a processing operation or not (1); An analysis of morality's systems of thought (moral philosophies) is unnecessary for the moment within the context of this political philosophy (2); Can morality be avoided altogether? (3); On whether individuals should keep their promises (4); On religion (5)*

### 1. \*

These regulations<sup>659</sup> that are so well embedded on the information platform that is the state (through hundreds or thousands of years of implementation) that they allow choice (that is, the consequences of breaking them are nuanced) form morality.

In other words, morality is the ability<sup>660</sup> to choose whether to carry out a processing operation or not. This choice is made possible through regulations that have been applied for so long and so extensively that, instead of a yes or no situation enforced through consequences (as is the norm<sup>661</sup>), many more options are allowed to the individual. This is what is meant whenever it is claimed that morality is subjective: it is possible for the individual to decide what to do, to choose.

Consequently, there is no morality that is outside of or beyond regulation. However, there is law that has not yet become morality,<sup>662</sup> with the

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659 See Chap. 20, par. 5.

660 See Chap. 5, par. 8.

661 See Chap. 20, par. 8.

662 See, for example, data privacy legislation, which is most likely on this path after more than 50 years of implementation.

digital world, being relatively new, offering us a suitable opportunity to witness this procedure.

## 2.

An analysis of morality's systems of thought (moral philosophies) is unnecessary for the moment within the context of this political philosophy, for the simple reason that the basic questions asked by each do not coincide: the former suggest what humans should do, while the latter explains why, and how, things are as they are—why, and how, humans live as they live.

In other words, moral philosophy is, in fact, an algorithm that addresses the individuals' question, 'What should I do?', in the event that morality allows him or her a choice in any given situation in life: for example, to avoid pain and seek pleasure (epicureanism), to patiently endure (stoicism), to do whatever benefits the greatest number of others (utilitarianism), to do what one thinks should become a universal principle (Kant) or to do what God commands (religion).

Be that as it may, other than providing a definition for morality and moral philosophy, this chapter will only discuss two basic moral questions (one inherent, the other posited), and leave the topic of morality (a moral philosophy of information) for discussion at a later stage.

### 3. Can morality be avoided altogether? \*

Is there any philosophy or other human endeavour that does not engage with it? Even within the context of a political philosophy that does not address the question of what humans should do (or, for the same purposes, within the context of any other human endeavour), it is impossible to altogether avoid morality, to claim amorality<sup>663</sup> in any one of our actions.

With information processing explained through need<sup>664</sup> (and opportunity), the question can be asked as to whether this focus on need is not already some kind of morality. In its effort to explain how things are, and in replying that this is how they need to be, does this approach not adopt an ultimately conservative viewpoint? Does it not ultimately reveal a certain morality, that of affirmation, of acceptance of things as they came to be?

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663 Even the negative connotations of the term revealing the impossibility of the endeavour.

664 See Chap. 5.

The same is, after all, true of any human endeavour. If it is accepted that states are individualisation mechanisms for humans,<sup>665</sup> as suggested in this analysis, does this not reveal a certain morality as well? Should humans exist as individuals at all? Or should we be, for example, numbered<sup>666</sup> animals—with numbering resetting locally and periodically so that no identification across time and space is possible? Similarly, any social interaction (business, employment etc.) or scientific discovery (from its assumptions to the way it is used) also invariably reveals a certain kind of morality.

Difficulties, however, are also met with a hypothetical question. A hypothetical question about how things could have been<sup>667</sup> is useful in opening up new perspectives and elucidating overlooked aspects. However, being hypothetical, not only does it miss the reality test, which would after all demonstrate its worthiness (or from the opposing viewpoint, the fact that it was never reality is an argument for its unworthiness), but it too also reveals a morality: that of the person who asks it.

In other words, (a, any) morality cannot be avoided in any human action, because, quite simply, it is humans who act.<sup>668</sup>

The topic of morality is expected to hold a central role in the digital world, because it is a fully controlled, artificial environment.<sup>669</sup> Even if it is a simulacrum gone rogue,<sup>670</sup> the fact remains that processing operations need to be pre-planned in order to exist in it, offering humanity a unique, God-creator moment. Whether choice will be embedded in the system (and to what extent and under which circumstances) remains an open issue.

#### 4. On whether individuals should keep their promises\*

In spite of this striving (as seen in the previous paragraph, to the greatest extent humanly possible) not to be a moral philosophy, some replies to moral questions need to be provided here too, if for no other reason than illustration. After all, any theory is also assessed on the responses it gives to

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665 See Chap. 8.

666 The state in this case providing the numbering anyway—revealing even in this hypothetical scenario that states are natural (necessary, as per their nature, see Chap. 5, par. 5) to humans.

667 The suggestion of how things should be thus revealing the morality of the speaker.

668 Causing, after all, the Unique Human Observer Perspective disclaimer (see note 1/1/1), because ultimately (a certain) morality is in the eyes of the observer.

669 See Chap. 1, par. 17.

670 See Chap. 1, par. 11.

basic human questions, particularly if these have already been prominently<sup>671</sup> asked.

One such prominent question is, why should individuals keep their promises? In an informational approach, one would first have to analyse what a promise is: it is a (conditional) processing initiated on the information platform that is the state by an individual assisted by its state (warranting the individual's identity—and also the identity of the other party, for the same purposes). Keeping the promise, therefore, would be the final part, the conclusion of the algorithm underlying the processing—nothing more or less. A promise should (presumably) be kept because it exists, because the corresponding processing has been initiated on the information platform and it strives for its completion.<sup>672</sup>

Whether an individual should be forced to keep a promise (something entirely possible on the information platform that is the state), as for example in the case of a contract, is an entirely different (political) matter.

## 5. On religion

Religion is a type of morality. In fact, it is a morality that is different to the one described above,<sup>673</sup> because its basic terms of reference are different: morality is based on regulation, whereas religion is based on holy texts. These two moralities, therefore, have developed independently within states. At times they have had a harmonious relationship, when their texts of reference have been the same, and at other times a conflicting one, meaning that each insisted on its own solution as to what individuals (in fact, the very same individual) should do.

The reason why two types of morality exist in parallel in each state is due to the fact that, from humanity's beginning (or at least its recorded history) until a few hundred years ago, each served a very different purpose: religion was humans' only way to discover the law of Nature,<sup>674</sup> whereas morality was the outcome of regulation to manage human relationships. Of

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671 . Although, one has to admit, these questions are themselves the practical result of the implementation of older philosophies, placing any new philosophy at the disadvantage of having to heed, and tend to, the problems of the past—and therefore treating the question (on the relevance of the philosophy concerned) as the answer.

672 See also Chap. 4, par. 6.

673 In par. 1.

674 See also Chap. 20, par. 3.

course, with each passing century each type of morality gained depth as a result of human progress, that is, humanity's increase of its information processing capacity; and religion unavoidably developed its own moral code (humans need to control Nature anyway<sup>675</sup>). After the Enlightenment, religion was replaced by science; however, its moral code, developed over thousands of years, often through indescribable pain and bloodshed, remained in place.

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675 See Chap. 20, par. 3.

## 24. Property

*‘Possession, ownership, are tactical matters.’*

Walter Benjamin

**Synopsis:** Property is control over (specific processing operations out of the many possible on) a dataset; In essence, a Being can be said to have property-like control over a dataset when it can destroy it (1); Property is an attribute of a dataset (2); Property is natural to all Beings (and, thus, is not a platform right) (3); Property is not a pursuit for its own sake (4); No property over humans (5); Property is dependent on the state (6); Property and sovereignty (7); Appropriation (8); Property in the digital world (9–11); On inequality (12);

### 1. Property is control over a dataset\*

Property is control<sup>676</sup> over a dataset,<sup>677</sup> meaning a Being or a Thing.

Because total control is impossible,<sup>678</sup> property is control over specific processing operations out of the many possible on a dataset. In other words, property is a bundle, a batch of processing operations (that have come to be known collectively under that name), that a Being can allow or prohibit to others (and which, obviously, it can itself carry out), as afforded to it by its state. Exactly which processing operations these are varies vastly. Because property is afforded to individuals by their state according to its political system at any given time,<sup>679</sup> its content is dynamic; property has not been and is not defined in the same manner over space and time. Its definition each time depends on the particular state.

Accordingly, the right to property (ownership), is the ability of a Being<sup>680</sup> to allow or prohibit a specific processing operation on a dataset and (if

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676 See Chap. 6.

677 Immaterial information is not subject to it; see, however, Chap. 24.1 on intellectual property.

678 See Chap. 6, par. 2.

679 See par. 6.

680 Afforded to it by its state; see Chap. 21, par. 2.

appropriate) by a dataset.<sup>681</sup> Processing on it, of course, meaning by another Being, while by it, meaning by the dataset itself (only, of course, if it is another Being; Things do not process information<sup>682</sup>).

Although the batch of processing operations that constitute property may include any single one,<sup>683</sup> because property's content is dynamic, the one universal characteristic of property is the destruction<sup>684</sup> or deletion (in other words, consumption) of a dataset. In essence, a Being can be said to have property-like control over a dataset when it can destroy it.

## 2. Property is an attribute of a dataset

Property is an attribute<sup>685</sup> of a dataset, a batch of processing operations that is possible by a specific Being on a specific Thing or (another) Being.

Property is only one among many attributes of a dataset; it is always relevant to specific processing operations, but it is never absolute, in the same way that total control is impossible.<sup>686</sup> In other words, the restrictions over property reflect the impossibility of complete control over any dataset, even though property's existence means in practice more control over a dataset than, for example, partial ownership (lease) or no ownership (common goods<sup>687</sup>). In the same vein, this specific attribute, meaning property, may or may not exist for a specific dataset—not all Things or Beings belong to a Being.

The processing rules included in property as an attribute are state-dependent on each occasion, but the decisions behind them (whether to grant them, to whom and to what extent) are political.<sup>688</sup>

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681 See also Chap. 6, par. 1.

682 See Chap. 3.

683 See Chap. 4.

684 See Chap. 1, par. 9.

685 See Chap. 6, par. 5.

686 See Chap. 6, par. 2.

687 See also Chap. 22, par. 8, on the platform right of liberty, where it is clarified that all humans have (some) control over all (Things and Beings) on the information platform that is their state.

688 See par. 6.

### 3. Property is natural to all Beings (and, thus, is not a platform right)\*

In the analogue world property has been exercised over datasets, be they in Nature (land, trees etc.) or human-made (artefacts), since the beginning of time by humans<sup>689</sup> and animals alike.

Can it then be claimed that property is natural to Beings, specifically to humans? The political considerations behind this question aside, property is natural to humans (in fact, to all Beings) because destruction (deletion, consumption etc.) is natural, that is, it is a processing operation among the many possible over a dataset. In other words, because destruction of a Thing by a Being is possible in Nature, property is natural to all Beings.

Exactly for this reason, because property is natural to all Beings (and not specifically to humans in spite of it stemming from their states<sup>690</sup>), property is not a platform right.

In the digital world property is (for the moment, at least) exercised in the same way as in the analogue world.<sup>691</sup>

### 4. Property is not a pursuit for its own sake\*

Although property is natural to humans, making it a primary purpose in one's life (meaning giving it primacy over other purposes that are possible) is a choice within the domain of morality<sup>692</sup> that is made possible by the state.

Ownership, the accumulation of wealth, is one purpose among many that certain humans choose to set for themselves if afforded to them by their states. Propelled by the constant need of humans to augment their information processing,<sup>693</sup> this pursuit may never end for the humans concerned. The same (or at least similar) is true for organisations, depending on their (human-set) purpose.<sup>694</sup>

Artificial Beings are not yet able to hold property, because their states do not allow them to, although, as has been seen, property is natural to them as well.

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689 Regardless of whether by a single individual or collectively by a family, a tribe etc. (see also Chap. 1.1, par. 5).

690 See Chap. 22, par. 6.

691 See, however, par. 9.

692 See note 5/2/2.

693 See Chap. 5.1.

694 See Chap. 2, par. 7.

Accordingly, because Things have no purpose (purpose being the result of need<sup>695</sup>), no Thing's purpose is to become the property of a Being. Similarly, even after a Thing becomes the property of a Being (for any period of time), and even though the Being will certainly process it in a way that serves its purposes, the Thing itself does not acquire a purpose (the purpose being imposed on it by the Being who happens to be its proprietor), meaning Things have no purpose, or rather their short-term purpose depends on their short-term use.<sup>696</sup>

### 5. No property over humans\*

Although one Being can be the property of another (organisations are owned, for example, by their shareholders or by whoever created them<sup>697</sup>), this does not apply to humans. A human cannot, logically, be the property of another human (or in the same context, of another Being), notwithstanding centuries of human slavery. Why is that?

In short, because of the platform right to liberty.<sup>698</sup> Because all humans receive a name and a citizenship directly from their state, all humans are born free from control by other humans, that is, all humans are born at liberty from other humans.

Of course, whether the platform right of liberty materialises (and to what extent) on any information platform that is a state at any moment in human history (and whether for all or only for a few) is a matter of politics—as can be seen by the issue of property over artificial Beings (specifically, computer programs) that remains undecided today.

### 6. Property is dependent on the state\*

Property is inconceivable without a state, because only through the state is the identification of Beings and Things possible. It is only through a state that the designation of an owner (the Being exercising property) or a dataset to be owned can be carried out. This, however, has nothing to do

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695 See Chap. 5, par. 2.

696 See also Chap. 3, par. 4.

697 See Chap. 2, par. 7.

698 See Chap. 22, par. 8.

with acknowledging a right to property within a state for all or some of its citizens. This is a political decision made by a state's government.<sup>699</sup>

Throughout practically all of human history the right to property has been acknowledged within states (regardless of how many of their citizens this applied to) to such an extent that states are frequently depicted as effectively protecting property. However, it is important to clarify how and why they do this. States are able to protect property first and foremost because it is through them that both the owner and whatever the attribute of property applies to exist. States have full control over all information processing concerning property.<sup>700</sup> States can therefore protect property, but it is not necessary the case that they will do so. Protection can be provided but whether it is actually provided and on what terms is a matter for the political system and the government. In other words, it is not the state's purpose to protect property (states have no specific purpose anyway<sup>701</sup>), rather it is the role of the government, if under the political system applicable at the time<sup>702</sup> this is considered a worthy cause.

Therefore, the reason that states in practice appear to protect property is because their political systems and governments ask them to—and the state obliges, being uniquely in the position to do so because property is entirely dependent on it.

Consequently, the way in which we have experienced property, and the human right to property, over history varies greatly depending on the political systems and governments in place, not on states or individuals' property-relevant processing.

## 7. Property and sovereignty\*

As has been established,<sup>703</sup> sovereignty means total control; in the context of a state it means control over all information processing carried out within the territory of a state. The state is by definition sovereign on the information platform that is, after all, its own creation (i.e. its territory); however, for the government that controls the state, sovereignty, although

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699 See Chap. 12.

700 As is the case for any information processing happening on their information platform; see Chap. 16, par. 2.

701 See Chap. 11, par. 7.

702 See Chap. 12.1.

703 In Chap. 16, par. 1.

factual and material in each state, is an unattainable objective, because total control is impossible.<sup>704</sup>

In practice, sovereignty and property are quite similar, but not identical. Property allows for control over a batch of processing operations that may seem wide-ranging (wider-ranging, at least, than any other control usually exercised by a Being over another Being or a Thing), and includes its destruction. From this point of view it resembles sovereignty (i.e. total control) because (especially in property-favouring political systems) it seems to cover every processing imaginable.<sup>705</sup> Nevertheless, this is not actually the case. Property grants practical control over pre-known, pre-described, and thus pre-assessed, so as to be permitted, processing operations.

In other words, property is not open-ended; most notably, it does not allow for processing operations not foreseen by regulation at the time of the creation of new information;<sup>706</sup> if any new types of processing are made available to citizens on the information platform that is the state, the government has the last word on whether they will be allowed under property rights and on which terms.

In contrast to property, sovereignty strives for total control—which is, of course, an unattainable objective. In essence, property is material, whereas sovereignty is an objective. Property and sovereignty may (depending on the political system) appear to coincide, but they are not the same—an individual is not sovereign over the Things or Beings it has property rights to—at least, not in the analogue world.<sup>707</sup>

## 8. Appropriation\*

As has been seen,<sup>708</sup> the mechanism of establishing property is simple: any time that control over a dataset is allowed by one Being to another, and processing takes place, new information is created. If this new information materialises (in the analogue or digital world) then its creator exercises control over it that may (or may not) constitute property, depending on the state (specifically, on the government and the political system) the creator lives in. In other words, whenever a human is allowed to interact with a dataset, new information is created (thoughts, feelings, wishes) in that

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704 See Chap. 16, pars. 2–5.

705 On the connection of imagination with freedom, see Chap. 25.

706 As seen most visibly in intellectual property.

707 On the digital world, where total control may be possible, see Chap. 16, par. 7.

708 In Chap. 6, par. 4.

human, over which, if this leads to creation of another (i.e. a new) dataset (be it in the analogue or the digital world), that same human may have property rights (or not), depending on the state in which the human lives and its political system.

The same is true for new, previously unknown datasets (existing in Nature); the first human to discover them exercises control over them, which may amount to property depending on the state in which that human lives.

## 9. Property in the digital world

The gravest challenge for traditional, analogue-world notions about property in the digital world comes from the breakdown of the natural, analogue-world link between control and location. As has been seen,<sup>709</sup> in the digital world, contrary to what has been known to humanity since its beginning, a Thing or a Being never leaves the territory of the state where it was created: it can process information, or information can be processed on it, from an analogue-world distance, from (or in, as the case may be) the (digital) territory of other states. This affects (in fact, reduces) the control of states within their own territories and thus the property rights of their citizens—in essence, their citizens have become users (instead of owners).

Of course, from the point of view of the owners, their property is strengthened, because the digital world, artificial as it is, allows for more control than the analogue.<sup>710</sup>

## 10.

That aside, as in the analogue world, property can be exercised over digital information (including digital-born and therefore digital world-only information).<sup>711</sup> Because digital information is intangible, ownership of digital information will be discussed in the context of intellectual property.<sup>712</sup>

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709 In Chap. 17, pars. 10 and 11.

710 See also par. 7.

711 See Chap. 1.1, par. 17.

712 See Chap. 24.1.

## 11.

Although increasing property in the digital world can be a purpose for humans, as in the analogue world,<sup>713</sup> in the case of digital information, wealth will unavoidably need to materialise at some point in the analogue world for the purpose to be considered (partially, as is always the case) fulfilled by humans. In other words, because humans are biological Beings, wealth can never exist for them exclusively in the digital world.

Because, however, this materialisation can be partial (a rich individual in digital assets does not have to make all of them materialise in the analogue world too), the bigger picture of information being infinite in the digital world, but finite in the analogue, is not affected.<sup>714</sup>

## 12. On inequality\*

As has been seen,<sup>715</sup> although all humans are born equal towards their state, differences among humans start to emerge as soon as they are born (in terms of abilities, health and characteristics), which are immediately accentuated after birth by circumstances (particularly, the state into which they are born) and opportunity (luck). Inequality thus being natural to humans,<sup>716</sup> this is also reflected in property accumulation, even among those born in similar circumstances in the same state—and much more so if either of the two is different. In other words, among individuals who have given primacy to wealth accumulation,<sup>717</sup> even if they live in similar conditions, some will succeed in amassing (much) greater wealth than others; even slightly different conditions may dramatically accentuate the differences.

The above unavoidably leads to inequality in property acquisition among humans; in other words, just as property is natural to humans,<sup>718</sup> inequality

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713 See par. 4.

714 What is affected, however, is aesthetics, because processing (or the enjoyment of wealth) in this case is no longer carried out visibly by the individual in the analogue world but rather happens in the digital world. In other words, the traditional picture of Scrooge McDuck swimming in his vault full of golden coins is not possible to achieve with digital assets.

715 In Chaps. 2.1, par. 4, and 22, par. 7.

716 In other words, there is no inequality because there can be no equality.

717 See par. 4.

718 See par. 3.

is also natural to them. (As is the case with regard to any purpose-setting between any two different individuals.)

As has also been seen,<sup>719</sup> comparison (and not conflict) is natural to humans. Humans need to augment their information processing;<sup>720</sup> augmentation, however, is always subjective and relative.<sup>721</sup> Consequently, inequality, in spite of being natural, will not go unnoticed.

Whether, and to what extent, such natural inequality among humans is to be reduced by states (which have the means to do it, because they control all the processing operations that make inequality possible) is a political decision of their governments.

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719 In chapter 5.1, par. 9.

720 See chapter 5.1.

721 See also chapter 25, on freedom.

## 24.1. Intellectual property

*‘Something that doesn’t actually exist can still be useful.’*

Ian Stewart

**Synopsis:** *Intellectual property is a kind of property that is exercised over dematerialised datasets (1); All that was said about property is applicable also on intellectual property; Crucially, however, intellectual property does not afford the owner the option to destroy the dataset (2); Intellectual property, same as property, is dependent on the state; similarly, it is natural to humans (3);*

### 1. \*

Intellectual property is a kind of property<sup>722</sup> that is exercised over dematerialised<sup>723</sup> datasets.

Although property in the analogue world has been exercised since the beginning of time,<sup>724</sup> the concept of intellectual property was invented only relatively recently in human history, in the seventeenth century. It reproduced, to the greatest extent possible, what was already known of the traditional notion of property. Because it was created by humans, intellectual property was made to resemble what humans were already familiar with (a remark that, as can be seen, is also valid for the digital world<sup>725</sup>).

### 2.

All that has been said about property above<sup>726</sup> is also applicable to intellectual property: it means control over a dataset (which is, however, dematerialised); it gives to a Being (human or organisation) the ability to allow or prohibit another’s processing operation over that specific (dematerialised)

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722 See Chap. 24.

723 See Chap. 1.1, par. 10.

724 See Chap. 24, par. 3.

725 See Chap. 1, par. 11.

726 In Chap. 24.

dataset. Ultimately, intellectual property is an attribute of a specific dematerialised dataset that dictates whether and what type of processing on it is allowed, by which Being(s) and under which conditions.

Crucially, however, intellectual property does not afford the owner the option to destroy the dataset. Unlike traditional property, this being its distinctive characteristic,<sup>727</sup> owners of intellectual (dematerialised) datasets cannot destroy them once they have been created, that is, once they have materialised and come into existence in the analogue or the digital world. Apparently, the replication of the traditional property system was unsuccessful—and this accounts for the dysfunctions of the intellectual property system.

### 3.

Notwithstanding the differences between the traditional notion of property and intellectual property, intellectual property, like property, is dependent on the state<sup>728</sup> and is protected by the state in accordance with the political system and government decisions in place at any given time.

The question of whether intellectual property is natural to humans merits some explanation.<sup>729</sup> Although the fact that intellectual property was invented late on in human history suggests the opposite, one must not forget that humans will process information in any way they can. Until the seventeenth century (with the Industrial Revolution leading to mass mechanical reproduction), humans processed dematerialised information in the only way they knew how, augmenting their information processing in accordance with their processing capabilities. When things changed, a new type of property was invented, one which was natural to them.<sup>730</sup>

As with property, however, intellectual property is not a platform right.<sup>731</sup>

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727 See Chap. 24, par. 1.

728 See Chap. 24, par. 6.

729 As with property, see Chap. 24, par. 3.

730 On the basis of the abstraction criterion set out in Chap. 5, par. 5.

731 See Chap. 24, par. 3.

## 25. Freedom and liberty

*‘Since we are not, in fact, free, but could not live without the conviction that we are, what are we to do?’*

Isiah Berlin

**Synopsis:** Freedom is the ability to imagine; It is constrained by the state, the information platform any individual happens to be living on—and is thus transformed into liberty (1); Freedom is impossible to attain (2); Freedom is relative (3); A human need to be free? (4–5); The state is at the same time the source of and the basic impediment to human freedom (6); States are still (‘freely’) living in an (imagined) ‘state of nature’ (7); Liberty (8); Liberty is also relative (9); A platform right to liberty exists only with regard to other humans (10); Liberty to be examined within the context of a moral philosophy at a later stage (11).

### 1. \*

Freedom is the ability<sup>732</sup> of individuals to process information to the greatest extent imaginable by them, to potentially carry out any processing operation they wish, to do what they want. It is not material, in the sense that the processing need not actually happen; it is only enough that individuals imagine that it is possible for it to happen. Freedom is ultimately the ability to imagine.

Freedom is constrained by the state, the information platform any individual happens to be living on—and is thus transformed into liberty.<sup>733</sup>

### 2. Freedom is impossible to attain

The struggle for freedom is notoriously unending: because human imagination has no limits, freedom can never be attained.

Accordingly, although everyone is born free (i.e. with the ability to imagine), there is no generally accepted threshold for freedom or generally ac-

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732 See Chap. 5, par. 8.

733 See par. 8.

cepted definition of what it actually means to be free. Freedom is imagined each time, by each one of us, according to our imagination of either what is possible for us or what should ideally be the case—the point being that the relevant threshold is constantly changing in space and time throughout human history.

### 3. Freedom is relative\*

However, even imagination has to be anchored somewhere. Humans alive one hundred years ago could not have imagined the digital world—if they could, they certainly would have liked to process information in it too, otherwise they would not have considered themselves free.

Practically, therefore, any one person's freedom is relative to another person's freedom. An individual only imagines oneself to be more or less free than another individual, and even then freedom is in the eye of the beholder (because one can only imagine another's actual freedom). Consequently, because comparison is natural to humans,<sup>734</sup> a human is free or unfree in relation to, or compared with, an (imagined) other.

### 4. A human need to be free? \*

Notwithstanding its relativity and the impossibility of attaining it, humans (nominally at least) have striven for freedom throughout their history—they want to be free. Millions have died willingly in the name of this cause, making this a question that cannot be ignored. Is there a human need to be free? Why do most (or at least certain) humans claim that they need to be free?

As has been seen, humans need to augment their information processing. In fact, each and every human needs to augment his or her own information processing, to constantly process new information for as long as he or she lives.<sup>735</sup> However, humans strive towards an imagined, not a real end, because needs are unsatisfiable.<sup>736</sup> Imagination is, therefore, critical: humans need to be able to imagine that further, new processing is possible

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734 See Chap. 5.1, par. 9.

735 See Chap. 5.1, par. 2.

736 See Chap. 5.1, par. 5.

for them<sup>737</sup> that may satisfy their needs (even though this is, however, never actually the case). If they could not imagine that new information processing is possible for them, they would simply stop (reducing themselves to a mechanical increase of their information processing with every new day of their lives). It is therefore humans' need to augment their information processing that causes (gives rise to) humans' ability to imagine—and, thus, to be free.

## 5. \*

One cannot know if only humans among all other animals have the ability to imagine and thus a need to be free. There is certainly empirical evidence that certain animals cannot live in captivity. Notwithstanding, however, whether animals can or cannot imagine, animals whose freedom is protected within (human) states enjoy liberty<sup>738</sup> (not freedom<sup>739</sup>).

Under the Unique Human Observer Perspective, the two other categories of Beings, organisations and artificial Beings, cannot imagine, and thus do not need to be free.<sup>740</sup> After all, having a specific purpose in their lives means that all of their information processing is constrained by it (meaning that even if they could imagine, this would happen within the confines of serving their purpose). However, it is possible that, partially at least, the algorithm behind human imagination (the comparison of a Being's information processing with that of another's and the reproduction of it—but perhaps not the innovative increase) could occur in the case of artificial Beings (specifically, computer programs).

Of course, as with animals, liberty within any given state can be shared by all, Things and Beings alike. There is no reason, therefore, why artificial Beings, specifically computer programs, should not be given rights by regulation (similar to organisations).

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737 This does not necessarily have to be entirely new or never-before-heard-of processing; it may well be that the processing already done by others is imagined to be applicable to them as well—comparison being natural to humans.

738 The same is true for certain Things that have been granted rights in human states, such as specific rivers or trees, see also Chap. 21, par. 1.

739 See par. 8.

740 In essence, organisations and artificial Beings are treated as not able to process immaterial information and thus as lacking in creativity; see Chap. 5.1, par. 6.

## 6. The state is at the same time the source of and the basic impediment to human freedom<sup>741</sup> \*

The state is the source of human freedom, because the state is the only way for humans to become individuals and thus to be able to augment their information processing.<sup>742</sup> At the same time it is the greatest impediment to human freedom, because it controls all of its citizens' information processing. This is unavoidable: all human information processing on the information platform that is their state exists because of the state and takes place with its intermediation. The state is a (tacit, implied) participant in any and all human interaction. State sovereignty, after all, means control of any and all information processing within its territory.<sup>743</sup> In other words, the state constrains freedom because it gives humans the terms of reference necessary for them to be able to imagine.

This conflicted role accounts for all of the ages-long disputes and fights between individuals and their states over human freedom which, among others, have resulted in the creation of social contract theory,<sup>744</sup> the individual's division into two selves<sup>745</sup> and political systems.<sup>746</sup>

Needless to say, freedom is not impeded by other individuals, but liberty most certainly is.<sup>747</sup>

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741 This also helps to make sense of Rousseau's famous opening, that 'man was born free'. Humans are born free, i.e. able to imagine. What they imagine as their freedom, however, is transformed through government and political system into liberty as soon as they are born, unavoidably restricting their imagined freedom—hence Rousseau's immediate follow-up that 'he is everywhere in chains'. In other words, the state, as an information platform, is actually found everywhere around humans (i.e. it is natural to them), thus transforming their natural-born freedom into liberty as soon as they come to life.

742 See par. 4.

743 See Chap. 16, pars. 1 and 2.

744 See Chap. 13, par. 2.

745 See Chap. 26, par. 4.

746 See Chap. 12.1, par. 5.

747 See Chap. 21, par. 3.

## 7.

In essence, therefore, states are the only Beings that are truly free today, in the sense that no other Being exercises control over their information processing.<sup>748</sup>

This shows that states are (still) living in whatever ‘state of nature’ can be imagined: a non-state point in history that predates language and consciousness (with the EU being the first state of states, an information platform for all the information platforms that are states<sup>749</sup>).

### 8. Liberty\*

As has been established,<sup>750</sup> freedom is the ability to process information to the greatest extent imaginable—ultimately, it is the ability of humans to imagine. Liberty, on the other hand, is a condition, an absence of restraints within a specific state, a permission to process information (i.e. a right<sup>751</sup>). As has also been seen,<sup>752</sup> freedom can never be attained. An individual can appear to be free (i.e. nominally proclaimed to be able to be free) but, in fact, is not free (their state being able to control all his or her processing); in any event, most of the time individuals feel themselves to be less free than others or than their imagined level of freedom.

In contrast, liberty is a (reached or at least agreed upon) level of freedom on the specific information platform that is the state. Liberty is effectively a subset of freedom, a smaller batch of processing operations than those imagined by freedom but one which is actually materialised, afforded to individuals within a state.<sup>753</sup>

In other words, liberty is materialised freedom: liberty decides whether the information processing imagined in the context of feeling free can materialise in the analogue or the digital world, or not.

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748 Notwithstanding breaches, of course, such as those caused by the digital world or the global markets (see also Chap. 12, par. 11, as well as, note 16/1/3 on the Westphalian state).

749 See Chap. 19.

750 In par. 1.

751 See Chap. 21.

752 In par. 2.

753 Meaning that individuals have access to them, see Chap. 6, par. 6.

## 9. Liberty is also relative

Like freedom,<sup>754</sup> an individual is neither at nor not at liberty, because liberty's content varies in space and time. Most importantly, however, there is no state where some level of liberty, even minimal, was or is not afforded to individuals, that is, some absence of restraints so as to allow them to be able to process information on the information platform that was or is their state.<sup>755</sup> Whether that level was satisfactory or not each time is a matter of politics (comparison being natural to humans<sup>756</sup>).

Freedom therefore, whenever found in political discourse, invariably actually means different levels of liberty, that is, it is part of the discussion on political systems.<sup>757</sup>

## 10.

Although (some) liberty invariably exists in human states, the human right to liberty (freedom of the person) has been acknowledged as a fundamental (natural law) human right only recently. As is the case with all rights, including human rights, its acknowledgement is political, it is assumed.<sup>758</sup>

By contrast, a platform right to liberty exists only with regard to other humans:<sup>759</sup> all humans are born free from other humans' control<sup>760</sup>—but certainly not from their states' control.

Of course, whether this platform right actually materialises in any state is a matter of politics (as has been painfully demonstrated through human slavery for thousands of years).

## 11. \*

Although the provision of more liberties would intuitively appear better to individuals than fewer liberties, because in this way their information processing would be augmented even further, this is not a matter to be decided

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754 See par. 2.

755 See also Chap. 22, par. 8.

756 See Chap. 5.1, par. 9.

757 See Chap. 12.1.

758 See Chap. 22, par. 11.

759 See Chap. 22, par. 8.

760 See Chap. 24, par. 5.

lightly, first and foremost (utilitarian reasoning notwithstanding) because it is not claimed here that the augmentation of information processing is a worthy purpose for any state to pursue<sup>761</sup> (taking into account, for example, the measures this pursuit also unavoidably necessitates). This would be a political decision.

Evidently, for the very same reasons, liberty is not analysed any further here. Liberty is to be examined within the context of a moral philosophy at a later stage; here only what freedom and liberty really are is identified.

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761 States may need their citizens to augment their information processing (see Chap. 10), but whether needs need to be served (and to what extent) is a moral and political issue.

## 26. Liberalism

*'As for me, I only exist 'at home' (in myself); and as for that other life of mine which lies in what those who love me know of me, considered naked and simply in itself, I am well aware that I feel no fruit or joy from it, other than from the vanity of an imagined opinion.'*

Michel de Montaigne

**Synopsis:** *The individualisation of humans and the limits of this philosophy (1–2); Individualistic political theories (3); The distinction between the public and the private spheres (4); The inherent conundrum that individualistic theories have to deal with (5–8); The digital world and the right to informational self-determination (9–10); In need of an alternative political theory (11).*

### 1. The individualisation of humans and the limits of this philosophy\*

States turn humans into individuals.<sup>762</sup> It is states that provide each human with a name and a citizenship at birth, making them uniquely identifiable over space and time—and, therefore, an individual. Once individualised in this way, humans are able to satisfy their need to augment their information processing.<sup>763</sup>

### 2.

In the manner described above, humans become individuals. This is the individualisation of human beings. It is a natural process, common to all humans ever since they gained self-consciousness. Individualisation is a technical procedure that takes place automatically for each and every human on the planet—there is no political theory behind it.<sup>764</sup> Therefore,

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762 See Chap. 8, par. 1.

763 See Chap. 5.1.

764 Of course, other than that humans become individuals that are uniquely identifiable in space and time, and thus are different to other pack animals (or artificial Beings,

this procedure demarcates the borders of this political philosophy of information, beyond which this philosophy cannot expand.

### 3. Individualistic political theories\*

Individualisation is different to, and ought not to be confused with, individualism or individuality—or any other political theory of the individual, for that matter.

Individualism is a political theory that considers the individual the only social<sup>765</sup> unit, and gives priority to its various needs.

Individuality is a cornerstone of the political theory of liberalism. It assumes a unique character for each human, and therefore adds qualitative features to individuals which need to be nourished within a specific political system.

### 4. The distinction between the public and the private spheres\*

What is important to note is that, regardless of variations and differences in approaches (which can of course be quite significant in everyday politics), all individualistic political theories are based on a fundamental dichotomy: specifically, that an individual is composed of a private and a public sphere<sup>766</sup> (or a private and a public self).

The dichotomy works, and makes sense, through conflict.<sup>767</sup> The two spheres that supposedly make up an individual are conceived to be mutually exclusive: each time one of them increases it does so at the expense of the other.

If this theoretical model is accepted, which one of the two spheres is to be supported? Conveniently, two political theories have emerged, one for each.

Liberalism<sup>768</sup> broadly favours the private sphere over the public. It basically suggests that each individual's private sphere is not only inalienable (i.e. it should not be completely dominated by the public one), but that it

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for that matter). On morality, and whether it can be avoided altogether, see Chap. 23, par. 3.

765 Consider, however, that society is a group of individuals who are individualised by a specific state (see Chap. 8, par. 5).

766 The contents of each being left deliberately vague.

767 Obviously, because the self is imagined to be constrained.

768 The name is derived from its support of the private sphere, at the core of which reside, supposedly, an individual's thoughts and ideas, and thus imagination. In

should also be increased (nourished, fostered) as much as possible (again, to the detriment of the public one). At its extreme, meaning the complete domination of the public by the private sphere, lays anarchism and libertarianism.

On the other hand, communitarianism broadly favours the public sphere over the private one. Here belong all political theories that formulate a 'common will of the people' with which the private sphere of each individual needs to merge. At its extreme are authoritarian regimes that entirely deny the existence of any inalienable private sphere.

### **5. The inherent conundrum that individualistic theories have to deal with\***

Nevertheless, if seen from an informational point of view, this assumption, the dichotomy between the private and the public self, is basically false, it does not exist. The state, because it is the information platform that individualised humans and made it possible for them to live meaningful lives, has access to all information, it is omnipresent.<sup>769</sup> For the state, there is no private and public sphere. It is just information processing as usual. In other words, the state knows everything anyway. It cannot avoid doing so as it is an indispensable, ever-present party to any information creation and processing that takes place by any one of its citizens on its (information) platform.

This is the basic problem, the inherent conundrum for any individualistic theory, on the information platform that is the state. What is to be done with the fact that the state knows everything anyway?

Of course, so formulated, the question is stylistic: the state is not a person, only an informational infrastructure. It enables knowing but it does not know itself, it has no purpose<sup>770</sup> (let alone consciousness); effectively, it is the Being that runs the state, meaning its government (specifically 'its' individuals) that can know everything anyway, through its control<sup>771</sup>

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essence, liberalism yearns for freedom, but achieves liberty instead (see also Chap. 25).

769 See Chap. 7, par. 3, and also Chap. 16, par. 2.

770 See Chap. 11, par. 7.

771 See Chap. 12, par. 1.

of the information platform that is the state. Basically, because the state is omnipresent, its government can be (relatively) omnipotent.<sup>772</sup>

## 6.

In view of the above, the government, representing the public sphere, is at an inherent advantage, which explains why liberalism has had to come up with a number of ideas to limit government,<sup>773</sup> while communitarianism provides practically none (it simply developed theories to justify its claim instead).

## 7. \*

Understandably, one could claim that the practical result of the above false dichotomy is the same, no matter the theory behind it (meaning, whether one accepts the dichotomy of the self or not). That is, in view of humans' need to augment their information processing, and because information in the analogue world is finite,<sup>774</sup> those asking for more liberties for themselves in order to be able to process (to act) more will always come up against those who would prefer not to give these to them (because they wish to keep these opportunities for themselves, so as to increase their own information processing). Conflict, regardless of whether innate or the result of comparison, is inherent in an environment (system) of scarcity.

Whatever the case may be, within an individualism context (and resulting political systems) it is clear that the middle political ground (those accepting the theory of the two spheres and therefore supporting some balance between them) has a harder time than the extremes, which, each for its own purposes, want the system of the two spheres gone. This explains why historically, democracy (the epitome of individualistic political systems and itself a perpetual balancing exercise) has had (and still has) a harder time defending its case, and why the two extremes (far right and far left) meet (in their wish to abolish the dichotomy and individualism itself).

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772 See Chap. 12, par. 10.

773 See Chap. 12, par. 8.

774 See Chap. 1, par. 16.

## 8.

However, the most serious problem caused by these individualistic theories and their false dichotomy between a private and a public self is that they pit the individual against the state, causing state malaise.<sup>775</sup> This is not only unnatural on the information platform that is the state (because states are natural to humans<sup>776</sup>), but is also counterproductive, in the sense that it requires a Sisyphean effort to make countless subtle distinctions work while also trying to strike a balance each time: there are myriad instances that the government should (pretend to) not know of and others that it is expected to know of (the same case sometimes falling into both categories, for example in cases of emergency<sup>777</sup>).

### 9. The digital world and the right to informational self-determination\*

In the digital world the false dichotomy between a private and a public self is accentuated, because, for the first time in humanity's history, total and complete control is possible. The digital world is an artificial world; control is embedded in the system, in the sense that those who have constructed and maintain it are able to know and monitor at all times<sup>778</sup> all behaviour in it (regardless of whether that of individuals or artificial Beings).

This is a fundamental, tremendous change from the analogue world. In the analogue world the state may be omnipresent and the government (relatively) omnipotent, nevertheless these are only possibilities, not facts. The reality depends on the processing capabilities available at any given time. In other words, the state *does* know and the government *can* know all that an individual does in any moment of his or her life, however whether they *actually actively know* this, whether they actually process any and all information so as to acquire that knowledge is a completely different matter. From the beginning of humanity until very recently, processing was done manually (e.g. on paper), and therefore actual knowledge was impossible to achieve. Computing has improved processing capacities tremendously, but the immense variation of the analogue world still impedes actual, real-time

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775 See Chap. 13, par. 10.

776 See Chap. 8.

777 It is on this premise that the dictator (Fuehrer) theory is based—which takes us back to Caesar (and even before that, to Aristotle's *aesymnetes*).

778 See Chap. 1, par. 17.

total knowledge, at least it does today. Significantly, however, this is not true in the digital world, where the complete opposite is the case.

## 10.

By way of a response to the completely new challenges facing humanity, the distinction between an individual's private and public spheres has already been projected onto the digital world. A new right, the right to data privacy, emerged in the 1970s, when computers first appeared, and quickly took over the world, adopted by liberal and authoritarian regimes with equal enthusiasm.<sup>779</sup> At its basis lies the assumption that individuals have a right to determine (in principle, at least) for themselves (i.e. through self-determination) how information that lies within their private spheres is used in both the analogue and the digital worlds.

However, in this way the conundrum of the two spheres will be perpetuated—specifically, in an environment (system) where the supposed dichotomy of the two spheres could not be further from reality, due to the technical specifications of the digital world.

## 11.

If the two basic premises underpinning much of modern human life (social contract theory and the individualistic theories) are fundamentally flawed, what could replace them? Because both engage with the 'should' rather than the 'is', they are prescriptive rather than descriptive, and thus the answer to this question is beyond the scope of this philosophy.

New political theories need to be devised to provide us with alternatives for the roles of the state and humans, as well as all other Beings, in both the analogue and the digital worlds.

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779 Of course, differing in the extent of its application, i.e. whether it also applies in full in the public sphere (i.e. the government, the public sector) too. Whatever the case may be, the vast majority of states today have introduced legislation that tacitly subscribes to the individualism dichotomy (see also par. 2).

## *Notes for Archipelago Chapters*

*'As long as we live, we are devoted to self-improvement, and we shall not cease to make our writings more polished and more complete until we cease to breathe. No one is so good a man that he could not be made better; and no book has had so much work put into it that it cannot be made more perfect.'*<sup>1</sup>

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1 Erasmus, Ep. 1341A:1465–86 (quoted in Erasmus, *The Adages of Erasmus* (1536), ed. William Barker (Toronto: University of Toronto Press, 2001), xxi).

## *Notes on the Preface*

The distinction by Coleridge was made at his Table Talk of 2 July 1830: 'Every man is born an Aristotelian, or a Platonist. I do not think it possible that anyone born an Aristotelian can become a Platonist; and I am sure no born Platonist can ever change into an Aristotelian. They are the two classes of men, beside which it is next to impossible to conceive a third.'<sup>2</sup> Consider also Emerson:

“As thinkers, mankind have ever divided into two sects, Materialists and Idealists; the first class founding on experience, the second on consciousness; the first class beginning to think from the data of the senses, the second class perceive that the senses are not, final, and say, The senses give us representations of things, but what are the things themselves, they cannot tell.”<sup>3</sup>

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- 2 Samuel Taylor Coleridge, *The Table Talk and Omniana of Samuel Taylor Coleridge* (1836) (London: Oxford University Press, 1917), 118.
  - 3 Ralph Waldo Emerson, *The Selected Writings of Ralph Waldo Emerson*, ed. Brooks Atkinson (New York: Modern Library, 1950), 87.

## Notes on the Prologue

### On paragraph 1

0/1/1 *On the use of the word 'philosophy' in the title of this book*

Monod, a biologist, claimed that the use of this word would be an unwise choice, because 'nothing more is needed to earn it a distrustful reception from other scientists, and from philosophers a condescending one at best', his own excuse being 'the duty which more forcibly than ever thrusts itself upon scientists to apprehend their discipline within the larger framework of modern culture'.<sup>4</sup> This is also my own excuse for releasing a political philosophy,<sup>5</sup> although I am not a trained political philosopher. (However, I would dare to say that law (my own field of expertise) lies closer to political philosophy than biology.) Perhaps, most importantly, it is developments in the field of law, which have had to deal urgently with the digital world (arguably, it was the first among all human sciences to have to do so), that have allowed a new viewing of the analogue world.

Having said that, the influence of the EU (and the EU's law) is evident. This book, which is basically *made in Brussels* (in the meaning of being the capital of the EU), untangles the, until now, unresolved true nature of the EU (see also note 19/11/1)—a theoretical, and practical, problem that has deeply imprinted on my own way of thinking. Every scholar is a product of his or her time and environment, and this truism holds true from Plato (the student of Socrates, who was executed by a democracy) and Aristotle (the student of Plato and personal friend of the first-ever king over Greeks) to, for example, Hobbes (the friend and tutor of a king whose own father, a king, had been beheaded), Rousseau (whose 'rusticity'<sup>6</sup> and love of a simple life in nature was perhaps the result of him being born in Geneva, a place far from the metropolitan centres of his time) and, even more recently, Kohr (who humbly admitted that the greatest influence on his philosophy

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4 Jacques Monod, *On Chance and Necessity* (New York: Alfred A. Knopf, 1971), 8.

5 On the, probable, effect on a political philosophy when one is released by lawyers, as opposed to, for example, by ethics philosophers, see note 0/1/7.

6 See Maurice Cranston, 'Introduction', in Jean-Jacques Rousseau, *The Social Contract* (1762), ed. Maurice Cranston (London: Penguin, 1968), 17.

against state bigness was the fact that ‘he was born in a small village in Austria’).<sup>7</sup>

0/1/2 On the ‘craziness’ of the undertaking

Providing a single, general theory of the state to explain its existence throughout human history, and even more so if it is a single-line theory,<sup>8</sup> is, according to Bourdieu, a ‘crazy undertaking’.<sup>9</sup> Specifically, in view of the ‘monstrous literature’ on this topic, which is terrifying because it is impossible to master, there is also ‘hubris in [the] undertaking’<sup>10</sup>—both remarks with which anyone would (be crazy not to) readily agree. And then there is always Oakeshott’s stern warning that ‘A man, it is generally agreed, may make himself ridiculous as easily by a philosophical system as by any other means’.<sup>11</sup>

Still, because information processing has made a new viewing of human activities possible, such an effort will be undertaken in this book, in full knowledge of its limitations, particularly when trying to bring together centuries of human progress in many different, disparate scientific fields. In other words, finding inspiration in the Durants’ audacity, ‘only a fool would try to compress a hundred centuries into a hundred pages of hazardous conclusions. We proceed.’<sup>12</sup>

At the end of the day, I take refuge (if not find solace) in Machiavelli’s desperate call for assistance, when he realised that it is not possible to put all of humanity’s most serious topics (individuals, states, governments, property, freedom, human rights etc.) into a single book: ‘although this enterprise may be difficult, nonetheless, aided by those who have encouraged me to accept this burden, I believe I can carry it far enough so that a short road will remain for another to bring it to the destined place.’<sup>13</sup>

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7 Leopold Kohr, *The Breakdown of Nations* (Dutton, 1978), xii.

8 See also the predicament of single-line definitions of the state in note 7/1/3.

9 Pierre Bourdieu, *On the State: Lectures at the Collège de France, 1989–1992* (Cambridge: Polity, 2015), 40.

10 Bourdieu, *On the State*, 125.

11 Michael Oakeshott, *Hobbes on Civil Association* (Indianapolis: Liberty Fund, 2000), 11.

12 Will Durant and Ariel Durant, *The Lessons of History* (New York: Simon & Schuster, 1968), 13.

13 Machiavelli, *Discourses on Livy* (1517), trans. Harvey Mansfield and Nathan Tarcov (Chicago: The University of Chicago Press, 1996), 6.

0/1/3 Clarity among 'political philosophy', 'political science' and 'political theory'

It has been (convincingly) claimed that political philosophers (or normative political theory) focus on what is desirable, on what *should* or *ought to be* the case, while the social sciences, including political science, through a strong empirical element, focus on what *is* the case.<sup>14</sup> Accordingly, political philosophers see what they think the state ought to be like in the state as

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14 See Held, placing, for example, Hobbes, Locke and Mill with the former and Weber with the latter (David Held, *Political Theory and the Modern State* (Cambridge: Polity Press, 1989), 13 (he also discusses the role of political theory on 3). Of course, at around the same time, sociologists claimed Weber (and Durkheim) for their own domain of 'political sociology' (see, for example, Anthony Giddens, 'Introduction', in Emile Durkheim, *Durkheim on Politics and the State* (1890), ed. Anthony Giddens (Stanford: Stanford University Press, 1986), 1). This domain is also engaged with an 'explanation of the peculiar social structure called the state' (Philip Abrams, 'Notes on the Difficulty of Studying the State (1977)', *Journal of Historical Sociology* 1/1 (1988), 60), which seems different again to the field of 'political socialisation' (Irving Louis Horowitz, 'Socialization Without Politicization: Emile Durkheim's Theory of the Modern State', *Political Theory* 10/3 (1982)).

On a more recent approach to the nature of political philosophy, see Larmore, who claims that legitimacy is the primary object of political philosophy (Charles Larmore, *What Is Political Philosophy?* (Princeton: Princeton University Press, 2020), 5). See also Miller, who defines political philosophy as 'an investigation into the nature, causes, and effects of good and bad government', thus giving precedence to governance, whereby the state is merely 'the political institutions through which authority is exercised' (David Miller, *Political Philosophy: A Very Short Introduction* (Oxford: Oxford University Press, 2003), 2).

As regards political science, the issue is whether it is focused or not on the state. See, for example, Bendix and Lipse: 'Political science starts with a state and examines how it affects society, while political sociology starts with a society and examines how it affects the state, i.e., the formal institutions for the distribution and exercise of power' (cited in John P. Nettl, 'The State as a Conceptual Variable', *World Politics* 20/4 (1968), 591). Or, as put more succinctly by Garner: 'political science begins and ends with the state' (cited in Frederick Mundell Watkins, *The State as a Concept of Political Science* (New York: Harper & Brothers, 1934), 1). Pierson notes, 'That academic division of labour which once (and briefly) split the social sciences into the discrete study of the state (political science), economy (economics) and society (sociology) [has broken down]' (Christopher Pierson, *The Modern State*, 3rd edn. (London: Routledge, 2011), 1).

Of course, the focus of political science on the state is not uncontested; see, for example, Alexander Passerin d'Entrèves, *The Notion of the State: An Introduction to Political Theory* (London: Oxford University Press, 1967), 59.

it is, while social scientists interpret state-related facts each time, defining only incidentally what the state itself actually is.<sup>15</sup>

The reasons for this programme for political philosophy, that is, not to seek the truth but only to make suggestions, go as far back as (and are perhaps due to) Aristotle's classification of politics under the 'practical sciences' (those concerned with action) rather than under the 'theoretical' ones (those concerned with the truth).<sup>16</sup> Picking up his *Politics* (and also Plato's *Republic* and *Laws*, which, although antecedent, apply the same line of thinking), political philosophers thereafter obliged.<sup>17</sup>

Of course, at the basis of (current) political philosophy lies, basically, the social contract theory: the assumption that the state is a result of artificial agreement among groups of humans for whatever purpose and under whatever conditions (see Chapter 13, pars. 2 and 3). This is a fundamental assumption that was introduced by Plato and has basically never been questioned since (except by Aristotle, who, however, provided only a half-baked alternative). Obviously, if the artificiality of the state is taken for granted, other than observing and assessing it as such (i.e. as it *is*), one (regardless of whether a political philosopher or a political scientist) has every reason to examine its merits (what it *should be* or *could have been*). After all, morality is inherent in any human endeavour (see Chapter 23, par. 3).

This leaves us at a loss when trying to distinguish between political philosophy and political science. Indicatively, Britannica, although defining political science as 'the systematic study of governance by the application of empirical and generally scientific methods of analysis', making it therefore

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15 See also Strauss, who clarifies that '[t]he theme of political philosophy is the City and Man. The City and Man is explicitly the theme of classical political philosophy. Modern political philosophy, while building on classical political philosophy, transforms it and thus no longer deals with that theme however legitimate, if one has not understood the original form' (Leo Strauss, *The City and Man* (Chicago: University of Chicago Press, 1978), 1).

On a plea to free political science from the exclusive study of the state, as late as the 1930s, see Watkins, *The State as a Concept of Political Science*, 82.

16 See Jonathan Barnes, *Aristotle: A Very Short Introduction* (Oxford: Oxford University Press, 2000), 40.

17 Consider also Gombrich's claim as regards art: 'There really is no such thing as Art. There are only artists' (Ernst Gombrich, *The Story of Art*, 16th edn. (London: Phaidon Press), 15).

distinct from political philosophy, uses the same basic texts of reference for both (political philosophy and political science).<sup>18</sup>

This book therefore, as with any matter pertaining to the state, attempts to provide clarity: any science being a philosophy (that is, it seeks truth, which is never to be wholly attained),<sup>19</sup> the term political philosophy as used so far in history only accounts for political theories (unproven hypotheses).<sup>20</sup> However, 'political philosophy' and 'political science' can be used as synonyms to denote the science of seeking the truth in matters of the state (the *polis*).<sup>21</sup> In other words, there is no (longer) a *should*, but only an *is*.<sup>22</sup>

(It is claimed here that) An informational basis can offer us this.<sup>23</sup> This philosophy is not normative, although it reflects on the state, the government, human nature, morality, property, freedom and so on. That being said, it is empirical, in the simplest of meanings: because every one of us has a name, this makes us uniquely identifiable throughout space and time. Thus everyone should quickly realise that a (human) name needs to be warranted in order for it to serve its (human) purposes, by something external: the state.

This philosophy, therefore, unlike any other, makes no assumptions but is empirical to the greatest extent possible. It does not assume a social

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18 M. G. Roskin, 'Political Science', *Encyclopedia Britannica*.

19 See Plutarch: 'in philosophy, no progress or awareness of progress can be assumed if the mind is not freeing and purifying itself of fallibility' (Plutarch, *Essays*, trans. Robin Waterfield (London: Penguin, 1993), 122).

20 See also Sidgwick's use of the term 'politics' (as distinguished from 'ethics'); Henry Sidgwick, *The Methods of Ethics* (1874) (Indianapolis: Hackett, 1981), 15.

21 On equating the state with the *polis*, see note 0/1/9.

22 See also Hegel: 'This book, then, containing as it does the science of the state, is to be nothing other than the endeavour to apprehend and present the state as something inherently rational. As a work of philosophy, it must be removed as far as possible from any attempt to construct a state as it ought to be. The instruction which it may contain cannot consist in teaching the state what it ought to be; it can only show how the state, the ethical universe, should be understood' (Georg W. F. Hegel, *Outlines of the Philosophy of Right* (1820), trans. T. M. Knox, ed. Stephen Houlgate (Oxford: Oxford University Press, 2008), 14; see also note 13/6/1). It should be remembered, however, that his idealism ultimately led to the creation of totalitarian political systems in any case (see also note 11/4/5).

23 See also Floridi, who considered the philosophy of information a 'philosophia prima' (Luciano Floridi, *The Philosophy of Information* (Oxford: Oxford University Press, 2011), 25), or 'information' the 'Cinderella in the history of philosophy', with digital technologies 'inviting Cinderella out of the kitchen and allowing her to join the party' (Luciano Floridi, *The Routledge Handbook of Philosophy of Information* (London: Routledge, 2016), 1).

contract or a 'state of nature' or a 'veil of ignorance' or 'social classes', or any other hypotheses that other political philosophies (in essence, political theories) are based on. Theories and assumptions are of course necessary in science, but only to be tested, to prove a point. When the assumption is taken as a given, the cart is put in front of the horse: this is no longer science but politics, the personal preferences and prejudices of the theorist, and of those who choose to believe them.

#### 0/1/4 *A state theory*

Depending what one thinks (modern) state theory should include,<sup>24</sup> this book could be interpreted as a state theory, because of its emphasis on the state.

#### 0/1/5 *On the use of 'informational' in this book*

The adjective 'informational', whenever used in this book, means 'based on information' and not 'informative', as is otherwise usually the case.

Similarly, 'information' and 'data' are considered synonyms in this book.<sup>25</sup> However, to avoid confusion, 'data' is a term not employed here at all.<sup>26</sup> It is not therefore assumed here that any processing of data leads to the formation of information, that is, that (human) meaning (thus, the formation of information) is given to the data (which are sometimes meaningless to humans) through their processing.

Having said that, the term 'informational' is practically implied every time within the context of a political philosophy of information. Beings and Things are effectively *informational* Beings and Things. It is only to avoid repetition that this is not mentioned each time.

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24 For example, 'a theory of the state should encompass a theory of politics and a theory of government'; in turn, 'a theory of politics should explain the distribution and use of power, violence, and coercion within a society, and a theory of government should explain both the structure of governments and the behavior of political officials and employees of the government' (Douglass C. North, John J. Wallis and Barry R. Weingast, *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History* (New York: Cambridge University Press, 2009), 268).

25 Notwithstanding the basic tenet of the philosophy of information that information equals 'data + meaning' (see Floridi, *The Philosophy of Information*, 83).

26 At least, not on its own; in the composite form, 'dataset', it denotes cumulatively Beings and Things; see Chapter 1, par. 2.

0/1/6 *What this philosophy is not*

The following few notes (0/1/7 and 0/1/8) explain what this philosophy is not (intended to be).

0/1/7 *Not a moral philosophy*

This is not a political philosophy promoting morality of any kind (see also note 5.1/1/1) or any political system.<sup>27</sup> In other words, it is not a political philosophy ‘to acquire knowledge of the good life and of the good society’<sup>28</sup> or of the ‘*summum bonum*’.<sup>29</sup>

This political philosophy attempts to explain the *why* and the *how*: why and how things are as they are around us today. As regards the *should*, how things around us *should* be (or *should have been*), this is a project left for a later stage. After all, how could anybody claim they know what needs to be done, if they do not first explain where we are exactly?

Admittedly, this is not usually the case: most political philosophers (certainly, the most famous ones) wrote with a preference for a political system in mind: Plato, Aristotle, Machiavelli, St Augustine, Hobbes, Locke and Rousseau all defended a certain type of political organisation. In turn, this has never troubled the political philosophers who studied and furthered their works.<sup>30</sup>

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27 On moralism in political theory see Bernard Williams, ‘Realism and Moralism in Political Theory’, in Robert E. Goodin and Philip Pettit (eds.), *Contemporary Political Philosophy: An Anthology* (Oxford: Wiley, 2019). On the need to separate the two, see Larmore, *What Is Political Philosophy?*, 3.

28 Leo Strauss, *What Is Political Philosophy? And Other Studies* (Westport, CT: Free Press, 1959), 10.

29 Which, as aptly explained by Mill, concerns ‘the foundation of morality’ (John Stuart Mill, *On Liberty, Utilitarianism, and Other Essays* (1859), ed. Mark Philp and Frederik Rosen (Oxford: Oxford University Press, 2015), 115). On the connection with morality, see also Immanuel Kant, *Critique of Practical Reason* (1788), trans. Mary Gregor, 2nd edn. (Cambridge: Cambridge University Press, 2015), 89.

30 On political philosophy being necessarily connected to moral philosophy, see Leo Strauss, *The Political Philosophy of Hobbes: Its Basis and Its Genesis*, trans. Elsa M. Sinclair (Chicago: University of Chicago Press, 1952), 6, and (for philosophy overall), 79.

Rawls originally claimed that there is no distinction between moral and political philosophy, but later, perhaps regretting this approach, introduced the term ‘reasonable pluralism’ to account for his ultimately moralising ‘justice as fairness’ theory (John Rawls, *Political Liberalism* (New York: Columbia University Press, 1993), xv and xvii).

However, this expectation from political philosophy, the search for the *summum bonum*, is wrong. What is *good* is political. It is already moral, subject to an opinion, a political programme. To validate an opinion is not philosophy, which is the search for wisdom, but politics. If this is so, then philosophy needs to be true to its name; in other words to be (only) a search for wisdom. This is exactly what this book does, and why it can be considered a philosophy. It seeks to understand and explain how, and why, things are as they are.<sup>31</sup> For example, on the notorious<sup>32</sup> questions of whether somebody who wishes to cross a dangerous bridge should be stopped or whether someone should be forced to receive protection against smallpox (or be vaccinated against Covid-19, as in the recent past), this philosophy will not tell you what to do. It will not explain how to balance personal with public interests, but only that somebody will always try to cross a bridge no matter how dangerous and no matter how forewarned, and that someone will always refuse to be protected against diseases, no matter how lethal—and why this is so.

Of course, it could always be argued that what was *good* in Aristotle's time and thereafter, after long-term practice (and admittedly world domination by the West) has created the 'how things are' today that this philosophy discusses. Although this is an *ad infinitum* (chicken and egg) reasoning, this philosophy is absolved, because, by suggesting that states have been natural to humans ever since humans started communicating, it is not affected by how things developed—in fact, this is exactly what does not interest it at all. Once the true nature of the state is revealed, under the new light offered to us by the digital world, anyone will be able to formulate their own ideas on what needs to be done.

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In the same vein, on a candid assessment that political philosophy is moral philosophy out of desperation, 'because "most men" do not obey precepts', see Strauss, *The Political Philosophy of Hobbes*, 98.

On a lamentation that this is not the case for sociology too, see Jürgen Habermas, *The Postnational Constellation: Political Essays*, trans. Max Pensky (Cambridge, MA: MIT Press, 2001), 58.

- 31 Therefore, it is a study of the nature, but not necessarily of the 'well-being of civic societies'; see George H. Sabine, 'What Is a Political Theory?', *The Journal of Politics* 1/1 (1939), 1.
- 32 In the sense that they have caused quite a stir among the different schools of philosophers and remain, to this day, basically unanswered, see Isaiah Berlin, *Liberty: Incorporating Four Essays on Liberty*, ed. Henry Hardy (Oxford: Oxford University Press, 2002), 196; also Cranston, 'Introduction', 36.

In any event, this could not have been a moral philosophy.<sup>33</sup> Because it describes what is natural to humans (states) and it uses human needs to explain how and why things are as they are, it could not possibly moralise. (Or rather it should not moralise, accepting that there is no morality in Nature or that Nature's morality, whatever it is, should be taken for granted—this being a kind of morality in itself, of course.) If the reader accepts the claims of this philosophy, then moralising inferences could be made on its basis—however it, itself, needs to stay away from morality of any kind (even the most humanistic, seemingly benign sort).

Having said that, it is clear that morality cannot be avoided altogether (see Chapter 23, par. 3). Ultimately, the basic (good/bad) questions about humans and human life can only be theorised (being as they are, unanswerable) in a moral way: Are humans born good or evil? Is ownership (property) something good (improving human life) or bad (depleting nature)? Is luck in humans something good (to be celebrated) or bad (to be compensated)? Replies to these questions are deeply moralising and, ultimately, political. This is why a conscious effort has been made in this book to keep away from them, that is, to take them for granted: there is ownership (therefore, property, capitalism) in human life, there is luck (therefore, inequality, meritocracy) in human life, and humans are born with a need (to augment their information processing) that is neither good nor evil. Although even the act of taking the above for granted reveals a certain (affirmative) morality (if not political inclination), this is as far as a political philosophy aiming to explain how and why things are (and not how they should be or could have been) may go.

In view of the above, a suggestion of a 'should', instead of an examination of the 'is', as is the case in this book, will follow at a later stage. Any new moral philosophy will have to be divided into three parts, focusing on individuals, artificial Beings and the state (the latter, basically a political theory) respectively.

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33 Perhaps the decision not to release a moral political philosophy is unavoidable when such political philosophy comes from lawyers (e.g. Kelsen, Schmitt); exactly the opposite is the case when a political philosophy comes from ethics philosophers (e.g. Rawls, Nozick).

0/1/8 Not a theory, nor a policy nor a political programme

This book is also not a theory: a ‘theory’ is a belief, what one thinks. It therefore lies dangerously close to political theories and political recommendations.<sup>34</sup> Because this is not what this book is about, this term is not used in it.

It is of course well understood that this can be an important self-limitation. Laslett’s argument (although formed within the ungrateful theoretical exercise of resolving whether Hobbes’s *Leviathan* or Locke’s *Two Treatises* is ‘a work of greater importance’<sup>35</sup>), that ‘[Hobbes’s] influence about politics has been enormous, but his purchase over what men do politically has been negligible’<sup>36</sup> is a stern warning against any political philosophy that does not include even a hint of policy in it.<sup>37</sup>

Not to disappoint, an important policy recommendation, and thus a theory, will be suggested in Chapter 19, as is noted in the title of this book. It being, namely, that states themselves are currently found in a ‘state of nature’ (borrowed from social contract theory, for illustration purposes only) and that they therefore need to form ‘platforms for platforms’ for their proper individualisation. The chapter suggests that the EU is the precursor of things to come—and that the EU itself could be enlarged by countries not necessarily located in (the continent of) Europe. This is a theory.

The archipelago theory will, however, be introduced with the utmost care not to disturb a political philosophy (a search for truth in the relationships among political actors, i.e. Beings) that claims to be natural to humans—and thus disconnected from the controversies of actual political systems (or, much worse, policy), even if these have lasted for centuries and are still affecting humans.

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34 In the words of Sabine, who does not, however, distinguish political theory from political philosophy, as is the case for most others too (see, however, Strauss, *What Is Political Philosophy?*, 13), ‘quite regularly, a political theory does contain, or imply, a policy’ (George H. Sabine, ‘What Is a Political Theory?’, 4).

35 Peter Laslett, ‘Introduction’, in John Locke, *Locke: Two Treatises of Government* (1689), ed. Peter Laslett (Cambridge: Cambridge University Press, 1988), 92.

36 John Locke, *Two Treatises of Government* (1689), ed. Peter Laslett (Cambridge: Cambridge University Press, 1988), 91.

37 In the same vein, Rawls richly obliged, not to be outdone by the utilitarians against whom he wrote (see Rawls, *Political Liberalism*, xv).

0/1/9 *What this philosophy is*

The 'is nots' above also provide an outline of what this political philosophy is actually intended to be: an explanation of how things are and why things are how they are, and not a suggestion of how they should be—at all times with a focus on the state.

The same can be said after a simple substitution of the Greek words for 'political philosophy' in the way its inventors would (most likely) have seen them: 'polis' being basically the 'state', and 'political' anything pertaining to the state: thus a political philosophy is a state philosophy, a political system is a state system (see Chapter 12.1, par. 1) and, when it is famously claimed that 'man is a political animal',<sup>38</sup> it is meant that man is an animal living, as per its nature, in states—a basic claim in this book.

Similarly, 'philosophy' is the search for the truth;<sup>39</sup> therefore if being classified back then it would have been as a science and not (as is the case today) a theory.

0/1/10 *Not a response to the digital world*

This political philosophy is motivated by an urgent need: to deal with the change brought about by the advent of the digital world; to demonstrate how the digital world is overturning assumptions that have been made by humanity ever since it emerged, while at the same time making a new viewing possible. In order, however, to identify the change, we first need to understand how things really are—however, this can be achieved through an examination under the new light shed by precisely this change.

Therefore, this is not a philosophy that addresses, in the meaning of following, the findings of science, it is not a system of thought created in response to the digital world, to accommodate its needs—this will be constructed at a later stage. For the moment this is only a new way of viewing, opened up by science, by the digital world. The informational approach has always been there for humans; however it is only now that technology has made it possible to discern it for the first time.

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38 Aristotle, *Politics*, 1253a7.

39 In full awareness, of course, that 'Sophia' is wisdom and not truth ('Aletheia').

0/1/11 *Not a time-specific approach*

This political philosophy is thus a-temporal, not time-specific, timeless.<sup>40</sup> In other words, states are natural to humans and have always been information-processing platforms for them. Humans have always needed to augment their information processing. This philosophy is therefore not intended to be an interpretation of the present or of any specific period in human history or of any specific part of the planet.<sup>41</sup>

Of course, other political philosophies, for example social contract theory, are also intended to be a-temporal too: it is assumed that there has always been a social contract that formed a 'body politic' among the citizens of any given state in human history (after the 'state of nature' was abandoned) which gave authority to their government.

0/1/12 *No assumptions made*

Similarly, no distinctions with regard to gender, race, ethnicity, religion, geographical location or any other characteristic are made here—other than the unavoidable one of the Unique Human Observer Perspective (see note 1/1/1). Indeed, this (or any other) philosophy would be very different if it was written by (what we humans consider) an animal or a machine.

0/1/13 *A philosophy of the many, not of the one: the (philosophical) truth*

Although not discriminating with regard to space and time, this is actually a philosophy focused on and taking account of *the many*, of the majority of individuals and not of a single individual.<sup>42</sup> In other words the actions of the many are taken into account (e.g. those living on the information platform that is their state) and not of any smaller, exceptional groups. If one or a few individuals do not perform an action at any given moment, out

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40 Of course it is time-specific with regard to the digital world—but this time-specificity is to be assessed in the future, retrospectively.

41 In contrast to the view that political philosophy 'may be understood to be what occurs when this movement of reflection takes a certain direction and achieves a certain level, its characteristic being the relation of political life, and the values and purposes pertaining to it, to the entire conception of the world that belongs to a civilization' (Oakeshott, *Hobbes on Civil Association*, 4), meaning that it is therefore civilisation- (and time-) specific.

42 Political philosophy examines the actions of the many, while moral philosophy examines the actions of the individual.

of choice or otherwise, others do act, do perform this action. For example, it is claimed here that no unwritten law exists (in Chapter 20, par. 2): this would seem to exclude morality (if unwritten) from controlling humans' actions, which is demonstrably not true—for example, vegetarians<sup>43</sup> will not eat meat although no law prohibits it. This is where the focus on the many (necessary for any political philosophy) comes in: perhaps a single or a few individuals who are vegetarians will not eat meat despite no (written) law prohibiting it, but others (many more) will. On the contrary, if the law prohibited meat-eating then the majority would stop.<sup>44</sup>

Similarly (and perhaps even more controversially!) the truth, philosophical or otherwise, is material (see note 0/1/13), created by Beings (humans) and understood as such by the many in a specific state—otherwise it does not exist, it is not the (or a) truth. Truth exists through materialisation and acceptance as such by the many.<sup>45</sup> A not-yet materialised truth, an unwritten philosophy, has not yet reached us, and, as such, does not exist. For example, (to take this approach to its limits) witchcraft may exist in a specific state, it may be considered real (that is, true) if it is widely believed in (i.e. it produces results in the analogue world) in that particular state.

### 0/1/14 *A machine-readable philosophy*

For the past few years (the digital world is only a couple of decades old), humanity has been trying to make (all of) its knowledge readable by machines so as to enable humans to communicate with them (see Chapter 1.1, par. 15). Once this has been accomplished, the next step will be for machines to communicate with each other. This philosophy addresses the former efforts, in the hope that the latter will follow—perhaps, in the

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43 A discussion in humanity that goes back at least as far as Pythagoras (Nietzsche also had a lot to say about it); despite this, vegetarianism has apparently never gained traction, even after all these centuries.

44 Thus creating a new morality, see also Chap. 23.

45 Consider Aristotle: 'even where there are many people, each has some share of virtue and practical wisdom; and when they are brought together, just as in the mass they become as it were one man with many pairs of feet and hands and many senses, so also do they become one in regard to character and intelligence. That is why the many are better judges of works of music and poetry: some judge some parts, some others, but their collective pronouncement is a verdict upon all the parts. And it is this that gives sound men their superiority over any individual man from the masses' (Aristotle, *The Politics*, trans. Thomas A. Sinclair and Trevor J. Saunders (London: Penguin, 1981), 1281a39).

meaning of the 'other' philosophy hopelessly (and self-deceivingly while also catastrophically) looked for by Nietzsche, a philosophy that will be written by machines.<sup>46</sup>

Unavoidably, therefore, this philosophy perceives and interprets all of the natural and the digital world as (material) information and all life as (material) information processing. Admittedly this is a highly functionalist approach,<sup>47</sup> a mechanistic–materialist one (see also note 5/2/4).<sup>48</sup> At the same time it is, however, a conscious choice taken by this author, in line with an Aristotelian (rather than Platonist) perspective, even if machines were never considered in his discussions—the difference being that while in the past philosophers could (and did) endlessly speculate about the material and the (or any) world of ideas, machines are a reality and an opportunity that cannot be ignored.<sup>49</sup>

To this end, and in this context (including for the purposes of experimentation!), this book has been reconstructed in a wiki (<https://archipelago.wiki>).

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46 A philosophy that would also address the endless doubting of Pyrrhonians, although Montaigne was right to address them: 'The Pyrrhonian philosophers, I see, cannot express their general conception in any kind of speaking; for they would require a new language on purpose' (Michel Montaigne, *The Complete Essays* (1580), trans. M. A. Screech (London: Penguin, 2004), 590)—that new language being machine code.

47 Similar, for example, to that adopted by Kelsen, when he equated the state with the legal order, and examined all relevant issues (admittedly, not those pertaining to human life) exclusively from this point of view (Hans Kelsen, *General Theory of Law and State* (1945) (New Brunswick: Transaction Publishers, 2006), 207).

48 Which of course Nietzsche would accuse of being nothing other than a 'useful stylistic abbreviation' (Friedrich Nietzsche, *Beyond Good and Evil* (1886), trans. Marion Faber (Oxford: Oxford University Press, 1998), 14), if only he (or any other human philosopher for the same matter, see note 1/1/1) could overcome this difficulty himself.

49 At the same time, however, Nietzsche's strong warning also needs to be taken into account here, when it comes to a potential machine-produced philosophy: 'Strictly speaking, there is absolutely no science "without presuppositions", the very idea is inconceivable, paralogical: a philosophy, a "belief" must always exist first in order for science to derive from it a direction, a meaning, a limit, a method, a right to existence' (Friedrich Nietzsche, *On the Genealogy of Morals* (1887), trans. Douglas Smith (Oxford: Oxford University Press, 1996), 127).

0/1/15 A unifying, monocausal theory

As repeatedly stressed, since Plato<sup>50</sup> no philosophical idea has been entirely new. The same is true here: nothing said here is entirely new or unprecedented. Instead, a re-interpretation of ideas expressed throughout human history is attempted, under the light afforded to us for the first time by the digital world.

Similarly, a scholar could spend his or her entire lifetime on any one of the topics or subtopics touched upon in the chapters that follow, and it still would have been a life (academically) well spent. To the greatest extent possible, experts on all the topics discussed in this book have been consulted, but, of course, it is entirely possible that theories are misrepresented or state-of-the-art research findings escape me. Although this book does not aim to serve as a jack of all academic trades and readers are actively discouraged from using it as an introduction to any one of its subtopics, it does aim to present a unifying theory. It is to this end that brief analyses of such varied topics as the origins of writing or the philosophy of language or naming studies are attempted—not in an effort to display erudition (or to claim comprehensiveness) but simply to demonstrate that the basic tenets of this theory can hold their ground from a multitude of perspectives. Hopefully, therefore, if any part or parts of it crumble, the theory will still stand—this, after all, being the ultimate test of the validity of any unifying theory.

Equally, however, to be convincing, a unifying theory needs to be able to explain many and diverse facts.<sup>51</sup> Because the selection within the context of a political philosophy has been already made (the topics of the nature of the state, human nature, the role of government, property, freedom, human

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50 All of (Western) philosophy being a footnote to his, as observed by Whitehead. This claim has time and again been confirmed in the topics that are of interest to this book: for example, the idea of the 'noble savage' or the 'noble primitive', as exalted by Rousseau, was discussed, in more or less the same manner, in *The Laws* (679b); most notably, the basic idea underlying the social contract, that states are artificial and the result of agreement among humans, was first expressed by him (see also note 13/2/2). Specifically on state theory and in order to witness how little modern theory (rule of law) has added to older theory, see Georg Jellinek, *Allgemeine Staatslehre*, 3rd edn. (Berlin: Julius Springer, 1929), 613.

Having said that, this political philosophy most certainly does not agree that states are the result of agreement or in any way artificial. Other points of difference with Plato will be demonstrated throughout (as is also the case with a single point of agreement, see note 5/5/1).

51 See Mancur Olson, *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities* (New Haven: Yale University Press, 1982).

rights etc. figuring prominently in the relevant analyses), one cannot but oblige.

The informational premise, however, is ever-present: humans need to augment their information processing, and individualisation through their states is the only way to achieve this, thus making states natural to them. As such, it is indeed a monocausal approach,<sup>52</sup> at least if all of the above are combined into a single cause that can be found in the origins of the state, as well as in human history and culture.

That having been said, Olson's self-limitation applies here as well: 'At most—at the very most—the aspiration is to provide the equivalent of Sherlock Holmes's observation of the dog that didn't bark: to provide a missing clue that gives us a better understanding of the whole story.'<sup>53</sup>

### *0/1/16 A new thought (philosophical) system*

This book does not share the vast ambition of constructing a new philosophical system, in the sense of a complete architectural theoretical construction wherein a theoretical foundation and a superstructure are 'planned as a single whole, with civil philosophy as the top storey',<sup>54</sup> as attempted by Spinoza and, arguably, achieved by Hegel. However, it does aim to introduce a new thought system (in the simple meaning of establishing consistency among all of its concepts). It does so by placing information at its epicentre and treating all life as information processing, asking its readers to start thinking along these lines.

### *0/1/17 On the focus on the state*

The state has been, and still is, the centrepiece of any political philosophy since Plato invented the term. This is a view also upheld here, where it is claimed that states are natural to humans, the mechanisms necessary for them to have a meaningful life.

That being said, no assumptions are made about the actual relationship between states and their citizens on each occasion. The philosophy does

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52 Also in the sense of Archilochus' hedgehog (see also Isiah Berlin, *The Hedgehog and the Fox: An Essay on Tolstoy's View of History*, 2nd edn. (Princeton: Princeton University Press, 2013), particularly 2.

53 Olson, *The Rise and Decline of Nations*.

54 Michael Oakeshott, *On Human Conduct* (Oxford: Clarendon Press, 2003), 16.

not address Plato's claim that, 'we are bound to admit that the elements and traits that belong to a state must also exist in the individuals that compose it. There is nowhere else for them to come from'.<sup>55</sup> Nor is the truth of Cassirer's observation that 'The nature of man is written in capital letters in the nature of the state'<sup>56</sup> (and thus, nor does it address whether unique characteristics for nations or peoples exist—or to what extent) (see, however, Chapter 18).

## On paragraph 2

0/2/1

Consider Jenkyns: 'A theory should contain as little explanatory apparatus as possible and yet be able to explain as much as possible.'<sup>57</sup>

## On paragraph 4

0/4/1 *On whether the (modern) state is dead*

The question of whether the (modern) state is dead is addressed in a number of (mostly post-1980s') political philosophy books and academic literature.<sup>58</sup>

Similar, but not identical to such death announcements, are alerts about a lessening interest in the notion of the state. For example, Caporaso identified a decline in interest in the state based on trends in political philosophy, namely logical empiricism and pluralism,<sup>59</sup> a view also shared much later

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55 Plato, *The Republic*, trans. Desmond Lee (London: Penguin, 2007), 186 (435e).

56 Cassirer Ernst, *An Essay on Man: An Introduction to a Philosophy of Human Culture* (1944), ed. Peter E. Gordon (New Haven: Yale University Press, 2021), 63.

57 Richard Jenkyns, 'Introduction', in Lucretius, *The Nature of Things*, ed. Richard Jenkyns (London: Penguin, 2007), 11.

58 See, for example, David Runciman, *Confronting Leviathan: A History of Ideas* (London: Profile Books, 2021), 8; Georg Sørensen, 'The Transformation of the State', in C. Hay, M. Lister and D. Marsh, *The State. Theories and Issues* (Houndmills, NY: Palgrave Macmillan, 2006), 1–8.

59 James A. Caporaso (ed.), *The Elusive State: International and Comparative Perspectives* (London: Sage Publications, 1989), 7. Even before him a decline in interest in the notion of the state, at least in the US, could be identified, for example, by Nettl ('The State as a Conceptual Variable', 561); for an analytical explanation as to why this may have occurred, see also Passerin d'Entrèves, *The Notion of the State*, 60.

by Nelson.<sup>60</sup> Mitchell described the processes of (and the reasons for) the abandonment and then reintroduction of the study of the state in the social sciences in the US since the 1950s.<sup>61</sup>

All of the above indicate a certain *malaise* (see Chapter 13, par. 10) with regard to the notion of the state, without, however, providing any conclusive specific attribution—or verdict.

0/4/2

On the distinction between modern and ancient states (which, consequently, assumes that modern states are alive (even if barely) while ancient ones are dead), see Chapter 8, par. 3.

0/4/3

On the Westphalian state, see note 16/1/3.

## On paragraph 5

0/5/1 *On the relationship between developments in political philosophy and social, political or financial upheaval and disruption*

As regards the time-specificity of political philosophy see, for example, Runciman who noted, when (re-)opening the question of the nature of the state while discussing Maitland's interest in it in 1900, that 'the modern British state was a remarkably successful one, and the success of the institutional changes of the seventeenth century meant that the institutions of British public life in the early twentieth century had never been under sufficient "strain" to raise these phenomenological questions in a pressing form.'<sup>62</sup>

Similarly, as noted by Sabine, 'It is a remarkable fact that, in a history extending over nearly twenty-five hundred years, a considerable part of the

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60 Brian Nelson, *The Making of the Modern State: A Theoretical Evolution* (New York: Palgrave Macmillan, 2006), 2.

61 Timothy Mitchell, 'Society, Economy, and the State Effect', in George Steinmetz (ed.), *State/Culture: State-Formation After the Cultural Turn* (Ithaca: Cornell University Press, 1999).

62 David Runciman, 'Is the State a Corporation?', *Government and Opposition* 35/1 (2000), 94.

most significant writing on political philosophy was done in two periods of only about fifty years each and in two places of quite restricted area,<sup>63</sup> meaning Athens, with Plato, Aristotle and the lapse of the city-state, and England, with Hobbes, Locke and the formation of the constitutional state.

Accordingly, Rawls noted the practical role of political philosophy as ‘arising from divisive political conflict [and the need] to settle the problem of order.’<sup>64</sup>

### 0/5/2 On singularity

On the prophetic (currently expecting the next milestone to occur in 2045) use of the term ‘technological singularity’, see, for example, Vernor<sup>65</sup> and Kurzweil.<sup>66</sup>

## On paragraph 6

### 0/6/1

This approach, therefore, to the milestone moments in humanity’s development siding with Trinitarianism.<sup>67</sup>

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63 George H. Sabine, ‘What Is a Political Theory?’, 3. In the same vein, he connected the ‘conception of the state primarily as power’ with ‘facts which were doubtless of sufficient importance in their day to justify the definition [but which have largely passed away]’ (George H. Sabine, ‘The Concept of the State as Power’, *The Philosophical Review* 29/4 (1920)).

64 John Rawls, *Justice as Fairness: A Restatement*, ed. Erin Kelly (Cambridge, MA: Harvard University Press, 2001), 1. See also, for example, his connection of the emergence of Protestantism with the factual development of the principle of toleration (while explaining the path to the principle of liberalism) in Rawls, *Justice as Fairness*, 192.

65 Vernor Vinge, ‘The Coming Technological Singularity: How to Survive in the Post-Human Era’, *Science Fiction Criticism: An Anthology of Essential Writings* 81 (1993).

66 Ray Kurzweil, ‘The Singularity Is Near’, in Ronald L. Sandler (ed.), *Ethics and Emerging Technologies* (Springer, 2005).

67 Ernest Gellner, ‘Soviets Against Wittfogel; Or, the Anthropological Preconditions of Mature Marxism’, in John A. Hall (ed.), *States in History* (London: Basil Blackwell, 1986), 78.

### On paragraph 7

#### 0/7/1 *Minerva's owl*

Minerva's owl, which flies only with the falling of dusk, is a metaphor used by Hegel to illustrate that philosophy comes onto the scene only when actuality is mature.<sup>68</sup>

#### 0/7/2

On new light making new perspectives possible, see, for example, Einstein's remark to Heisenberg in 1925: 'Whether you can observe a thing or not depends on the theory which you use. It is the theory which decides what can be observed.'<sup>69</sup>

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68 Hegel, *Outlines of the Philosophy of Right*, 16.

69 Quoted in Edward Hallett Carr, *What Is History?* (London: Penguin, 2018), 13.

## Notes on Chapter 1

### On paragraph 1

#### 1/1/1 *The Unique Human Observer Perspective*

Because this is a human philosophy (as is, after all, also the case for any other philosophy), it cannot avoid taking the unique perspective of a human observer, meaning that it is a human who wrote this book, and it is addressed to other humans.<sup>70</sup> Surely, if, for example, an artificial Being (specifically, a computer program) were to have written it (assuming that such Beings ever have a use for books), its perspective, and resulting analysis, would be entirely different.

Therefore, the claim that *everything is information* is relevant to us, humans. All that exists in the analogue and digital worlds is information to us, because it is we who observe it and assess it in this manner (and also, for anything not existing in Nature, it is we who created it too). In other words, this philosophy's viewpoint is uniquely human—it is written from the Unique Human Observer Perspective.

This issue (or, limitation, depending on the viewpoint) has of course been long discussed, from Protagoras' 'man is the measure of all things' to Kant's transcendentalism and 'thing in itself',<sup>71</sup> to Nietzsche's stern critique of the 'prejudice of philosophers'<sup>72</sup>—without anyone offering any solution to it.

It is also steeped in our thinking, ingrained in our way of understanding and processing information: for example, when Borges claimed that the Minotaur knew it was a monster and wanted to die, to assist Theseus in

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70 Without wishing to enter into the question of whether humans are considered 'the most excellent work of nature' as mooted by Hobbes (Thomas Hobbes, *Leviathan* (1651), ed. John Gaskin (Oxford: Oxford University Press, 1996), 7.

71 See also Kant on his concept of 'space', which was fundamental to his *Critique of Pure Reason*: 'we can accordingly speak of space, extended beings, and so on, only from the human standpoint. If we depart from the subjective condition under which alone we can acquire outer intuition... then the representation of space signifies nothing at all' (Kant, *Critique of Pure Reason*, 159).

72 Us, humans, being that 'particular kind of life' that is putting these words onto paper; Nietzsche, *Beyond Good and Evil*, 7.

achieving its own death,<sup>73</sup> he implicitly claims for what is apparently a non-human (the Minotaur) not only self-consciousness but also an anthropomorphic and anthropocentric self-consciousness (that of a monster). Apparently, it is impossible for a human to think in non-human terms, however expanded (through technology or otherwise) his or her abilities may become. After all, the sciences are not excused from taking this Unique Human Observer Perspective either.<sup>74</sup>

In addition, this philosophy's logic is also human. All inferences (for example, on the need of any naming system to have a registry (see Chapter 8.1, par. 5) or on the existence of platform rights (see Chapter 22, par. 5)) are reached using human logic;<sup>75</sup> all understanding (for example, on hierarchies as an organisational method, see note 6/7/1) and all meaning are human too.

On this philosophy also unapologetically adopting a materialist, functionalist approach, see note 0/1/8.

In any event, because this is ultimately an attempt to interpret human nature, Nisbett's 'universal [human] constraints' apply here too:

*[F]irst, awareness of the element of art that lies in all efforts to grasp reality, no matter how undergirded by pretentious methodologies and computer systems these efforts may be; second, that however one proceeds, with whatever degree of objectivity and devotion to truth, he cannot escape the limitations imposed by the form of his inquiry; and third, that many words through which social scientists, humanists and others approach reality are unalterably metaphoric.*<sup>76</sup>

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73 In his myth, *The House of Asterion* (to be found, for example, in Jorge Luis Borges, *Collected Fictions*, trans. Andrew Hurley (London: Penguin, 1999), 216).

74 Consider Stewart, on 'mathematical existence': 'There's a strong consensus that mathematics isn't reality: it just resembles reality in useful ways. A mathematical object or process exists if it doesn't lead to logical contradictions' (Ian Stewart, *Infinity: A Very Short Introduction* (Oxford: Oxford University Press, 2017), 129).

75 See Aristotle: 'the principles of logic are common to all disciplines and cannot in any case be demonstrated, because they are self-evident and demonstration depends on them' (Aristotle, *The Metaphysics*, trans. Hugh Lawson-Tancred (London: Penguin, 2004), 51). See also Kant's 'transcendental logic' (Kant, *Critique of Practical Reason*, 197): 'Such a science, which would determine the origin, the domain, and the objective validity of such cognitions, would have to be called transcendental logic, since it has to do merely with the laws of the understanding and reason, but solely insofar as they are related to objects a priori'.

76 Robert A. Nisbet, 'Genealogy, Growth, and Other Metaphors', *New Literary History* 1 (1970), 351.

1/1/2 A definition of information(?)

Because, within a political theory of information, everything around us is information, information cannot be defined.<sup>77</sup> Information for the purposes of this book has no specific meaning: when the air, the earth, its minerals and the houses built upon it are all treated as ‘information’, as well as the books, keyboard, computer and coffee sitting on my desk (the desk itself, also being ‘information’), it becomes obvious that no definition can be found for it.

Meaning can be given to it (contextual, societal, moral etc.), but then that is not simply information, it is information that has been processed (see Chapter 4).

On the non-distinction between information and data, see note 0/1/5.

1/1/3 The philosopher’s stone

Information, then, is the philosopher’s stone.

On *prima materia* and the relevant discussion (which is vast, therefore the focus here is only on the connection with Aristotle), see, for example, Robinson<sup>78</sup> or Scharle<sup>79</sup> (as well as Leclerc<sup>80</sup>), but also King.<sup>81</sup>

1/1/4 On digital ontologies

On the still much-debated topic of digital ontologies, see, for example, Knox and Walford,<sup>82</sup> as well as Luque-Ayala et al.,<sup>83</sup> but also Floridi.<sup>84</sup>

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77 On the definition of information within a philosophy of information context, see Floridi, *The Philosophy of Information*, 83.

78 Howard M. Robinson, ‘Prime Matter in Aristotle’, *Phronesis* 19:1 (1974).

79 Margaret Scharle, ‘A Synchronic Justification for Aristotle’s Commitment to Prime Matter’, *Phronesis* 54:4–5 (2009).

80 Ivor Leclerc, *The Nature of Physical Existence* (London: Routledge, 2013), 116.

81 Hugh R. King, ‘Aristotle Without Prima Materia’, *Journal of the History of Ideas* 17:3 (1956).

82 Hannah Knox and Antonia Walford, ‘Digital Ontology: Theorizing the Contemporary Fieldsights’, *Society for Cultural Anthropology* (24 March 2016).

83 Andrés Luque-Ayala, Ruth Machen and Eric Nost, ‘Digital Natures: New Ontologies, New Politics?’, *Digital Geography and Society* 6 (2024).

84 Luciano Floridi, ‘Against Digital Ontology’, *Synthese* 168 (2009).

1/1/5 On information clichés

If there is any merit in clichés (stereotypes being a fundamental human information-processing mechanism<sup>85</sup>), then the two most frequently met with regard to information perhaps deserve some mention and explanation here: the first pertains to ‘information is power’ and the second to ‘information wants to be free’.

As regards the former, notwithstanding a connection with (scientific) knowledge,<sup>86</sup> information actually is (in fact, has been) power in the analogue world, because it is not infinite (see par. 16); therefore, the more one processes the better, because individuals want to augment their information processing (see Chapter 5.1). However, in the digital world, because information is infinite, it is information processing (as opposed to information hoarding) that is power.

As regards the latter, the fact is that information, even if it ‘wanted to’ (information can be, but is not necessarily a Being), it could not be ‘free’, if the exact meaning of free is ‘outside the control of a state’, because it is unavoidably through states that information is materialised in the first place (see par. 7, as well as Chapter 8.1, par. 4). Consequently, information does not want to be free; similarly, information is not a ‘public good’.<sup>87</sup>

## On paragraph 2

1/2/1

Beings and Things have an informational context and meaning (on the use of ‘informational’, see note 0/1/5).

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85 On the relationship between the two, see, for example, W. Hugh Jansen, ‘A Culture’s Stereotypes and Their Expression in Folk Cliches’, *Southwestern Journal of Anthropology* 13/2 (1957).

86 Allegedly first formulated in these exact terms (‘knowledge is power’) by Bacon, and repeated by Hobbes (who for a period, served as his secretary) in *Leviathan*.

87 As, for example, claimed by Olson: ‘A state is first of all an organization that provides public goods for its members, the citizens’ (Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge, MA: Harvard University Press, 2002), 15).

1/2/2

On every human being an ‘informational entity’, see also Floridi,<sup>88</sup> with further reference to Proust.

1/2/3

On names and humans’ naming of Beings and Things as their (i.e. humans’) only way to understand and process their information, see Chapter 8.1.

1/2/4

On the purpose of a Being or a Thing, see note 5/2/2.

### **On paragraph 3**

1/3/1

A search for what is could quickly turn metaphysical: see, for example, Aristotle: ‘Being and that which is indicate both (a) what is potentially and (b) what is actually.... We say that the Hermes is in the stone and that the half-line is in the line and we say that corn is corn even when it is not ripe.’<sup>89</sup>

1/3/2

On the need to perceive each dataset as a closed system, see also Spinoza’s definition: ‘That thing is said to be finite in its own kind that can be limited by another of the same nature’,<sup>90</sup> thus considering a body or a thought limited by another body or thought, respectively (but not a body by a thought, therefore revealing that his intention is material, to enable processing, and not quantitative—and therefore, does not interfere with whether a thing can be infinite in number or not; see par. 16).

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88 Luciano Floridi, ‘The Ontological Interpretation of Informational Privacy’, *Ethics and Information Technology* 7/4 (2005), 194.

89 Aristotle, *The Metaphysics*, 126 (1017b).

90 Baruch Spinoza, *Ethics*, ed. Edwin Curley (London: Penguin, 1996), 1.

On the same topic, see also Wiener's approach to the 'concept of an organisation'.<sup>91</sup>

Finally, see also Montaigne's 'No matter how varied the greenstuffs we put in, we include them all under the name of salad.'<sup>92</sup>

#### On paragraph 4

1/4/1

See also Smith's approach to a system (resembling machines): 'Systems in many respects resemble machines. A machine is a little system, created to perform, as well as to connect together, in reality, those different movements and effects which the artist has occasion for. A system is an imaginary machine invented to connect together in the fancy those different movements and effects which are already in reality performed.'<sup>93</sup>

1/4/2

On coherence (and thus, Reason) in the analogue and the digital worlds, see Chapter 4.1, par. 3.

#### On paragraph 6

1/6/1 *On exhaustion (of a Being or a Thing)*

A processing operation, although always on a Being or a Thing, may or may not exhaust it.<sup>94</sup> In other words, a specific processing operation may include all of a person or a Thing (e.g. processing the information of George or Mary, or processing the information of a table or a tree), and refer to it as such, but it may also include only part of the same (e.g. in the above example, processing only the educational information of George or Mary, or processing only the material the table is made of or the locational

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91 Norbert Wiener, *Cybernetics: Or Control and Communication in the Animal and the Machine* (Cambridge, MA: MIT Press, 2019), 155.

92 Montaigne, *The Complete Essays*, 308.

93 Adam Smith, *Essays on Philosophical Subjects* (1795), ed. W. P. D. Wightman (Indianapolis: Liberty Fund, 1982), 66.

94 The discussion on how a thing can be exhausted or consumed ultimately pertains to how it is used, see note 4/5/1.

information of a tree). Unless otherwise specified,<sup>95</sup> processing on a dataset implies the processing of all its information.

### On paragraph 7

1/7/1

Consider also Hobbes: ‘Conception of the future is but a supposition of the same, proceeding from remembrance of what is past; and we so far conceive that anything will be hereafter, as we know there is something at the present that hath power to produce it.’<sup>96</sup>

1/7/2

On the issue of the control exercised by a Being over any newly created (or processed) information, see Chapter 6, par. 4.

### On paragraph 8

1/8/1 *Personal information*

If one of the datasets is an individual, then the other dataset is (in essence, contains) personal information to that individual<sup>97</sup> in the meaning of data privacy law—admittedly, within a binary perspective where (material) information is either personal or non-personal to a specific individual.<sup>98</sup>

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95 For example, this distinction is of particular relevance in the discussion of property (see Chap. 24).

96 Thomas Hobbes, *The Elements of Law, Natural and Politic*, ed. Ferdinand Tönnies (London: Routledge, 1969), 33.

97 In the meaning of data privacy law; see, for example, article 4(1) of the EU General Data Protection Regulation (European Parliament and Council Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L119 (27 April 2016), 1).

98 In EU law, see article 4(1) of the EU General Data Protection Regulation, as well as, Regulation (EU) 2018/1807 (Regulation (EU) 2018/1807 of the European Parliament and of the Council of 14 November 2018 on a framework for the free flow of non-personal data in the European Union, OJ L 303) on non-personal data.

1/8/2 *On the definition of the self*

Thus transforming Ortega's 'I am myself plus my circumstances'<sup>99</sup> into *I am myself plus my information*, meaning the datasets relating to me.

**On paragraph 9**

1/9/1

On the notion of the materialisation of information, see Chapter 1.1, par. 5.

**On paragraph 10**

1/10/1 *On Nature as a Being*

On Nature as a Being, consider Heidegger's 'physis means the emerging and arising'.<sup>100</sup>

See also Aristotle's 'nature of a thing', as 'the factor which initiates movement and rest within that thing in which it is itself immediately, not incidentally, present'.<sup>101</sup>

1/10/2 *On unity or individuality in Nature*

On the same topic, Spinoza affirms that 'For it is certain that nature, considered wholly in itself, has a sovereign right to do everything that it can do, i.e., the right of nature extends as far as its power extends.' Nevertheless, he goes on to claim that 'the universal power of the whole of nature is nothing but the power of all individual things together', so as to ascertain that 'it follows that each individual thing has the sovereign right to do everything that it can do, or the right of each thing extends so far as its determined power extends'.<sup>102</sup> This is, however, not true: the whole is not 'nothing but' the sum of its parts, but, on the contrary, an entirely different Being (in the same way that the state is not the sum of its citizens, see Chapter 11, par.

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99 José Ortega y Gasset, *Meditations on Quixote* (1914), trans. Evelyn Rugg and Diego Marín (Urbana, IL: University of Illinois Press, 2000), 168.

100 Martin Heidegger, *An Introduction to Metaphysics* (1953), trans. Ralph Manheim (New York: Anchor Books, 1961), 51 (see also, 11).

101 Aristotle, *Aristotle's Physics*, trans. Richard Hope (Lincoln: University of Nebraska Press, 1961), 23 (192b23ff).

102 Baruch Spinoza, *Theological-Political Treatise* (1670), ed. Jonathan Israel (Cambridge: Cambridge University Press, 2007), 195.

4). Spinoza could have reached the same conclusion (that ‘each individual thing has the sovereign right to do everything that it can do, or the right of each thing extends so far as its determined power extends’) without the first claim. However, his elimination of the parts in favour of the whole is in line with his philosophy of unity in his *Ethics*.

In general, one can distinguish between philosophies of unity, where the whole is the sum of its parts and all parts strive to unite with the whole, and those that make no such claim, that is, they see no (idealistic) unity in Nature (or anywhere else)—within these philosophies the parts maintain their individuality.<sup>103</sup> The former came into existence with Plato<sup>104</sup> and include the philosophies of Spinoza above, Kant, Hegel, Schopenhauer and so on. The approach advocated in this book falls firmly into the latter category:<sup>105</sup> the parts, specifically individuals, do not strive to unite in a whole, that is, humans are not living in a bee hive.<sup>106</sup>

## On paragraph II

### *1/11/1 On simulacra*

The digital world can be viewed as a simulacrum corresponding to stages three and four of Baudrillard’s theory.<sup>107</sup> This theory was of course developed and used in a very different context (media and culture), but can be

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103 See, for example, Aristotle, *The Metaphysics*, 248 (Book VIII, 1045a), or Hume (in David Hume, *A Treatise of Human Nature* (1739), ed. Ernest Campbell Mossner (London: Penguin, 2004), 252; or David Hume, *Enquiries Concerning Human Understanding and Concerning the Principles of Morals* (1739), ed. Peter Millican (Oxford: Oxford University Press, 2007), 46).

104 See, for example, *Timaeus* 30d-33c (e.g. in Plato, *Timaeus and Critias*, trans. Desmond Lee (London: Penguin, 1977), 50).

105 In other words, there is no Diotima’s (absolute) beauty’ (in Plato, *The Symposium*, trans. Christopher Gill (London: Penguin, 1999), 47 (210a).

106 See Plato, *The Republic*. trans. Christopher Rowe (London: Penguin, 2012), 247 (520b); see also Chapter 5.1, par. 7.

107 Jean Baudrillard, *Simulacres et Simulation* (Paris: Galilée, 1981). See, particularly: ‘The simulacrum is never that which conceals the truth—it is the truth which conceals that there is none. The simulacrum is true.’ (Jean Baudrillard, *Simulacra and Simulation*, trans. Sheila Faria Glaser (Ann Arbor: University of Michigan Press, 1994), 1). (The Ecclesiastes quote is reused in this book in the way in which it was intended by Baudrillard.)

of use here as well—after all, its connection to the metaverse of online video games has already been clearly identified in the relevant theory.<sup>108</sup>

1/11/2

On the discovery by Europeans of the New World and the parallels of their mindset of amazement and of endless possibilities with the contemporary mindset, see note 1/16/4.

On the resemblance of current digital world conditions with early stage colonialism and company-states, see Chapter 7.1, par. 5.

1/11/3 *On the connection of the digital world with the (open) sea*

The connection of the digital world with the open seas has been present since its early days,<sup>109</sup> hence the use of terms such as ‘navigating the Internet’ or ‘web surfing’—not to mention that ‘Netscape Navigator’ was the public name of the first commercial Internet browser (replaced commercially by ‘Internet Explorer’).

1/11/4 *One digital world*

In spite of numerous contemporary (commercial) efforts to create multiple digital worlds (or many versions of it), for example the (proprietary) metaverse, in order to serve obvious business interests (as is the case today for enclosed online information platforms),<sup>110</sup> for the purposes of this analysis the digital world is considered one world.

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108 See, for example, Kareem Mohamed and Shema Bukhari, ‘The Media in Metaverse; Baudrillard’s Simulacra, Is Metaverse that Begins the Apocalypse’, *SSRG International Journal of Communication and Media Science* 10/1 (2023).

109 Also in connection with ‘freedom’, see, for example, ‘Cyberspace, like the high seas, was first conceptualized as a free space, beyond the control of any government’ in Jack Goldsmith and Tim Wu, *Who Controls the Internet?: Illusions of a Borderless World* (Oxford: Oxford University Press, 2006), 3.

110 Causing the emergence of such notions as ‘digital feudalism’; see, for example, Sascha D. Meinrath, James W. Losey and Victor W. Pickard, ‘Digital Feudalism: Enclosures and Erasures From Digital Rights Management to the Digital Divide’, in *Advances in Computers* 81 (2011). See also the law-maker’s response regarding, for example, the use of the term ‘virtual environments’ when defining AI systems in the EU’s AI Act (see European Parliament and Council Regulation (EU) 2024/1689 laying down harmonised rules on artificial intelligence and amending Regulations

### On paragraph 12

1/12/1

From this point of view, the ‘Cyber–Physical World (CPW) convergence’<sup>111</sup> suggested by pervasive (ubiquitous) computing or computers that will ‘vanish in the background’<sup>112</sup> may blur, but will not change this distinction.

### On paragraph 14

1/14/1

On the use of (and access to) information, see note 4/5/1.

### On paragraph 16

1/16/1 *On the material limitations of the digital world*

It is, of course, understood that the digital world is created by computers, which exist in the analogue world; their number is finite, and thus possibly controllable (as is also true of the energy these computers need to function). However, even ignoring the fact that computer ownership is widely dispersed (with effectively most humans on the planet owning more than one), the digital world is created by their combined processing power, and, for the moment at least, it is difficult to imagine that this could become extinct.<sup>113</sup> In any event, the use of ‘infinity’ here is functional and not ontological.

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(EC) no. 300/2008, (EU) no. 167/2013, (EU) no. 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), OJ L2024/1689, Article 3(1)).

111 See, for example, Marco Conti et al., ‘Looking Ahead in Pervasive Computing: Challenges and Opportunities in the Era of Cyber–Physical Convergence’, *Pervasive and Mobile Computing* 8/1 (2012).

112 Mark Weiser, ‘The Computer for the 21st Century’, *Scientific American* 265/3 (1991).

113 On the notion of ‘digital scarcity’ (only, however, for digital assets that subsist on a blockchain—thus excluding all other digital (digitised, as well as digital-born) information from its scope) see Primavera De Filippi, Wessel Reijers and Morshed Mannan, *Blockchain Governance* (Cambridge, MA: MIT Press, 2024), 44–5.

1/16/2 *On our thinking based on scarcity of resources*

On the claim that political philosophy (as well as general philosophy, religion, ethics and our thinking overall) is based on scarcity/the finite nature/the knowable end of resources, little needs to be said. For example, Hobbes based his ‘state of nature’ theory that conflict is natural to humans on the assumption that ‘whatever appears to a man to belong to his felicity he must strive for with all his powers, and men who strive for the possession of the same object are enemies of one another’ and on the idea that ‘[t]he natural condition of man is one of the competition of equals for the things (necessarily scarce because of the desire for superiority) that belong to felicity.’<sup>114</sup> He concluded that ‘when all the world is overcharged with inhabitants, then the last remedy of all is war; which provideth for every man, by victory or death.’<sup>115</sup>

1/16/3 *On Locke’s explanation of property—and of the social contract*

Locke based his approach to social contract theory on property,<sup>116</sup> in fact (immodestly) claiming that ‘property I have nowhere found more clearly explained, than in a book entitled, *Two Treatises of Government*’.<sup>117</sup> As property was such a key idea in his theory (and with his ideas, and those of other social contract theorists being behind much of how we live today, at least for those of us living in liberal democracies), it is worth seeing how he explains it, that is, what it is that is so unique about his explanation (which is overturned in the digital world).

Locke explains property in terms of appropriation (human labour),<sup>118</sup> as well as evolving in a linear process from initial abundance to his world of entrenched property rights:

*Nor was this appropriation of any parcel of Land, by improving it, any prejudice to any other Man, since there was still enough, and as good left;*

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114 See Oakeshott, *Hobbes on Civil Association*, 37.

115 Thomas Hobbes, *Leviathan*, 230.

116 Of course taking into account that, when he spoke of property, he meant effectively the ‘Lives, Liberties and Estates’ of a person (Locke, *Two Treatises of Government*, 350). In any event, on the perennial question of (the traditional meaning of) property, see Chap. 24.

117 Cited in Laslett, ‘Introduction’, 3.

118 See also, Karl Olivecrona, ‘Locke’s Theory of Appropriation’, *The Philosophical Quarterly* 24/96 (1974).

*and more than the yet unprovided could use. So that in effect, there was never the less left for others because of his inclosure for himself... No Body could think himself injur'd by the drinking of another Man, though he took a good Draught, who had a whole River of the same Water left him to quench his thirst. And the Case of Land and Water, where there is enough of both, is perfectly the same.*<sup>119</sup>

Such initial abundance, however, was not to remain forever, because in the immediately following paragraph, Locke claims that

*God gave the World to Men in Common; but since he gave it them for their benefit, and the greatest Conveniencies of Life they were capable to draw from it, it cannot be supposed he meant it should always remain common and uncultivated. He gave it to the use of the Industrious and Rational, (and Labour was to be his Title to it;) not to the Fancy or Covetousness of the Quarrelsome and Contentious.*<sup>120</sup>

Consequently, abundance ended, and the land and whatever was on it came under property rights. It is these that then, according to Locke, gave rise to the social contract and his take on the 'True Original, Extent, and End of Civil Government' (as per the title of his famous *Second Treatise*).

However, what if this abundance never ended? What if the land and the water were, to all intents and purposes, endless?

#### *1/16/4 Information in the analogue world is finite*

Famously, Archimedes wrote *Psammites* in order to disprove the assertion that the number of grains of sand on the surface of the Earth is infinite.<sup>121</sup>

On the relationship between what is notionally finite but practically infinite (a finding that also affects computing power and the number of computers used to create the digital world, see note 1/16/1), see Stewart on the largest number: 'Of course we can write  $10^{10^{100} + 1}$ , but for any pre-specified notational system, there comes a point when it's not possible to write a bigger number down. There's not enough time or not enough

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119 Locke, *Two Treatises of Government*, 291.

120 Ibid.

121 See Stewart, *Infinity*, 21.

room. Our finite world, though gigantic, can't continue the process as we naively imagine.<sup>122</sup>

*1/16/4 On the (imagined) infinity of resources in the sixteenth and seventeenth centuries and the creation of modernity*

A similar imagined infinity of resources was noted in the sixteenth and seventeenth centuries, as a result of both the discovery of the New World and scientific breakthroughs. This change of perspective led to the break with ancient, Greco-Roman thinking and to the creation of modernity. This can be seen, for example, in Bacon's work (when discussing the 'New Atlantis'): 'The end of our foundation is the knowledge of causes, and secret motions of things; and the enlarging of the bounds of human empire, to the effecting of all things possible'.<sup>123</sup> This point is also made by Bruno ('Innumerable suns exist; innumerable Earths revolve around these suns'<sup>124</sup>) and even Locke ('As much Land as a Man Tills, Plants, Improves, Cultivates, and can use the Product of, so much is his Property... Thus in the beginning all the World was America, and more so than that is now; for no such thing as a Money was any where known'<sup>125</sup>).

On more recent approaches, see, for example, Webb's 'Great Frontier' thesis (specifically, the 'boom hypothesis of modern history'<sup>126</sup>), as well as Koyre's explanation of the 'the story of the destruction of the Cosmos and the infinitization of the universe'.<sup>127</sup>

On the connection with company-states, see Chapter 7.1, par. 5.

122 Ibid., 52. On the notion of infinity in Aristotle and natural philosophy, see Leclerc, *The Nature of Physical Existence*, 41.

123 Francis Bacon, *Francis Bacon: A Critical Edition of the Major Works*, ed. Brian Vickers (Oxford: Oxford University Press, 1996), 480.

124 Giordano Bruno, *On the Infinite, the Universe, and the Worlds* (1584), trans. Scott Gosnell (London: Cassell & Company, 2014), 102.

125 Locke, *Two Treatises of Government*, 290 and 301.

126 Walter Prescott Webb, 'The Great Frontier' (Nebraska: University of Nebraska Press, 1986), 13.

127 Alexandre Koyré, *From the Closed World to the Infinite Universe* (Baltimore: Johns Hopkins Press, 1957), 2.

## ***Notes on Chapter 1.1***

### **On paragraph 1**

1.1/1/1

See also the ‘it from bit’ theory, in note 3/1/1.

### **On paragraph 5**

1.1/5/1 *Materialisation versus actualisation*

Materialisation means the acquisition of matter, and therefore actual, physical existence in the analogue world or the digital world. It is not the same as actualisation. Hegel, in his *Philosophy of Right*, claims that ‘the system of right is the realm of freedom made actual’.<sup>128</sup> Although actualisation may also include materialisation, actualisation may remain non-existent in the analogue world, that is, it may include ideas, thoughts and so on.

### **On paragraph 14**

1.1/5/1

See also Negroponte enthusiastically embracing the digital change that started in the mid-1990s: ‘The change from atoms to bits is irrevocable and unstoppable.’<sup>129</sup>

### **On paragraph 16**

1.1/16/1 *Zero cost of reproduction*

The functional infinity of information in the digital world is also achieved through the already identified zero cost of reproduction of digital informa-

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128 Hegel, *Outlines of the Philosophy of Right*, 26.

129 Nicholas Negropont, *Being Digital* (London: Hodder and Stoughton, 1995), 4.

tion; that is, information can be reproduced indefinitely, at zero marginal cost.<sup>130</sup>

### On paragraph 17

#### *1.1/17/1 On the effect of digital-born information*

The creation of digital-born (and even more so, digital world-only) information creates unprecedented opportunities and challenges for humanity. For example, in the analogue world, due to the costs of the reproduction and distribution of tangible information, dissemination took place through intermediaries (publishers, record companies, studios etc.) who selected what to disseminate. This is no longer the case. Similarly, tangible information is hard to move around, precisely because of its weight, something that is not a factor for digital-born information. Consequently, publishers may no longer be needed as anyone can now publish, and disseminate, their thoughts. By the same token, state records can now be kept anywhere, meaning not necessarily in state buildings owned by the state authorities, as has been the case until now (see also note 9/6/1).

### On paragraph 18

#### *1.1/18/1 On the digitisation of the self*

For the moment what is taking place is the digitisation of information on the self, meaning, in practice, the meticulous digital record-keeping of our daily lives<sup>131</sup>—which is, nevertheless, no different from what certain individuals have always done in the past with pen and paper (famously, for example, Samuel Pepys in 1660). If, however, this is a natural trait of humans, the combined effect of information digitisation and ever-increas-

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130 See, for example, Negroponte ('A bit has no color, size, or weight, and it can travel at the speed of light'; Negroponte, *Being Digital*, 14) or Shapiro and Varian ('Information is costly to produce but cheap to reproduce. Once the first copy of a digital good has been created, additional copies can be made at virtually no cost'; Carl Shapiro and Hal R. Varian, *Information Rules: A Strategic Guide to the Network Economy* (Boston, MA: Harvard Business Press, 1999), 10).

131 On the 'datafication' of human lives see, for example, Viktor Mayer-Schönberger and Kenneth Cukier, *Big Data: A Revolution That Will Transform How We Live, Work, and Think* (Boston: Houghton Mifflin Harcourt, 2013). On the 'quantified self', see, for example, Deborah Lupton, *The Quantified Self* (London: John Wiley & Sons, 2016).

*Notes on Chapter 1.1*

ing processing capabilities may turn this from being an interesting (if not self-indulgent and egotistical) pastime into something very different.

*1.1/18/2*

On digital states, see note 17/4/2.

## ***Notes on Chapter 2***

### **On paragraph 2**

*2/2/1 On the rights of Things*

On the (legal) rights of Things, see note 25/5/2.

### **On paragraph 7**

*2/7/1*

On the purpose of organisations to further the common interests of their members see, for example, Olson<sup>132</sup> or Coleman.<sup>133</sup>

### **On paragraph 9**

*2/9/1*

On the state as an organisation, see also note 11/2/1.

### **On paragraph 11**

*2/11/1*

On purpose in life, see note 5/2/2.

### **On paragraph 12**

*2/12/1*

On artificial Beings, see Aristotle:

*For suppose that every tool we had could perform its task, either at our bidding or itself perceiving the need, and if—like the statues made by*

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132 Olson, *The Logic of Collective Action*, 7.

133 James S. Coleman, *Foundations of Social Theory* (Cambridge, MA: Harvard University Press, 1990), 311.

*Daedalus or the tripods of Hephaestus, of which the poet says that 'self-moved they enter the assembly of the gods'—shuttles in a loom could fly to and fro and a plucker play a lyre all self-moved, then master-craftsmen would have no need of servants nor masters of slaves.*<sup>134</sup>

2/12/2

Heidegger opposed Hegel's definition of the machine as an autonomous tool. This was correct, because he claimed a standing-reserve status for a machine, during which it is completely unautonomous, 'for it has its standing only from the ordering of the orderable'.<sup>135</sup> A standing-reserve status is the only option for words or money, these artificial Beings having been created when human information-processing capabilities were limited. This is no longer the case with computer programs, which have been designed to never be in a standing-reserve position, to act irrespective of *ad hoc* human orders. (The programming itself, admittedly, may be an order, but with so many variations in the actual actions possible for the artificial Being that the action becomes virtually autonomous.)

2/12/3

On use (and uses of information), see note 4/5/1. However, the existence of unlimited, variable uses for each Thing does not affect the claims in this paragraph: for example, a knife was created with the purpose of cutting, regardless of how many cutting uses, and how different they may be, to which it could potentially be put. On the other hand, artificial Beings were created with the purpose of processing information for a multitude of (unforeseeable and unchartable) purposes, a non-specific purpose if compared with that of any other Thing.

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134 Aristotle, *The Politics*, 65 (1253b23).

135 Martin Heidegger, 'The Question Concerning Technology' (1962), in William Lovitt (ed.), *The Question Concerning Technology, and Other Essays* (New York: Garland Publishing, 1977), 17.

### On paragraph 14

2/14/1 *On effigies*

On the use of effigies to showcase the ‘double body’ of monarchs, see, for example, Kantorowicz.<sup>136</sup>

### On paragraph 16

2/16/1

On language, see also note 8/1/4.

### On paragraph 17

2/17/1 *On money*

There is a vast bibliography on money,<sup>137</sup> not to mention a whole science (of finance). In addition, a number of books are aimed at non-academics or professionals—which, after all, are more likely to deal with the question *per se* of what money really is, and from which it becomes obvious that the answer is that we do not really know.<sup>138</sup>

### On paragraph 18

2/18/1 *On computer programs*

The term here is used in the meaning of information technology,<sup>139</sup> to denote its difference from software (and regardless of the distinction between operating systems and applications). In general, however, it is noted that

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136 Ernst Kantorowicz, *The King's Two Bodies: A Study in Medieval Political Theology* (1957) (Princeton: Princeton University Press, 2016), 382.

137 See, in any case, Adam Smith, *The Wealth of Nations, Books I–III* (1776), ed. Andrew S. Skinner (London: Penguin, 1999), 126.

138 See, for example, Gavin Jackson, *Money in One Lesson: How It Works and Why* (London: MacMillan, 2022); David McWilliams and Michael Lewis, *Money: A Story of Humanity* (London: Simon & Schuster, 2024).

139 Compare, for example, the definitions given by Britannica and Wikipedia, respectively: ‘computer program, detailed plan or procedure for solving a problem with a computer; more specifically, an unambiguous, ordered sequence of computational instructions necessary to achieve such a solution’, and ‘A computer program is a sequence or set of instructions in a programming language for a computer to execute’ (as retrieved on 14 May 2025).

this is an unsuccessful term (in the sense that it needs the definition of 'computers' in order for it to work, itself a notoriously difficult term to define), and is mostly abandoned in daily practice.

### On paragraph 19

2/19/1

On money, see, for example, Aristotle:

*Not all the things that we naturally need are easily carried; and so for purposes of exchange men entered into an agreement to give to each other and accept from each other some commodity, itself useful for the business of living and also easily handled, such as iron, silver, and the like. The amounts were at first determined by size and weight, but eventually the pieces of metal were stamped. This did away with the necessity of measuring, since the stamp was put on as an indication of the amount.*<sup>140</sup>

### On paragraph 20

2/20/1 *On the death of computer programs*

It may be the case that computer programs can process information but the digital world in which they live no longer allows them to do so, as is the case, for example, for old software: a computer game from the 1970s will still work (i.e. it can process information), but only if a suitable digital environment is made available for it.

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140 Aristotle, *The Politics*, 82 (1257a28).

## Notes on Chapter 3

### On paragraph 1

#### 3/1/1 The 'it from bit' theory

In 1989 Wheeler formulated the 'it from bit' theory: '[In other words], every physical quantity, every it, derives its ultimate significance from bits, binary yes-or-no indications, a conclusion which we epitomize in the phrase, it from bit.'<sup>141</sup> In some more detail,

*[i]t from bit symbolizes the idea that every item of the physical world has at bottom—at a very deep bottom, in most instances—an immaterial source and explanation; that what we call reality arises in the last analysis from the posing of yes–no questions and the registering of equipment-evoked responses; in short, that all things physical are information-theoretic in origin and this is a participatory universe.<sup>142</sup>*

That is, the universe at its foundation is not made of matter or energy, but of information.<sup>143</sup>

### On paragraph 2

#### 3/2/1

A 'thing' in Hegelian theory is 'something not free, not personal, without rights', or, 'when "thing" is contrasted with "person" as such... it means the opposite of what is substantial, i.e. that whose determinate character lies in its pure externality'.<sup>144</sup>

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141 John Archibald Wheeler, 'Information, Physics, Quantum: The Search for Links', in Anthony Hey (ed.), *Feynman and Computation* (Boca Raton: CRC Press, 2002), 310.

142 *Ibid.*, 311.

143 In which case, the Being is an observer in Wheeler's theory—however, this image expressly does not turn this into an idealist approach, i.e. Things (as well as Beings) do not exist because they are observed (by an observing Being).

144 Hegel, *Outlines of the Philosophy of Right*, 58.

Consider also (with regard to the juxtaposition of Beings with Things) Nietzsche's 'will to power':

*A 'will' can have an effect only upon another 'will', of course, and not upon 'matter' (not upon 'nerves', for example): one must dare to hypothesize, in short, that wherever 'effects' are identified, a will is having an effect upon another will—and that all mechanical events, in so far as an energy is active in them, are really the energy of the will, the effect of the will.<sup>145</sup>*

There is, of course, a rich philosophy on things and their nature; see, for example, Walter Benjamin's 'soul of the commodity'<sup>146</sup> or Ortega's 'things and their meaning'.<sup>147</sup>

#### **On paragraph 4**

3/4/1

On purpose, see note 5/2/2.

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145 Nietzsche, *Beyond Good and Evil*, 36; see also note 5.1/1/2.

146 Walter Benjamin, *The Arcades Project* (1940), trans. Howard Eiland and Kevin McLaughlin (Cambridge, MA: Belknap Press, 1999), 369.

147 Ortega y Gasset, *Meditations on Quixote*, 87.

## *Notes on Chapter 4*

### **On paragraph 1**

#### *4/1/1 On the actions of processing*

A good, indicative list of the actions possible while processing information can be found in the text of the EU's General Data Protection Regulation (GDPR): 'collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.'<sup>148</sup> The only significant difference here in this political philosophy from the GDPR definition is that processing also includes the creation of information. In the GDPR processing does not include creation because it regulates the processing of existing information (i.e. datasets).

#### *4/1/2 Some clarifications on terminology*

The terms 'processing' and a (single) 'processing operation' are interchangeable, unless otherwise specified.

Similarly, the terms 'types of processing' and 'categories of processing', denoting more than one processing operation (regardless of whether on one or more individuals), will be used interchangeably, also unless otherwise specified.

### **On paragraph 2**

#### *4/2/1*

A thought (the processing of immaterial information) can either lead to another thought (similarly, therefore, the processing of immaterial information) or to the materialisation of that thought into a dataset.

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148 European Parliament and Council Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), art. 4(2).

4/2/2

Aristotle famously claimed that everything we do is an end or a means to an end,<sup>149</sup> essentially implying that all actions are composite actions (an *end* that has been accomplished is composite in itself, and the *means to an end* denotes no standalone action—it has purpose in it).

### On paragraph 3

4/3/1

The bundling of all possible interactions by Beings with information into one, single term (processing) may deprive each of these actions its autonomy; however, other than for ease of reference, it also warrants that moral considerations (e.g. who has access/why/to what extent) are avoided (morality needs singularity, i.e. to focus on a single action each time). A separation of the term into its component actions would, therefore, fall under a separate moral philosophy of information (see also note 0/1/7).

### On paragraph 4

4/4/1

On living and processing information in an actionable and not purely contemplative manner, consider the Hobbesian definition of life as ‘but a motion of limbs’ and the idea that ‘life itself is but motion’.<sup>150</sup>

Also consider Nietzsche: ‘Every action that has ever been done, has been done in an entirely unique and unprecedented manner, and the same will be true of all future actions.’<sup>151</sup>

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149 ‘Every art and every investigation, and similarly every action and pursuit, is considered to aim at some good. Hence the good has been rightly defined as “that at which all things aim” (Aristotle, *Nicomachean Ethics*, trans. J. A. K. Thomson (London: Penguin, 2004), 3 (1094a)).

150 Hobbes, *Leviathan*, 7 and 41 respectively; see also John Gaskin, ‘Introduction’, in Hobbes, *Leviathan*, ed. John Gaskin (Oxford: Oxford University Press, 1996), xxvii.

151 Friedrich Nietzsche, *The Joyous Science* (1886), trans. Kevin R. Hill (London: Penguin, 2018), 182.

## On paragraph 5

### *4/5/1 Use of information*

Use of information<sup>152</sup> by a Being (specifically, a human) implies knowledge and necessitates a morality. This is why it is not analysed within this political philosophy (see note 0/1/7). Only the actual processing of information, taken as an external fact, is of concern here.

On the actual and material uses of information (specifically of datasets), which can vary vastly (but never exceed their given purpose), see note 5/2/2, as well as Chapter 3, par. 4.

On humans' becoming users in the digital world—the latest addition to human evolution—see Chapter 17, par. 11.

On the connection of use with regulation, see note 20/7/1.

## On paragraph 11

### *4/11/1*

On Tilly's theory of states being the result of war ('states make war and war makes states'), see note 7/1/11.

### *4/11/2*

On conflict and humans, see also Chapter 5.1, par. 9.

## On paragraph 12

### *4/12/1 On state centralisation*

State centralisation is a crucial (and for some scholars, the defining) characteristic of states (which also runs throughout human history).<sup>153</sup>

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152 Including access to information, see Chap. 6, par. 6 (and also Chap. 21, par. 3).

153 See, for example, Mann: 'the state is a differentiated set of institutions and personnel embodying centrality, in the sense that political relations radiate outward to cover a territorially demarcated area, over which it claims a monopoly of binding and permanent rule-making, backed up by physical violence' (Michael Mann, *The Sources of Social Power: Volume 1, A History of Power From the Beginning to AD 1760* (Cambridge: Cambridge University Press, 2012), 37). See also Spruyt: 'In a similar vein, the transition from a feudal system to a system of states is often explained by the rising costs of warfare and the increasing size of armies in the later Middle

On this topic, see also Mill: ‘But I believe that the practical principle in which safety resides, the ideal to be kept in view, the standard by which to test all arrangements intended for overcoming the difficulty, may be conveyed in these words: the greatest dissemination of power consistent with efficiency; but the greatest possible centralization of information, and diffusion of it from the centre.’<sup>154</sup>

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Ages.... This mode of warfare therefore favored a large tax basis and centralized authority. Feudal units lacked the sheer size required for this warfare. Efficiencies of scale dictated centralization of states’ (Hendrik Spruyt, *The Sovereign State and Its Competitors: An Analysis of Systems Change* (Princeton: Princeton University Press, 2020), 83). Finally, see also Skocpol: ‘Strengthened states—more centralized, bureaucratic, and autonomously powerful at home and abroad—emerged from all three Revolutions’ (Theda Skocpol, *States and Social Revolutions: A Comparative Analysis of France, Russia, and China* (Cambridge: Cambridge University Press, 1979), 285).

154 Mill, *On Liberty, Utilitarianism, and Other Essays*, 110.

## Notes on Chapter 4.1

### On paragraph 1

#### 4.1/1/1 On the 'Reason' of the Enlightenment

Thus transforming Descartes' famous '*cogito ergo sum*'<sup>155</sup> into a material and neutral, 'I process information therefore I am alive', because, as has been seen, all living informational Beings process information—our lives are the sum of information processing (see Chapter 1).<sup>156</sup>

However, during the Age of Enlightenment, the process of reasoning, Reason (in essence, an imagined human capacity for rational, critical and independent thinking), became an end, and simultaneously a fact. See, for example, Locke, 'We are born Free, as we are born Rational';<sup>157</sup> Kant, 'The motto of enlightenment is therefore: *Sapere aude!* Have courage to use your own understanding!';<sup>158</sup> or Diderot, 'Reason is to the *philosopher* what grace is to the Christian. Grace determines the action of the Christian; reason determines that of the *philosopher*'.<sup>159</sup>

Nevertheless, Reason with a capital 'R' is here expressly and specifically *not* used to denote the Reason of the Enlightenment (something that would

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155 Rene Descartes, *Discourse on Method and the Meditations* (1637), trans. F. Sutcliffe (London: Penguin, 1968), 53.

156 See also Hayek: 'for Descartes reason was defined as logical deduction from explicit premises'. Furthermore, 'only what is true in this sense [Cartesian reason] can lead to successful action, and that therefore everything to which man owes his achievements is a product of his reasoning thus conceived. Institutions and practices which have not been designed in this manner can be beneficial only by accident. Such became the characteristic attitude of Cartesian constructivism with its contempt for tradition, custom, and history in general. Man's reason alone should enable him to construct society anew' (Friedrich A. Hayek, *Law, Legislation and Liberty* (1973) (Oxon: Routledge, 2012), 11).

157 Locke, *Two Treatises of Government*, 308. See also Laslett's addition, that 'reason means even more than this and has further consequences for natural liberty and equality. Conceived of as a law (the law of nature), or almost as a power, it is sovereign over all human action' (Laslett, 'Introduction', 95).

158 Immanuel Kant, *Political Writings* (1784), trans. H. B. Nisbet, ed. Hans S. Reiss (Cambridge: Cambridge University Press, 1991), 54.

159 César Chesneau Du Marsais, 'Philosopher', in *The Encyclopedia of Diderot & d'Alembert Collaborative Translation Project*, trans. Dena Goodman (Ann Arbor: Michigan Publishing, 2002).

imply acceptance of, for example, assumptions about critical reason, humans' uniqueness etc.), but only an algorithm, the carrying out in sequence of more than one interconnected processing operation by a Being on a dataset. In this context, capitalisation is considered necessary in order to differentiate this use from use of the (non-capitalised) 'reason', which would, perhaps, invoke connections with causality.

#### 4.1/1/2

Although here algorithm and method are used interchangeably, in computer science the two terms differ; according to Knuth,

*So this is an algorithm. The modern meaning for algorithm is quite similar to that of recipe, process, method, technique, procedure, routine, rigmarole, except that the word 'algorithm' connotes something just a little different. Besides merely being a finite set of rules that gives a sequence of operations for solving a specific type of problem, an algorithm has five important features: finiteness, definiteness, input, output, effectiveness.*<sup>160</sup>

However, see also the software studies approach, where the algorithm is defined as 'provisionally, a description of the method by which a task is to be accomplished'.<sup>161</sup>

### On paragraph 5

#### 4.1/5/1 Unity versus singularity (of purposes)

If all processing has a purpose, is there a general purpose for it all? Is all processing interconnected, meaning that any and all processing affects any and all Beings? Is there an ultimate purpose which all processing carried out in the analogue and the digital world aims to achieve?

While in this book it is argued that no unity of purpose or of any other kind exists (i.e. humans have no specific purpose in their lives, or, better phrased, each has his or her own purposes), this is a question with which humanity has struggled since it appeared on the planet and to which it still has not been able to provide an answer—precisely because processing is external, but purpose is not (see also note 1/10/2).

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160 Donald E. Knuth, *The Art of Computer Programming*, 3rd edn. (Reading, MA: Addison-Wesley, 1997), 4.

161 Andrew Goffey, 'Algorithm', in Matthew Fuller (ed.), *Software Studies: A Lexicon* (Cambridge, MA: MIT Press, 2008), 15.

## On paragraph 7

### 4.1/7/1 Processing as a cultural phenomenon

On processing being not (only) neutral, but also a cultural phenomenon see, for example, Vesting's approach.<sup>162</sup>

On algorithmic bias see, for example, European Union Agency for Fundamental Rights, *Bias in Algorithms – Artificial Intelligence and Discrimination*.<sup>163</sup>

## On paragraph 8

### 4.1/8/1

For many it is Reason that distinguishes humans from animals, with this idea beginning with Plato<sup>164</sup> and being perpetuated by, for example, Aristotle,<sup>165</sup> Polybius,<sup>166</sup> Plutarch,<sup>167</sup> Cicero<sup>168</sup> and even Kant.<sup>169</sup>

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162 Thomas Vesting, *State Theory and the Law: An Introduction* (Cheltenham: Edward Elgar, 2022).

163 EU Agency for Fundamental Rights, *Bias in Algorithms—Artificial Intelligence and Discrimination* (Vienna, 2022).

164 Plato, *Statesman*, trans. Christopher J. Rowe (Oxford: Aris & Phillips Classical Texts, 2005), 46 (263d).

165 Aristotle, *Politics*, trans. Ernest Barker (Oxford: Oxford University Press, 1995), 11 (1253a9-18).

166 Polybius, *The Histories*, trans. Evelyn S. Shuckburgh (Westport, CT: Greenwood Press, 1962), 182.

167 See, in particular, his essay 'On the Use of Reason by "Irrational" Animals' (Plutarch, *Essays*, 383).

168 Marcus Tullius Cicero, *On Duties*, ed. M.T. Griffin and E.M. Atkins (Cambridge: Cambridge University Press, 1991), 21.

169 Found in, for example, Immanuel Kant, 'Idea for a Universal History With a Cosmopolitan Aim', trans. Robert B. Loudon, in Robert B. Loudon and Günter Zöllner (eds.), *Anthropology, History, and Education* (Cambridge: Cambridge University Press, 2007), 108.

## Notes on Chapter 5

### On paragraph 1

5/1/1 *On Democritus' 'chance and necessity'*

The philosophy of chance and necessity (where, however, 'necessity' is not the same as 'need' as used in this book—see note 5/1/2) has its origins in pre-Socratic antiquity,<sup>170</sup> but interest in it shows no signs of abating, even today.<sup>171</sup> In Goethe's words, 'The texture of this world is made up out of necessity and chance.'<sup>172</sup> Similarly, Plato considered that 'the all-controlling agent in human affairs is God, assisted by the secondary influences of "chance" and "opportunity", which best be accompanied by "skill"'.<sup>173</sup>

On chance, see also note 5/7/1.

However, 'opportunity', as referred to in par. 3, is not the same as 'chance'; in none of the eight main interpretations of chance given by Dudley<sup>174</sup> is opportunity listed among them.

Chance and necessity may be used in different ways as methodological tools. For example, Monod, using them to explain evolution, spoke of an 'accident', which is unpredictable because it is always singular, that was then multiplied into billions of copies: 'Drawn out of the realm of pure

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170 Monod (erroneously) attributing to Democritus the saying that 'Everything existing in the Universe is the fruit of chance and necessity' (Monod, *On Chance and Necessity*, 1). However, Democritus was a determinist—it was, in fact, Epicurus who added chance (through the swerve/clinamen) to the mix.

171 For this application, for example, in quantum mechanics, see John Dudley, *Aristotle's Concept of Chance: Accidents, Cause, Necessity, and Determinism* (Albany: State University of New York Press, 2012), 12; in the field of biology, see Monod, *On Chance and Necessity*.

172 But he continues by saying, 'Human reason holds the balance between them, treating necessity as the basis of existence, but manipulating and directing chance, and using it. Only if our reason is unshakeable, does man deserve to be called a god of the earth' (Johann Wolfgang von Goethe, *Goethe, Volume 9: Wilhelm Meister's Apprenticeship* (1796), trans. Eric A. Blackall (Princeton: Princeton University Press, 1995), 38). However, this is an approach with which this book does not agree (see Chap. 4.1).

173 Plato, *The Laws*, trans. Trevor J. Saunders (London: Penguin, 2004), 166 (par. 6, but see also par. 8 on ability).

174 Dudley, *Aristotle's Concept of Chance*, 11.

chance, the accident enters into that of necessity, of the most implacable certainties'.<sup>175</sup> See also Bourdieu, citing Husserl's analogy on chance and necessity being the genesis of a city.<sup>176</sup>

### 5/1/2 On 'need' vs. 'necessity'

Necessity is a term frequently used in philosophy within, for example, a logic–philosophical context<sup>177</sup> or a metaphysical one<sup>178</sup> (or even a legal one, see note 5/2/5).

In this book, however, it is used in its basic meaning of 'the need for something' or, even more appropriately for the purposes of this analysis, 'something that you need, especially in order to live'.<sup>179</sup>

## On paragraph 2

### 5/2/1 On need

All Beings have needs—needs are natural to them, as a result of their coming into existence in the analogue or the digital worlds. What needs Beings have are set by their nature: for example, humans need air and food, whereas artificial Beings (specifically, computer programs) need the digital world. Of course, the nature of Beings is then also (but not exclusively) evolutionarily co-shaped by these needs, in an unbreakable bond.

From the Unique Human Observer Perspective (see note 1/1/1) we can, to a greater or lesser extent, know the needs of humans<sup>180</sup>—but this is much less true of animals. The length of the list of human needs notwithstanding,

175 Monod, *On Chance and Necessity*, 118.

176 Bourdieu, *On the State*, 137.

177 As regards the notion of 'necessity' in analytical philosophy, although the relevant analysis largely exceeds the purposes of this book, the topic of what is necessary or 'essential' has long occupied analytical philosophers, with the two opposing camps (unsurprisingly) supporting that it is respectively possible or impossible to know (see, for example, Harold Noonan, *Routledge Philosophy Guidebook to Kripke and Naming and Necessity* (London: Routledge, 2014), 3).

178 See, for example, Aristotle, *The Metaphysics*, 120 (1015a20), or Spinoza, *Ethics*, 2.

179 With this definition taken from *Cambridge Academic Content Dictionary*, 'Necessity' (Cambridge: Cambridge University Press).

180 Even brief deliberation over (human) needs reveals that they can be infinitely classified based on a variety of criteria (biological, well-being etc.) that are also specific in time and space (to the region on the planet).

On the division of (general) needs between the categories of vital needs and agency needs, see L. A. Hamilton, *The Political Philosophy of Needs* (New York: Cambridge

need is the cause of human feelings, desires, thoughts and ideas—their only reason to act, to process both material and immaterial information. In the cases of organisations and artificial Beings, because their nature is given to them by the humans who have created them, their needs are, initially at least, knowable to humans.

Lack is inherent in need. In other words, a need is something that can never be fulfilled once and for all, it is never satisfiable.<sup>181</sup> In other words, need forces a Being to constant action.

The concept of need seems to be (at least, if compared with necessity, see note 5/1/1) little explored in philosophy.<sup>182</sup> It is much more widely explored in psychology, with regard to human needs and their connection to drive.<sup>183</sup>

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University Press, 2003). Here too need is 'defined ultimately in terms of human functioning, not in terms of lack' (ibid., 24). Although information is finite in the analogue world, lack is not the motivating factor for information processing. Humans need to process information in order to survive, but they also need to augment their information processing—in both cases lack does not come into play (at best, it would be competition among humans, again taking into consideration that in the analogue world information is finite). Having said that, the need to process information is not only a 'vital need' ('general ineluctable need', ibid., 35) but by far predates any other need listed therein (shelter, clothing and caloric intake; ibid., 35). It is information processing that warrants that all of these needs will be served—and, obviously, the same is true of any other need in 'social' or other similar lists following the vital needs above. Having noted the above, Hamilton's suggested 'state of needs' (ibid., 134), actually reflects what states as information platforms already do, meaning serving the basic need of humans to process information. Similarly, for an attempt to reply to (important, political) questions such as 'which needs are important?' or 'are needs politically and morally justified?', see, for example, Soran Reader (ed.), *The Philosophy of Need* (Cambridge: Cambridge University Press, 2005), 10.

Needs can also be viewed in philosophy as 'desires'. See, for example, Epicurus: 'Some desires are (1) natural and necessary, others (2) natural but not necessary, still others (3) neither natural nor necessary but generated by senseless whims' (Epicurus, *The Art of Happiness*, trans. George K. Strodach (London: Penguin, 2013), 177.

181 See, for example, Hume ('In man alone, this unnatural conjunction of infirmity, and of necessity, may be observ'd in its greatest perfection'; Hume, *A Treatise of Human Nature*, 537) or Nietzsche ('To be sure, there is no sleight of hand by which we can make a poor virtue into a rich and abundant one, but perhaps we can make a virtue of necessity and reinterpret its poverty as beautiful' (Nietzsche, *The Joyous Science*, 52).

182 See Gillian Brock (ed.), *Necessary Goods: Our Responsibility to Meet Others' Needs* (Lanham: Rowman & Littlefield, 1998), vii; Reader, *The Philosophy of Need*, 1.

183 See particularly, Maslow's hierarchy of needs (Abraham Harold Maslow, 'A Theory of Human Motivation', *Psychological Review* 50/4 (1943).

*5/2/2 On purpose in life*

A purpose in the life of a Being or a Thing (see also note 11/7/2) is always and invariably given (or identified, thus given). It is not innate to them, it does not exist in Nature; no Being or Thing is born or created with a natural purpose imprinted on it. For one (Being) to give a purpose to another (Being or Thing), it must be above it in a hierarchy, controlling it.

Non-biological Beings (organisations and artificial Beings) have a purpose in their lives that is given to them by the humans that created them. The same is the case for Things that are artefacts. Of course, the presence of a given purpose does not preclude or prejudice in any way the uses they (non-biological Beings and artefacts) are actually put to (see also note 4/5/1, and Chapter 3, par. 4)—they can, however, never exceed their given purpose.

Biological Beings (humans and animals), as well as the state,<sup>184</sup> have no specific purpose in their lives, they do not come into existence with or for a preordained purpose.

Of course, this *purpose in life* has nothing to do with a processing-operation-specific purpose, which is connected to reason (see Chapter 4.1, par. 2).

*5/2/3 On the relationship between need and purpose*

An explanation of the interrelation between need and purpose for Beings may be enlightening. It is need that causes the will to process information (i.e. to act) in Beings. It is also need that gives them the ability to reason (see Chapter 4.1), to put one processing operation (action) next to another so as to achieve a (or any) purpose. It is therefore through their ability to reason that Beings give purpose to each processing operation they execute (any action that they carry out).

But, which processing operation to do? Which need to serve first? The needs of Beings can never be satisfied in full, once and for all. A Being has to choose.

At this point a distinction is necessary: biological Beings have no purpose, whereas non-biological Beings do (the one given to them by humans at the time of their creation, which is, after all, the result of processing).

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184 See Chap. 11, par. 7; on the family, which also has no specific purpose in life, see note 8/2/1.

Humans (and animals), therefore, are able to choose which processing operation to undertake, which action to carry out, which purpose to set for themselves each time. By contrast, organisations and artificial Beings are constrained by their given purpose: whatever processing they choose to do must ultimately serve that purpose—and cannot exceed<sup>185</sup> it. (States are the only exception to this: although they are in essence an organisation, they have no purpose.<sup>186</sup>)

Put another way, the primary, dominant need of non-biological Beings is to serve their purpose, whereas biological Beings have no primary, dominant need.

It is in this choosing that self-consciousness and morality come into play for humans (see Chapter 23). The ability to choose one action over another, to set a purpose for our actions implies self-awareness and an ability to act morally.

#### *5/2/4 A functional, mechanistic approach*

The will of any Being to undertake a processing is taken as a given as a result of the fact that Beings having needs (otherwise, they would be Things). No assumption is made as to whether this will is natural-born or God-given, conscious or unconscious, rational or irrational, predetermined, or completely free and unaccountable. It is considered present in humans, animals, organisations and artificial Beings, because they can process information, and not present in Things, because they cannot.

Similarly, Reason is merely the ability to create an algorithm to process information with a purpose. All Beings use it—it is the direct result of their having the will to process (how else could they process information to serve their needs, these needs being what cause the processing in the first place?).

The same is true of need; needs are not explained or categorised or placed in any particular hierarchy.

Admittedly, this is a functional, mechanistic approach: attention is only paid to the fact of the processing, as caused by need (and opportunity, see par. 7), without assessing it in any way. It is only at a later stage, when humans (and animals), having no specific purpose in life, choose which processing to perform (and which to avoid), that an assessment could be

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185 This does not mean that their purpose is satisfiable in full, and thus finite; on the contrary, because they are designed with an intentionally open-ended purpose, they are forced to constant action (see Chap. 2, par. 11, and note 6/2/1).

186 See Chaps. 2, par. 9, and 11, par. 7 (and also note 5/2/2).

made—however, such an assessment would belong to the field of morality, and thus not to this political philosophy.

*5/2/5 The distinction between needs and (legal) rights*

It is in the context of information processing that the distinction between needs and legal rights, which has long caused discussion,<sup>187</sup> becomes clear. A human has the will to process information in order to serve its needs. This does not, however, also give it the right to do so, to serve these needs. (The same is, after all, also true for platform rights: although they exist, inherently on the information platform that is the state, they are not necessarily (in fact, often have not been) recognised throughout space and time in human history (see also Chapters 21 and 22).)

*5/2/6*

It is Strauss<sup>188</sup> who specifically noted that a philosophy of will (in essence, a clear distinction between a capacity to act and to take decisions (command) and the capacity to reason and plan) was introduced to social contract theory by Hobbes (who appointed the Sovereign as the provider of will) and Rousseau (who replaced the Sovereign with the equally absolutist General Will, see note 13/2/5).

### **On paragraph 3**

*5/3/1 On the need to survive*

The need to survive is the need of Beings to remain alive, to keep processing information. As such, this need is connected to self-consciousness, which is why it is only felt by biological Beings (animals, including humans) and not organisations or artificial Beings (at least for the moment, as regards computer programs). (It is not, however, a matter of fulfilling their purpose for organisations and artificial Beings, because their purpose can never actually be completely fulfilled.)

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187 See, for example, David Wiggins, *Needs, Values, Truth: Essays in the Philosophy of Value*, 3rd edn. (Oxford: Oxford University Press, 1998), 1.

188 Strauss, *The Political Philosophy of Hobbes*, 160.

The primacy of the need to survive (or consideration of it as the need of needs) is not easily accepted. Humans (and sometimes animals too) may forfeit their lives, for example through suicide or in self-sacrifice for some cause (family, state, religion, morality etc.). In spite of that, however, the need to survive has been placed as the basis of political philosophy, most notably by Hobbes while he was laying the foundations for social contract theory,<sup>189</sup> as ‘necessary par excellence’.<sup>190</sup>

### On paragraph 5

#### 5/5/1 A rare Platonist moment

Recourse to the idea of the essence of, for example, a house, clothing or, for that matter, a state, in order to assess what it is exactly that is necessary, and thus natural, to the respective Being, may be perceived as the only occasion when this analysis becomes a Platonist one<sup>191</sup>—although, in an effort to avoid it, one can simply think of a ‘class of objects’ in terms of computer programs.

#### 5/5/2

A similar attempt to remove excess from the basic idea was employed by Plato when distinguishing between ‘necessary’ and ‘unnecessary’ desires (e.g. the desire for bread and meat as opposed to the desire for a more varied and luxurious diet).<sup>192</sup>

On something not existing in Nature but also able to be considered ‘natural’, see particularly Hume:

*Mankind is an inventive species; and where an invention is obvious and absolutely necessary, it may as properly be said to be natural as any thing*

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189 See, for example, Thomas Hobbes, *On the Citizen* (1641), trans. Michael Silverthorne, ed. Richard Tuck (Cambridge: Cambridge University Press, 1998), 71; as well as Hobbes, *Leviathan*, 86.

190 Strauss, *The Political Philosophy of Hobbes*, 165.

191 See also Heidegger’s reference to ‘what endures’, in Heidegger, ‘The Question Concerning Technology’, 30.

192 Plato, *The Republic*, 295 (559a). This was the beginning of a long stretch of reasoning that continues, for example, in Berlin’s ‘basic needs’ (Isaiah Berlin, *The Crooked Timber of Humanity: Chapters in the History of Ideas* (Princeton: Princeton University Press, 2013), 322).

*that proceeds immediately from original principles, without the intervention of thought or reflection. Tho' the rules of justice be artificial, they are not arbitrary. Nor is the expression improper to call them Laws of Nature; if by natural we understand what is common to any species, or even if we confine it to mean what is inseparable from the species.*<sup>193</sup>

5/5/3

Compare also Hegel: 'what is rational is actual and what is actual is rational',<sup>194</sup> in his attempt to present the state as something inherently rational.

### On paragraph 7

5/7/1 On opportunity

According to the Cambridge Dictionary, opportunity is 'an occasion or situation that makes it possible to do something that you want to do or have to do, or the possibility of doing something'.<sup>195</sup> Meriam-Webster defines it as 'a favorable juncture of circumstances'.<sup>196</sup> Opportunity, even in the form of chance, has not attracted much theoretical attention, in spite of the fact that it is frequently used as a theoretical methodological tool.<sup>197</sup>

5/7/2

On the relationship of opportunity with chance, see note 5/1/1.

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193 Quoted in Christopher Morris, 'Can Artificial Rights Be Natural?', *Reason* 43/1 (2023), 124.

194 Hegel, *Outlines of the Philosophy of Right*, 14.

195 Definition of opportunity from *Cambridge Advanced Learner's Dictionary & Thesaurus*, 'Opportunity' (Cambridge: Cambridge University Press).

196 Merriam-Webster.com, 'Opportunity'.

197 See, for example, Andreas Anter, *Max Weber's Theory of the Modern State: Origins, Structure and Significance* (Basingstoke: Palgrave Macmillan, 2014), 89, with further bibliography.

## On paragraph 8

### *5/8/1 On the philosophy of actions*

The processing of information being an action that is performed by humans, the philosophy of actions comes into play. While the relevant discussion exceeds the purposes of this analysis, here it is enough to note that need and opportunity in this book are used as motivating reasons, meaning ‘a reason that the agent takes to favour her action, and in light of which she acts’.<sup>198</sup>

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198 Maria Alvarez, ‘Reasons for Action: Justification, Motivation, Explanation’, in Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2017 Edition), accessed on 15 May 2025.

## Notes on Chapter 5.1

### On paragraph 1

5.1/1/1 *The need to augment our information processing is neither good nor bad nor connected to morality*

This book takes neither a moral nor a quantifying approach. Although augmentation is a need, and, in fact, a need of needs (see par. 2), whether satisfaction of a need is something good (and under which conditions, if any) is the domain of morality. After all, even if considered good, its satisfaction would not necessarily lead to happiness.<sup>199</sup>

Nor does it take a quantifying, mathematical approach. Unlike utilitarianism, this is not a moral philosophy, it does not tell people what to do (see note 0/1/7). Its sole aim is to understand and explain how, and why, things are as they are. By contrast, utilitarianism is explicitly a moral philosophy: ‘The creed which accepts as the foundation of morals, Utility, or the Greatest Happiness Principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure, and the absence of pain; by unhappiness, pain, and the privation of pleasure.’<sup>200</sup> Therefore, while the approach outlined in this book explains that humans need to augment (increase qualitatively) their information processing because of their nature, because they simply exist, utilitarianism offers a way forward, suggesting what humans should do taking consideration of the maximisation of happiness, ‘the greatest happiness for the greatest number’, as the guidance for action.<sup>201</sup>

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199 See also note 5.1/1/2: execution of a specific type of processing merely opens up the opportunity for another to follow.

200 Mill, *On Liberty, Utilitarianism, and Other Essays*, 121. See also Sidgwick: ‘By Utilitarianism is here meant the ethical theory, that the conduct which, under any given circumstances, is objectively right, is that which will produce the greatest amount of happiness on the whole; that is, taking into account all whose happiness is affected by the conduct’ (Sidgwick, *The Methods of Ethics*, 411).

201 On act-utilitarian and rule-utilitarian, see Mark Philp and Frederick Rosen, ‘Introduction’, in John Stuart Mill, *On Liberty, Utilitarianism, and Other Essays*, ed. Mark Philp and Frederick Rosen (Oxford: Oxford University Press, 2015), xxix. On utilitarianism’s approach to state justification see Chap. 13, par. 6.

Nor does this book take a 'rational-choice' approach. This approach is perhaps aptly summarised as the assumption that 'all actors are rational, self-interested wealth maximizers'.<sup>202</sup> Not only is such an approach economics based<sup>203</sup> (see the inclusion of 'wealth' in the quotation above), but, importantly, no 'rationality' or 'morality' of any kind is assumed here.

### 5.1/1/2 Augmentation of information processing and the pursuit of happiness

Nor is augmentation of information processing related to the pursuit of happiness. Because the US Declaration of Independence places 'the pursuit of happiness' as high on the list of inalienable human rights,<sup>204</sup> one cannot but wonder whether the two are connected: both being open-ended (the Declaration neither defines happiness or the means to achieve it, nor attributes any specific purpose to its citizens), could it be that augmentation of information processing and the pursuit of happiness are one and the same?

This is not the case, however, because happiness has a moral content (being in itself a positive thing and a pursuit in one's life), whereas here it is not claimed that if an individual augments his or her information processing he or she will be happy. Happiness is a value that is notoriously difficult to define and understand,<sup>205</sup> and it is far from certain that the augmentation of information processing is the way to achieve it (see also note 5.1/8/2).

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202 Quoted in Julia Adams, 'Culture in Rational-Choice Theories of State-Formation', in George Steinmetz (ed.), *State/Culture: State-Formation After the Cultural Turn* (Ithaca: Cornell University Press, 1999), 99.

203 See also John Scott, 'Rational Choice Theory', in Gary K. Browning, Abigail Halcli and Frank Webster (eds.), *Understanding Contemporary Society: Theories of the Present* (London: Sage, 2000). Consider also Moe: 'The problem, as I saw it, was that the [rational choice] theory tended to view political institutions as structures of voluntary cooperation that resolve collective action problems and benefit all concerned, when in fact the political process often gives rise to institutions that are good for some people and bad for others depending on who has the power to impose their will' (Terry M. Moe, 'Power and Political Institutions', *Perspectives on Politics* 3/2 (2005), 215).

204 Van Doren noted that, 'Where Locke had used the word "property", Jefferson had used "the pursuit of happiness"', finding the latter 'a broader, more generous concept' (Charles Van Doren, *A History of Knowledge: Past, Present, and Future* (New York: Ballantine Books, 1992), 226).

205 See, for example, David G. Myers and Ed Diener, 'The Pursuit of Happiness', *Scientific American* 274/5 (1996).

On the same topic, Spinoza's conclusion of his moral philosophy, according to Scruton at least, claims that 'it is in our nature constantly to increase our power [adequacy of ideas], that this is the source of all pleasure.'<sup>206</sup>

See also Nietzsche's approach, relevant to his *will to power*:

*All animals, including la bête philosophe, strive instinctively for an optimum combination of favourable conditions which allow them to expend all their energy and achieve their maximum feeling of power; equally instinctively, and with a fine sense of smell which is 'higher than any reason', all animals loathe any kind of trouble-maker or obstacle which either actually obstructs their path to this optimum combination or has the potential to do so (—I am not talking here about their path to happiness, but their path to power, to action, to the most powerful action, which is in most cases actually the path to unhappiness).*<sup>207</sup>

### 5.1/1/3

The augmentation of information processing is not work-ethic relevant. For example, 'idlers' also need to augment their information processing. Johnson, who took a special interest in idleness, claimed of so-called idlers that, 'He that neglects his known duty and real employment, naturally endeavours to crowd his mind with something that may bar out the remembrance of his own folly, and does any thing but what he ought to do with eager diligence, that he may keep himself in his own favour'.<sup>208</sup> Therefore, it is the type of processing that anyone may opt in or out of, not the need to augment it per se.

### 5.1/1/4

On the relationship between history and knowledge, Van Doren noted that 'the history of mankind is the history of the progress and development of human knowledge. Universal history... is no other than an account of how mankind's knowledge has grown and changed over the ages'.<sup>209</sup>

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206 Roger Scruton, *Spinoza: A Very Short Introduction* (Oxford: Oxford University Press, 2002), 81.

207 Nietzsche, *On the Genealogy of Morals*, 86.

208 Samuel Johnson, *Selected Writings*, ed. Peter Martin (Cambridge: Harvard University Press, 2009), 169.

209 Van Doren, *A History of Knowledge*, xvii.

## On paragraph 2

### 5.1/2/1 *Relationship with other needs*

Humans, of course, have (countless) other needs too, most pressing among them the biological ones of having enough air, food and so on. When it is claimed here that the augmentation of information processing is the need of needs, it is meant that this need serves, and is caused by, all and any one of these other needs. For example, the need for air has developed into, among others, the need for good air quality, the need to survive in inhospitable environments and so on (see also note 5/2/1).

### 5.1/2/2 *On the term 'augmentation'*

The term is used here, admittedly in its US and not British English meaning, to denote improvement and not mere addition.<sup>210</sup> One must also avoid confusion with 'augmented reality' (see Chapter 1, par. 12) and 'data augmentation', meaning the process of artificially generating new data from existing data.<sup>211</sup>

### 5.1/2/3 *Augmentation does not mean knowledge*

Augmentation of information processing is not the same as augmentation of human knowledge. Although it is true that augmentation means the processing of new information, this new information is taken factually, that is, regardless of whether it contributes or not to human knowledge (which would, ultimately, be a moralising finding).

## On paragraph 3

### 5.1/3/1 *Why do only humans need to augment their information processing?*

The most frequent explanation for humans' need to augment their information processing, and thus creativity, pertains to their inquiring nature and restlessness. However, what exactly this nature involves is anybody's

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210 See particularly *Encyclopedia Britannica*, 'Augment' (2025).

211 On data augmentation see, for example, David A. van Dyk and Xiao-Li Meng, 'The Art of Data Augmentation', *Journal of Computational and Graphical Statistics* 10/1 (2001).

guess: Lucretius, for example, stresses discontent,<sup>212</sup> while Hobbes stresses self-preservation: a human ‘cannot assure the power and means to live well, which he hath present, without the acquisition of more’.<sup>213</sup>

Another explanation as to why only humans need to augment their information processing could relate to the fact that only humans among all Beings are conscious of their biological end, the point in time when they will no longer be able to process information and will be turned into Things (whereby, information will be able to be processed about them but not by them—as is the case, for example, for Lucretius and Hobbes themselves, in the previous paragraph). In other words, the human need to constantly process new information may be the result of the fact that they know they will die.<sup>214</sup>

If any of these explanations are the cause, if discontent, self-preservation or knowledge of an end have caused human creativity, will artificial Beings (specifically computer programs, since organisations, money or words have more or less proven their case over their long history), which supposedly do not share any of the above characteristics, be able to create new information? After all, it is accepted that the processing of immaterial information (thoughts, ideas, feelings), which once materialised gives birth to creativity, is only possible for biological Beings (see Chapter 1.1, par. 3).

In other words, there may well be a time in the future (sooner, rather than later) when computer programs will have processed all information available in the analogue and digital worlds. However, this will happen as a matter of capacity (one that humans themselves could never reach), and not of computer programs’ own will or purpose. It is humans that will have given this purpose to (one or more) computer programs. Once this is done, it remains to be seen whether computer programs will be able to create new information. If they can, this would imply that they do have a need to augment their information processing to reach an imagined, rather than existing, end (see par. 5). If not, computer programs may end up like Borges’ Funes the Memorious, who never forgot anything he had learned, but admitted that, for this reason, his memory was a ‘garbage heap’. Funes was unable to think, because ‘to think is to forget differences, to generalize,

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212 As in the epigram of this chapter.

213 Hobbes, *Leviathan*, 66.

214 See also Pascal: ‘When the universe has crushed him man will still be nobler than that which kills him, because he knows that he is dying, and of its victory the universe knows nothing’ (Blaise Pascal, *Pensées* (1670), trans. A. Krailsheimer (London: Penguin, 1995), 66).

to make abstractions<sup>215</sup>—at least, according to human understanding<sup>216</sup> (on the Unique Human Observer Perspective, see note 1/1/1).

5.1/3/2

See also Nietzsche, who connected self-consciousness and language: ‘If this observation is correct, then I may proceed to the conjecture that consciousness has developed only under the pressure of the need for communication.... In short, the development of language and the development of consciousness (not of reason, rather, only of reason become self-conscious) go hand in hand.’<sup>217</sup>

### On paragraph 7

5.1/7/1

Individual as opposed to hive processing<sup>218</sup> is not juxtapositioned here in order to discount the latter. Within the hive, after all, individualism remains, that is, each unit remains distinguishable from the others, even as part of a group with similar characteristics. However, for humans it seems impossible to even approach the information processing within a hive without first ‘individualising’ (at least some of) its units<sup>219</sup>—we seem unable to understand it in any other way.

By the same token, humans’ approach to information processing, and thus to the individualistic way of life, has been contrasted in literature

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215 Jorge Luis Borges, *Ficciones*, trans. Anthony Kerrigan et al. (New York: Grove Press, 1962), 154.

216 Accordingly, the issue of whether computer programs can think, and thus create (i.e. software as creator or inventor) has been resolved in (intellectual property) law in the negative, at least for the moment. More widely, the issue, however, remains open. For the relevant legal analysis see, for example, Ryan Abbott, ‘I Think, Therefore I Invent: Creative Computers and the Future of Patent Law’, *Boston College Law Review* 57 (2016).

217 Nietzsche, *The Joyous Science*, 353.

218 On this topic, see also Wiener’s physiological explanation (Wiener, *Cybernetics*, 156).

219 See, for example, the work of Seeley on honeybees, who gave unique ‘individualising’ colours to each bee so as to observe their behaviour (Thomas D. Seeley, *Honeybee Democracy* (Princeton: Princeton University Press, 2010), 14).

(science fiction) with aliens' (thus non-human) hive-like, interconnected processing in more cases than can be accounted for (e.g. Skynet<sup>220</sup> etc.).

### 5.1/7/2

This political philosophy subscribing to an Aristotelian<sup>221</sup> viewpoint, it is, unavoidably, against the Platonist idea of a unity (taken up, among others, by Spinoza, Hegel, Schopenhauer and even Nietzsche—all important differences among these thinkers taken into consideration), a whole in Nature to which individuals ideally belong (and strive to return).<sup>222</sup>

In the same vein, the claim that humans process information as individuals and not as an indistinguishable unit within a (bee)hive is a hint on Plato's Republic, where predetermined social groups were meant to work together harmoniously within a beehive<sup>223</sup> (see also note 1.10.2).

### 5.1/7/3

Of course, collective societal purposes do exist; however, their formulation, and how they are served by each individual, is a matter of morality and politics.

## On paragraph 8

### 5.1/8/1

On all rational beings always having an objective, see De Jasay: 'Rational beings have objectives they seek to attain, and they deploy their available means in the way they think will maximize the attainment of these objectives'.<sup>224</sup>

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220 James Cameron (dir.), *The Terminator* (Orion Pictures, 1984).

221 'But obviously man is a political animal in a sense in which a bee is not' (Aristotle, *The Politics*, 60 (1253a7)); see also the Foreword.

222 See also note 1/10/2 (as well as 4.1/5/1).

223 Plato, *The Republic*, 247 (520b).

224 Anthony de Jasay, *The State* (Indianapolis: Liberty Fund, 1998), xi.

5.1/8/2 *On the pursuit of happiness*

Admittedly, from this point of view, human happiness, in the sense of the fulfilment of all the objectives of a human, is never attainable. Because of constant new objective-setting, it is condemned to remain forever a pursuit, never to end. The stoic or epicurean *ataraxia* (or Buddhist nirvana), whereby all wishes are (considered) fulfilled, passions quenched and an individual has no more wishes, is not possible. An individual will always have one more, new wish. Hobbes was right to claim that 'felicity is not in a repose of mind satisfied'.<sup>225</sup>

Consider also Mill's famous dictum, 'It is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied'.<sup>226</sup>

**On paragraph 9**

5.1/9/1 *On placing assumptions about human nature at the basis of any political philosophy*

As aptly noted by Oakeshott, in reference to *Leviathan* but in an assertion that is generally applicable to all political philosophy that takes the nature of humans as its starting point, 'The nature of man is the predicament of mankind. A knowledge of this nature is to be had from introspection, each man reading himself in order to discern in himself, mankind. Civil philosophy begins with this sort of knowledge of the nature of man.'<sup>227</sup>

5.1/9/2 *On the connection between assumptions about human nature and political beliefs*

The assumption each of us makes about human nature may help to distinguish (contemporary) right-wing from left-wing ideology. In short, right-wingers assume that humans are born bad; therefore conflict is natural to them, and thus they need to be tamed through religion and the law and rules of human societies, so as for each, individually, to follow a (non-pre-ordained, random) path in life. On the other hand, left-wingers assume that

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225 Hobbes, *Leviathan*, 65; see also note 5.1/1/2, as well as Chap. 25.

226 Mill, *On Liberty, Utilitarianism, and Other Essays*, 124.

227 Michael Oakeshott, 'Introduction to *Leviathan*', in Gabriella Slomp (ed.), *Thomas Hobbes* (London: Taylor & Francis, 2017), 11.

humans are born good, that they will live harmoniously if left alone and that where there is bad in the world (or in their behaviour) those individuals only need to be shown the right path to correct it (with, naturally, the right path being implicitly known—or at least it may be known—to the left-wingers).<sup>228</sup>

### 5.1/9/3 *On conflict being natural to humans*

Hobbes is arguably the main proponent of conflict being natural to humans (war of all against all), with his political philosophy based on that assumption.<sup>229</sup> That being said, he would vehemently object: although ‘men’s natural Disposition is such that if they are not restrained by fear of a common power, they will distrust and fear each other, and each man rightly may, and necessarily will, look out for himself from his own resources’ he believed that ‘it does not follow from this Principle that men are evil by nature’.<sup>230</sup>

It is, however, the finite resources in the analogue world that cause this conflict:<sup>231</sup> As noted by Gauthier,

*Men become enemies because they desire the same commodities as needful to their preservation. If the state of nature were a state of plenty, then men might refrain from hostility. But given that a man, in order to survive, may need some object which is also needed by his fellows, then competition necessarily follows. And as Hobbes shows, diffidence follows competition.*<sup>232</sup>

However, his (ultimately pessimistic) approach to human nature was, naturally, disputed, in favour of some innate altruism in humans too, almost as soon as his book was published.<sup>233</sup>

228 See, for example, Floridi, who connects (schematically) the former with Hobbes and the latter with Socrates (Luciano Floridi, ‘How to Counter Moral Evil: Paideia and Nomos’, *Philosophy & Technology* 35/1 (2022)).

229 On a discussion of the limitations of Hobbes’s approach see, for example, Gregory S. Kavka, ‘Hobbes’s War of All Against All’, in Christopher W. Morris (ed.), *The Social Contract Theorists: Critical Essays on Hobbes, Locke, and Rousseau* (Oxford: Rowman & Littlefield, 1999).

230 Hobbes, *On the Citizen*, II.

231 See also Hume’s approach to scarcity (and the nature of man) giving birth to justice (Hume, *A Treatise of Human Nature*, 547).

232 David P. Gauthier, *The Logic of Leviathan: The Moral and Political Theory of Thomas Hobbes* (Oxford: Oxford University Press, 2000), 18.

233 See, for example, Pufendorf’s ‘sociability (socialitas)’ (Samuel Freiherr Von Pufendorf, *On the Duty of Man and Citizen According to Natural Law*, trans.

Notwithstanding Hobbes' approach, however, the assumption that conflict is natural to humans is common to practically all social contract theorists.<sup>234</sup>

5.1/9/4

On the 'state of nature', see note 8/2/3.

5.1/9/5 *Do humans need a master? The 'crooked timber of humanity'*

What is outlined in the above (note 5.1/9/3) is also useful to address the equally basic question of human nature, of whether humans need a master. The affirmative response to this was most famously claimed by Kant, who thought so because

*[man] certainly abuses his freedom in relation to others of his own kind. And even although, as a rational creature, he desires a law to impose limits on the freedom of all, he is still misled by his self-seeking animal inclinations into exempting himself from the law where he can. He thus requires a master to break his self-will and force him to obey a universally valid will under which everyone can be free.*<sup>235</sup>

In the same vein, Berlin famously expanded upon the 'crooked timber of humanity'.<sup>236</sup>

Notwithstanding others' beliefs on this matter (see also note 5.1/9/2), what is important to note is that these (and our) assumption(s) is/are made

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Michael Silverthorne, ed. James Tully (Cambridge: Cambridge University Press, 1991), 7; or even Locke, *Two Treatises of Government*, 280.

234 See, for example, Kant's 'nation of devils': 'the problem of setting up a state can be solved even by a nation of devils (so long as they possess understanding). It may be stated as follows: 'In order to organise a group of rational beings who together require universal laws for their survival, but of whom each separate individual is secretly inclined to exempt himself from them, the constitution must be so designed that,...', Kant, *Political Writings*, 112. Similarly, see also Rawls's 'circumstances of justice': 'The circumstances of justice may be described as the normal conditions under which human cooperation is both possible and necessary. Thus, as I noted at the outset, although a society is a cooperative venture for mutual advantage, it is typically marked by a conflict as well as an identity of interests' (John Rawls, *A Theory of Justice* (1971) (Cambridge, MA: Harvard University Press, 1999), 109).

235 Kant, *Political Writings*, 46; the same 'narrowness of soul' that is natural to men is used by Hume to justify the emergence of government (Hume, *A Treatise of Human Nature*, 589).

236 Berlin, *The Crooked Timber of Humanity*.

on the basis of the analogue world. It is the analogue world that, until now, humanity has known and dealt with. The digital world is expected to test this assumption in a twofold manner: (1) because information in it is infinite; and (2) because it is a controlled environment (see Chapter 1, pars. 16 and 17 respectively).

### **On paragraph 10**

*5.1/10/1*

On whether states are shaped by their citizens, in the sense that their citizens set the level of processing on their state each time (ultimately leading to the 'character of a (nation) state' or even a Hegelian (Platonist) metaphysical merging of the nation and the state) or whether there are other conditions at play as well (e.g. climate, geography), see Chapter 18.

## *Notes on Chapter 6*

### **On paragraph 1**

6/1/1

Because this is a purely technical approach, any conditions placed on the person of the Being that controls a processing are not important. In other words, the *why* (what purposes did the Being wish to serve when it allowed or prohibited the processing, what reasons it had for its decision etc.) and the *how* (was the Being fully informed? Free in its decision-making?) are not important. At this stage, what is important, other than control itself, is which Being is in a position to give it (see also par. 7).

6/1/2 *The connection with accountability*

The question of whether it is the Being that controls a processing (and allows or prohibits it for another) or the Being that actually carried it out, having requested to do so (because it will, whenever it can), that should be held responsible (i.e. carry any consequences) for a specific processing belongs to the domain of morality. Although this question has been (and is still) answered differently in different states throughout humanity's history, at this stage it only needs to be noted that acceptance of accountability implies individuality (i.e. an acceptance that humans develop individually, see Chapter 5.1, par. 7).

6/1/3 *On the connection of control with sovereignty*

In the case of states, control is connected with sovereignty (see Chapter 16). In the words of Goldsmith, 'For a system to be an independent and absolute one, it is only necessary that there should be no appeal outside it, that it should not be (normatively) dependent, derivative or subordinate.'<sup>237</sup> What is important here, of course, is the content of the parentheses: norma-

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237 Maurice M. Goldsmith, 'Hobbes's "Mortall God": Is There a Fallacy in Hobbes's Theory of Sovereignty?', in Christopher W. Morris (ed.), *The Social Contract Theorists: Critical Essays on Hobbes, Locke, and Rousseau* (Oxford: Rowman & Littlefield, 1999), 30.

tive means visible (legal) subordination. Thus imagined (whether actual or not does not matter) subordination or dependence cannot be accounted for, because it is invariably subjective.

## On paragraph 2

6/2/1

Total control is impossible because the uses of information, even when following purpose, may vary vastly, that is, they cannot be predicted—orcharted (see note 5/2/2, and Chapter 3, par. 4).

## On paragraph 4

6/4/1 *The theory of appropriation; first-acquirer rights*

On Locke's theory of appropriation to justify property, and on the central importance that his explanation holds for his political philosophy, see note 1/16/3.

Consider also Nietzsche's approach to originality:

*What is originality? It is to see something that as yet has no name, that cannot be referred to, even though it is hiding in plain sight. Men as they usually are require a name for a thing before it is visible to them at all. For the most part, those with originality have also been those who gave things their names.*<sup>238</sup>

6/4/2 *Personal information*

Control over newly created information does not mean property. This is most visibly the case with personal information (information relating to an individual, see also note 1/8/1): an individual in the course of his or her life will create information pertaining to him- or herself with the assistance of his or her state, other individuals and so on. Over such newly created information (personal information) the individual has control, that is, he or she can allow or prohibit certain processing operations on the information without, however, having property rights over it (specifically, the information cannot be destroyed by the individual, see Chapter 24,

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238 Nietzsche, *The Joyous Science*, 148.

par. 1). For example, an individual may study to get a degree with the assistance of a university; over such (newly created) degree that individual has control (it can decide who to transmit this information to etc.), without having either total control over it (the university, for example, can always process information on that degree, as it is, after all, the organisation that has awarded it) or property rights to it (for example, the individual cannot decide to destroy the degree).

Accordingly, depending on their state, individuals' control over their personal information may vary from relatively high (in those states where a fundamental right to personal data protection is acknowledged) to practically none (in totalitarian regimes). Variations, however, depend on politics; they do not affect the fact that individuals can exercise control over their (newly created, by them) personal information.

The same is, after all, true for all other information. Individuals can, or cannot, exercise control over it depending on the state in which they live. They can enjoy nature, own land and hold property depending on and to the degree that their state allows them to. The state creates the environment that is the system that first makes possible and then allows the processing of information (see Chapter 11, par. 3, and Chapter 24, par. 6).

### **On paragraph 6**

#### *6/5/1 Access (and use) of information as moral considerations*

On the connection between access (use of information—and thus control!) and morality, see note 4/5/1.

#### *6/5/2*

On (human) rights actually constituting permissions (and not claims) to process, see Chapter 22.

### **On paragraph 7**

#### *6/7/1 On hierarchy, categories and human understanding*

Although the way in which humans understand and process information remains elusive (its charting, however, being a pressing matter in view of the advent of artificial intelligence) and not relevant to this political

philosophy (because it is processing of immaterial information; it concerns us only if and when it materialises), some assumptions have been made on this matter, even dating as far back as Plato: '[the world] must have been constructed on the pattern of what is apprehensible by reason and understanding and eternally unchanging'.<sup>239</sup> After all, it is in Aristotelian categories (and categorisation)<sup>240</sup> that we seem to be processing information.

In spite of this topic being (vastly) outside the purposes and scope of this book, there is perhaps some relevance to examining whether hierarchy is natural to humans (as stated, for example, in Plato's, 'each and every assembly and gathering for any purpose whatever should invariably have a leader'<sup>241</sup>).

Hierarchy is a system visibly recognisable by (pack) animals. It is also present in the basic human unit of organisation, meaning the family: the parents decide for their children. It is because of these two reasons that hierarchy is considered in this book to be a system of organisation not only natural and understandable<sup>242</sup> to humans but perhaps preferable (presumably for these exact reasons) to any other (as is, after all, attested by the internal file organisation of our first computers—or any other information-processing equipment for that matter).

It is also quite possible that only by first acknowledging hierarchy could humans understand equality, its opposite and the alternative organisational system.

See also note 9/3/1.

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239 Plato, *Timaeus and Critias*, 41 (*Timaeus*, 29a).

240 See his book *Categories* (Aristotle, *The Complete Works of Aristotle: The Revised Oxford translation*, ed. Jonathan Barnes (Princeton: Princeton University Press, 1984), 3–24). This methodology has been also unavoidably reflected in software programming.

241 Plato, *The Laws*, 72 (639c).

242 See also, for example, the naturally born hierarchy in the 'snow-society' of Uruguayan Air Force Flight 571 (and its inevitable comparison with the 'Lord of the Flies' society), in *Economist*, 'Álvaro Mangino Survived a Plane Crash by Eating His Companions', 15 May 2025.

### On paragraph 8

#### 6/8/1 *On (state, political) power*

On the true meaning of ‘power’ in the socio-historical context and Tolstoy’s desperate struggle to explain it (social contract theory providing no useful insights to this end), see Berlin’s relevant analysis, which concludes that ‘we remain in the dark’.<sup>243</sup>

### On paragraph 9

#### 6/9/1 *Not a matter of quantity*

Power does not equate to having too many controls, that is, having control over too many processing operations—or, in any case, many more than the average in any given state. Too many controls is simply that, a quantitative, subjective and arbitrary criterion.

#### 6/9/2

Power, particularly in the context of state theory, has been approached mostly as ‘the ability of one actor to make another actor behave in a certain way’.<sup>244</sup> However, this is, in fact, control: control invariably makes another Being or Thing behave in a certain way.

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243 Berlin, *The Hedgehog and the Fox*, 28.

244 Sørensen, ‘The Transformation of the State’, 16.

## Notes on Chapter 7

### On paragraph 1

7/1/1 Two clarifications: (a) on the state, (b) on citizenship

Two important clarifications need to be borne in mind at all times with regard to the terms 'state' and 'citizenship' as used throughout this book (on the term 'platform', see Chapter 7.1).

First, with regard to *states*: a very broad notion of the state is used in this book, to include any organised society or polity that has ever existed among humans.<sup>245</sup> It therefore includes, among others, prehistoric tribes, Iron Age empires, city-states and empires of classical antiquity, medieval feudal states, and anything and everything up to modern (nation) states.

However, the states meant here are not necessarily the states that our (own contemporary) vision and reading of history would perhaps recognise. For example, the Persian Empire was not a single state, that is, Xerxes of Persepolis was never bothered about the names and citizenship of the newborn children in Egypt (or in far less populous or organised parts of his vast empire): these were organised locally, notwithstanding whether the Persian Empire expected allegiance and taxes to be paid. The same is equally true for Caesar Augustus and his famous subject (but not citizen) Jesus Christ—the latter's state was, famously, Nazareth, not Rome. For any specific individual who was born under the Persian Empire or Imperial Rome,<sup>246</sup> the state was the unit (local, regional or otherwise) that managed the personal information of its citizens in a manner distinct from that of

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245 In the past there has been considerable debate as to whether states existed in primeval societies, with views ranging from complete affirmation (see, for example, Eduard Meyer, *Geschichte des Altertums* (Stuttgart: J. G. Cotta, 1937), 11) to a nuanced approach (see, for example, Robert H. Lowie, *The Origin of the State* (New York: Russell & Russell, 1962), 44) to outward rejection (which is, however, frequently politically motivated, see, for example, Pierre Clastres, *Society Against the State: Essays in Political Anthropology*, trans. Robert Hurley and Abe Stein (New York: Zone Books, 1987)). This debate seems, however, to have settled down, marking a clear distinction between modern and ancient states (see Chap. 8, par. 3).

246 Imperial Rome did not give all its citizens citizenship until 200 AD, just before its demise (and as a desperate measure to postpone it), under the leadership of Emperor Caracalla.

other states, irrespective of how we, based on our own assumptions and prejudices, would characterise it today (or at any other time).<sup>247</sup>

Second, with regard to *citizenship*: citizenship is viewed in this book not as a full set of rights that is granted to certain individuals within a state (as the ‘right to have rights’<sup>248</sup>), but merely as the formal link of each individual with its state. It is ultimately a means of unique identification, the only way that has been possible until now, together with a name, to uniquely identify an individual in space and time.<sup>249</sup>

Citizenship within this meaning can be achieved through mere registration in any state records. In essence, the approach advocated here is

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247 Of broader importance for the analysis of this book is the idea of the state penetrating widespread communities. It appears that for much of human history the state was in practice a centralised administration that struggled to but frequently did not succeed in penetrating local, dispersed communities. This seems to have been equally as true for prehistoric and ancient states (Walter Scheidel, ‘Studying the State’, in Peter Fibiger Bang and Walter Scheidel (eds.), *The Oxford Handbook of the State in the Ancient Near East and Mediterranean* (Oxford: Oxford University Press, 2013), 17) as for medieval states. Only with the emergence of the nation-state was control restored (or gained, depending on the viewpoint)—a trend immensely assisted (or facilitated, again depending on the viewpoint) by information technology.

While this may be true, it does not affect the premise of this theory. States may not have had much impact on the lives of villagers in distant villages, but they did provide the two basic functions described in this book: states named individuals and processed these individuals’ information.

Individuals have had names since the time that humans first emerged on earth. Even if those names were given locally, in a village distant from the state epicentre, with no record made whatsoever by the state to which this village nominally belonged, the fact remains that any individual belonging to this village would, during his or her life, have needed to transact and thus pay taxes, may have been married or would perhaps have had to enlist in an army of some kind. In all those circumstances (the occurrence of at least one such event should be considered a certainty, even in prehistoric societies) state use and processing of the name and other relevant information would have taken place. In other words, whenever a peasant, who may have lived alone in the mountains, entered a village to sell some goods or buy something (more so if he/she got married or was enlisted), state processing of this individual’s information (and thus state existence) occurred. It is from this point of view that states need to be considered natural to humans, notwithstanding time, history, or personal statuses and conditions.

248 See Richard Bellamy, *Citizenship: A Very Short Introduction* (Oxford: Oxford University Press, 2008), 15.

249 Therefore, Bellamy’s definition of citizenship (‘a condition of civic equality. It consists of membership of a political community where all citizens can determine the terms of social cooperation on an equal basis’; Bellamy, *Citizenship*, 17) should be cut short for the purposes of this book: citizenship, here, consists only of membership of a political community.

described in modern theory as registration (and the relevant *right to registration*). However the word citizenship is retained in this text because (a) in the vast majority of cases (admittedly, at the expense of oppressed minorities) it does also reflect whatever citizenship rights were conferred from time to time by states on their citizens, (b) it is much more than simple registration (although at a bare minimum registration suffices) and (c) the right to registration<sup>250</sup> has only recently been acknowledged. (The latter most notably in the 1966 UN International Covenant on Civil and Political Rights, which was adopted by the General Assembly in 1966 and entered into force in 1976, when 35 state parties had ratified it. The second clause of Article 24 of the Covenant states that ‘every child shall be registered immediately after birth and shall have a name.’)

Basically this political philosophy supports the idea that citizenship can be had at the time of every individual’s birth.<sup>251</sup> Registration can have happened. It is expected for every human at birth. Whether it actually happened<sup>252</sup> and in which form depended (and to some extent continues

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250 The right to registration has been defined by Szezreter as ‘the human right to an identity. To be precise, the right to have one’s legal identity and relationship to significant others publicly recognized, securely registered, and accessible for personal use’ (Simon Szezreter, ‘The Right of Registration: Development, Identity Registration, and Social Security—A Historical Perspective’, *World Development* 35/1 (2007), 67). As also noted by Szezreter, ‘Registration at birth (or its absence) is the outcome of an ancient historical legacy. Systems for recording the existence of persons have existed throughout history for a number of reasons, the most well-known being military and tax-related censuses’ (Simon Szezreter, ‘Children With a (Local) State: Identity Registration at Birth in English History Since 1538’, in Jacqueline Bhabha (ed.), *Children Without a State: A Global Human Rights Challenge* (Cambridge, MA: MIT Press, 2011), 333).

251 Consider also Kant’s approach (albeit similar, when it comes to definition of the ‘fatherland’) to this matter within his overall social contract theory: ‘A country (territorium) whose inhabitants are fellow citizens of one and the same commonwealth by the very nature of the constitution (i.e. without having to exercise any particular right, so that they are already citizens by birth) is called the fatherland of these citizens’ (Kant, *Political Writings*, 160).

252 On the topic of statelessness, the UN claims that in 2023 more than 1% of the earth’s population comprised ‘refugees, displaced and stateless people’ (UN High Commissioner for Refugees, *Global Appeal* (2023)), out of which more than 4.3 million are estimated to be stateless. Statelessness is dealt with in two UN Conventions: the 1954 Convention relating to the Status of Stateless Persons and the 1961 Convention on the Reduction of Statelessness.

How can this book’s basic premise (that states are natural to humans because they are necessary for them to communicate by means of a name and citizenship granted to each one at birth) align with the UN’s findings and efforts? In essence, the UN’s

to depend) on the political circumstances of that time (and on the political agenda of those retrospectively assessing those circumstances).

Accordingly, the complexity of the registration, its actual content or role is of no importance to this political philosophy.

Similarly, if multiple states have records for the same individual, these are either competing or hierarchical. In the first case a state is challenging for the citizenship of an individual, either with or without the knowledge of that individual. In the second case, a later record in one state will point to a previous one in another for validation purposes (see also Chapter 8, par. 6).

### 7/1/2 On the definition of the state

The state is a notoriously difficult term to define, in spite of the numerous attempts that have been made to do so.<sup>253</sup> At the end of the day it seems

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approach is connected with nationality and a (full or less full) set of rights conferred to individuals based on their place of residence. A stateless person is anyone considered ‘a national by any State under the operation of its law’ (Article 1, par. 1 of the 1954 Convention). Accordingly, the 1961 Convention asks that ‘A Contracting State shall grant its nationality to a person born in its territory who would otherwise be stateless’ (Article 1, par. 1). See also Siegelberg: ‘when no country recognizes you as a citizen, you are a person of no nationality’ (Mira Siegelberg, *Statelessness: A Modern History* (Cambridge, MA: Harvard University Press, 2020), 19); as well as Conklin: ‘Without legal recognition as members of a state, stateless persons have been described as outsiders to a legal order, domestic or international’ (William Conklin, *Statelessness: The Enigma of an International Community* (Oxford: Hart, 2014), 3).

In the same context, the UN’s claim that statelessness ‘is really an anomaly, a mistake in our governance systems, where people fall through the cracks’ (UNHCR, *Global Appeal* (2023), 67) reflects this book’s approach.

Statelessness is sometimes also connected with lack of registration (see, for example, Wendy Hunter, *Undocumented Nationals: Between Statelessness and Citizenship* (Cambridge: Cambridge University Press, 2019), 9). Lack of registration is apparently a phenomenon that exists even in the modern world. However, in all these cases the lack of registration is a choice of the parents or the persons concerned, caused by objective or subjective obstacles (see Wendy Hunter, *Undocumented Nationals*, 9), and not the lack of an option to register altogether.

253 By 1931 around 150 definitions had been catalogued in political science alone (David Easton, ‘The Political System Besieged by the State’, *Political Theory* 9/3 (1981), 307). Or, in the words of Kaspersen et al., ‘ultimately, the moment of a state’s definitional ideality “never comes”’ (Lars Bo Kaspersen, Jeppe Strandsbjerg and Benno Teschke, ‘State Formation Theory: Status, Problems, and Prospects’, in Lars Bo Kaspersen and Jeppe Strandsbjerg (eds.), *Does War Make States? Investigations of Charles Tilly’s Historical Sociology* (Cambridge: Cambridge University Press, 2017), 6). See also Bourdieu, who thought of the state as the ‘unthinkable object’, because we are ‘in a

to be among these terms that everyone thinks they understand when they are referred to,<sup>254</sup> but the meaning of which they cannot otherwise put into words. For some, in view of the accumulated difficulties over the ages, there is no reason to try to define the state,<sup>255</sup> preferring instead to focus on specific aspects of it.<sup>256</sup>

The term as such was first used in the Middle Ages,<sup>257</sup> but entered the mainstream only during the seventeenth century.<sup>258</sup> Scholars of the state customarily distinguish between modern and ancient states (see Chapter 8, par. 3). However states, at least in the meaning examined here, are as old as humanity. The list of definitions that follows (notes 7/1/3 to 7/1/12) is merely indicative and by no means claims comprehensiveness or suitability for the purpose of analysing the various other approaches to defining the state.

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certain sense penetrated by the very thing we have to study' (Bordieu, *On the State*, 3).

- 254 Famously applied to 'civilisation' by Sir Kenneth Clark (standing in front of Notre-Dame in Paris in the first episode of the television series *Civilisation* and saying, 'What is civilisation? I don't know. I can't define it. But I think I can recognise it when I see it, and in fact I'm looking at it now', *Civilisation*, season 1, episode 1, "The Skin of Our Teeth," written and presented by Kenneth Clark, directed by Michael Gill, aired February 23, 1969, on BBC2). The connection has not been missed in modern state theory either, see, for example, Colin Hay and Michael Lister, 'Introduction: Theories of the State', in Colin Hay, Michael Lister and David Marsh (eds.), *The State: Theories and Issues* (London: Bloomsbury, 2006), 1. Pierson makes a similar connection with the famous US Supreme Court dictum on pornography (Pierson, *The Modern State*, 4).
- 255 See, for example, the 'overdue interment of the state' in Easton, 'The Political System Besieged by the State', 320.
- 256 Something that has also been claimed for the EU itself, in view of similar definitional difficulties. See, for example, James A. Caporaso, 'The European Union and Forms of State: Westphalian, Regulatory or Post-Modern?', *JCMS: Journal of Common Market Studies* 34/1 (1996), 30. However, the informational approach seems to make possible the definition of both (on the EU, see Chapter 19).
- 257 Notwithstanding, of course, Plato's and Aristotle's works, where the *polis* is, to all intents and purposes, the state (hence, 'political philosophy', 'political theory' etc.). See also Jellinek: "Political" means "of the state"; the concept of the political already contains the concept of the state' (quoted in Anter, *Max Weber's Theory of the Modern State*, 35).
- 258 See, for example, Ernst-Wolfgang Böckenförde, *Religion, Law, and Democracy: Selected Writings*, ed. Mirjam Künkler and Tine Stein (Oxford: Oxford University Press, 2020), 152.

7/1/3 *The Weberian definition (and epigones)*

Although one-line definitions of the state have generally not fared well,<sup>259</sup> it is likely that today the most influential<sup>260</sup> definition of the modern state is that offered by Weber, who famously defined it as follows: ‘an institutionally organised political enterprise will be called a state if, and to the extent that, its administrative staff can lay claim to a monopoly of legitimate physical force in the execution of its orders’.<sup>261</sup>

Even if one chooses to overlook the fact that this formulation is more of a criterion than a definition,<sup>262</sup> leaving for the state the rather bland definition of an ‘institutionally organised political enterprise’, it cannot be missed that this is a pragmatic definition. It sets a bar (the monopoly of legitimate physical force)<sup>263</sup> and then checks to see who has claim to it; it could be the state, but it could also be other actors (e.g. violent separatist groups).<sup>264</sup>

The ‘legitimacy’ criterion is even more troubling, because it turns the argument on its head: who is it that sets the law that says that the state (or anything at all, for that matter) is ‘legitimate’?<sup>265</sup> The state clearly predates the law (see Chapter 20, par. 6).

In any event, in spite of its dominance today, Weber’s definition does not go uncriticised. For example, Giddens accused him (probably justifi-

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259 See Pierson, *The Modern State*, 2.

260 A generally accepted claim; in any event see, for example, Pierson (*The Modern State*, 2); Mann (Michael Mann, ‘The Autonomous Power of the State: Its Origins, Mechanisms and Results’, in John A. Hall *States in History* (London: Basil Blackwell, 1986), 53); or Hay and Lister (‘Introduction’, 4).

261 Max Weber, *Economy and Society: A New Translation* (Cambridge, MA: Harvard University Press, 2019), 136.

262 See note 7/1/6, and also Anter, *Max Weber’s Theory of the Modern State*, 11.

263 On the connection with violence see, for example, Andreas Anter, ‘The Modern State and Its Monopoly on Violence’, in Edith Hanke, Lawrence Scaff and Sam Whimster (eds.), *The Oxford Handbook of Max Weber* (Oxford: Oxford University Press, 2019), 229.

264 On the (assumedly different definitional approach) of the state being the organisation that enjoys primacy within (effectively, exercises coercion over) a territory among all other organisations, see note 11/2/1.

Pragmatism is, of course, employed in the approach of this book too (see note 7/1/1); however, in this case attention is given to an objectively identifiable threshold (who registers the individual), whereas in Weber’s case the criterion is impossible to establish objectively.

265 See also Luhmann’s critique of legitimacy (who is it that makes it legitimate?) (Niklas Luhmann, *Die Politik der Gesellschaft* (Frankfurt am Main: Suhrkamp, 2002), 193).

ably) of time-specificity, namely that his definition is of the modern (essentially, post-Westphalian) state.<sup>266</sup> And the definition has not remained unimproved: see, for example, Bourdieu, who added ‘symbolic’ to ‘physical violence’.<sup>267</sup>

Notwithstanding the above, Weber’s definition remains the most influential today, in the sense that its emphasis on regulation and coercion is echoed in a number of more recent definitions too.<sup>268</sup>

#### 7/1/4 Hobbes and his *Leviathan*

Hobbes’ influential state definition, or depiction, imagined an artificial, omnipotent, mechanical or biological construction, complete with head, arms and body.<sup>269</sup>

Regardless, however, of visualisation for illustration purposes (something also adopted in the case of information platforms and archipelagos, after all!), it would seem that, to Hobbes, ‘the state is a voluntary society constituted for mutual protection’,<sup>270</sup> thus moving the burden of definition from ‘state’ to ‘society’ (crucially, at all times implying an artificial construction; see also note 13/2/1).

#### 7/1/5 The Hegelian, idealist definition

For Hegel (and idealists), ‘the state is the divine will, in the sense that it is spirit present on earth, unfolding itself to be the actual shape and organisation of a world’.<sup>271</sup> In the same vein, neo-Hegelians view the state as ‘a structure of judgments about what is true and what is not’ or as ‘a systematic structure of ideas on the basis of which the individuals of a

266 Anthony Giddens, *The Nation-State and Violence* (Cambridge: Polity Press, 1985), 18.

267 Bourdieu, *On the State*, 4.

268 See Scheidel, ‘Studying the State’, 5.

269 Hobbes, *Leviathan*, 7. For other machine-like visualisations of the state see, for example, Anter, *Max Weber’s Theory of the Modern State*, 196.

For mythical representations of the state or perceptions of the state as a living organism see, for example, Robert M. MacIver, *The Modern State* (London: Oxford University Press, 1962), 449 (and also note 11/4/5).

270 Prakash Sarangi, ‘Notion of “State” in John Rawls’ Theory of Justice’, *The Indian Journal of Political Science* 52/2 (1991), 195.

271 Hegel, *Outlines of the Philosophy of Right*, 244.

society seek jointly to control the physical objects that surround them'.<sup>272</sup> In other words, 'a state exists chiefly in the hearts and minds of its people; if they do not believe it is there, no logical exercise will bring it to life'.<sup>273</sup>

On Hegel's idealism and the state, see also Chapter 13, par. 7.

### 7/1/6 Definition of the state through a list of criteria

Within the Weberian context of providing criteria for the characterisation of a (or any) social group as a state, an important trend is to add to the list (the so-called institutional approach; see also note 7/1/7). A set of criteria is therefore provided by a number of scholars which, if met cumulatively, turn any given social group into a state.

For example, Runciman lists four such criteria:

*[N]ecessary and jointly sufficient conditions for the emergence of a state from nonstate or stateless forms of social organization: specialization of governmental roles; centralization of enforceable authority; permanence, or at least more than ephemeral stability, of structure; and emancipation from real or fictive kinship as the basis of relations between the occupants of governmental roles and those whom they govern.*<sup>274</sup>

Strayer lists durability, spatial fixity, permanent and impersonal institutions, final authority and loyalty.<sup>275</sup> Dryzek and Dunleavy offer 'seven defining characteristics of the state', and five 'associated' ones.<sup>276</sup> Of course, the list

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272 Peter J. Steinberger, *The Idea of the State* (Cambridge: Cambridge University Press, 2005), 21.

273 Joseph Reese Strayer, *On the Medieval Origins of the Modern State* (1970) (Princeton: Princeton University Press, 2005), 5. See also Weber: 'if we ask to what in empirical reality the thought "state" corresponds, we encounter an infinity of diffuse and discrete active and passive human actions, relations regulated factually and legally, sometimes unique, sometimes recurrent in character, all held together by an idea, a belief in actually or normatively prevailing norms and relations of rule of man by man. This belief is partly consciously held as a developed idea, partly dimly perceived, partly passively accepted and reflected in the most varied forms in the heads of individuals who, if they really did clearly think this idea through, would have no need of the "general theory of the state" that they sought to elaborate' (quoted in Anter, *Max Weber's Theory of the Modern State*, 96).

274 Walter G. Runciman, 'Origins of States: The Case of Archaic Greece', *Comparative Studies in Society and History* 24/3 (1982), 351.

275 Strayer, *On the Medieval Origins of the Modern State*, xv.

276 John S. Dryzek and Patrick Dunleavy, *Theories of the Democratic State* (New York: Palgrave Macmillan, 2009), 3.

can also comprise only one, inclusive, criterion, as, for example, in Fried's 'stratification'.<sup>277</sup>

On the inadequacy of using a list of criteria to define the state, see Hegel: 'By listing attributes, principles, etc., no progress can be made in assessing the nature of the state'.<sup>278</sup>

Nevertheless, the attempt to define states through a list of characteristics inevitably makes a list contemporary (or at least post-Weberian, if not post-Westphalian). For example, Sorensen, following Cox, conceptualises (modern) states as 'historical structures made up of material capabilities, ideas and institutions. The "institutions" level focuses on the government; the "ideas" level concentrates on nationhood (i.e., the community of people in the state); and the "material capabilities" level focuses on the economy'.<sup>279</sup>

### 7/1/7 Definition of the state through its functions

For a functional (as opposed to an institutional) approach to defining the state, see, for example, Mann (who tried to combine the two in his attempt to define state power)<sup>280</sup> or Nettl, who identifies the following functions that the state (normally) serves: the process of administration, the institutionalisation of sovereignty, sectoral autonomy, law enforcement, social goal attainment and representation.<sup>281</sup> In the same vein, Dunleavy and O'Leary distinguished between organisational and functional definitions, claiming that organisational definitions regard the state as a set of governmental institutions, while functional definitions define the state as either a set of institutions which carries out particular goals or by the consequences of a state's actions, for example, the maintenance of social order.<sup>282</sup>

A functional approach to defining the state (an 'apparatus') was also adopted by Marxism (see note 13/8/1).

However, a functionalist approach to defining the state cannot give us a definition but only an explanation of a definition (what the state

277 Morton H. Fried, 'The State, the Chicken, and the Egg or What Came First?', in Ronald Cohen and Elman R. Service (eds.), *Origins of the State: The Anthropology of Political Evolution* (Philadelphia: Institute for the Study of Human Issues, 1978), 36.

278 Hegel, *Outlines of the Philosophy of Right*, 242.

279 Sørensen, 'The Transformation of the State', 13.

280 Mann, 'The Autonomous Power of the State', 112.

281 Nettl, 'The State as a Conceptual Variable', 579–90.

282 Patrick Dunleavy and Brendan O'Leary, *Theories of the State: The Politics of Liberal Democracy* (London: Macmillan Education, 1987), 1.

does), which should have preceded the description of the function. In other words, a (or any) functionalist approach describes the functions of something, but that ‘something’ needs to have been defined beforehand. In addition, function is ultimately connected to purpose<sup>283</sup>—but the state has no specific purpose whatsoever (see Chapter 11, par. 7).

### *7/1/8 Definition of the state through the ‘forms of state’*

Another popular way to define the state is through the ‘forms of state’. As noted by Caporaso, “‘Forms of state’ is an umbrella concept that encompasses many historically specific state structures, e.g. the pluralist state, night-watchman state, predatory state and welfare state.”<sup>284</sup> In any case, there is a rich bibliography that distinguishes categories of states according to various sets of criteria (other than historical), for example, Adam’s ‘familial’ (patrimonial) state,<sup>285</sup> Weber’s research on ‘bureaucratic’<sup>286</sup> states, Bluntschli’s ‘legal’ states<sup>287</sup> and so on.

Other than the temporality (and ultimately historical nature) of this approach, it should be noted that it implies a conflict, a struggle among social actors (e.g. social classes, professional groups or political parties) in which the winner gets to ‘form’ the state (or at least its basic character) according to its will. In this way the state is thus perceived as a pawn in social struggles (see also Chapter 11, par. 4).

Although this approach to defining the state suffers from the same difficulties as the functionalist approach (see note 7/1/7), it is pertinent in the sense that it assumes that ‘there is no such thing as “a state,” or even a “modern state” or “nation-state”, with trans-historical and cross-societal

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283 See, for example, Heller’s claim that the ‘function’ of the state is ‘the autonomous organization and activation of the social process over the state’s territory, grounded in the historical need that some *modus vivendi* be achieved among the contrasting interests operating in a given section of the globe’ (quoted in Gianfranco Poggi, *The Development of the Modern State: A Sociological Introduction* (Stanford: Stanford University Press, 1978), 96), thus effectively giving a purpose to the state. On the relationship between function and purpose, see note 11/7/2.

284 Caporaso, ‘The European Union and Forms of State’, 31.

285 Julia Adams, *The Familial State: Ruling Families and Merchant Capitalism in Early Modern Europe* (Ithaca: Cornell University Press, 2005).

286 See Anter, *Max Weber’s Theory of the Modern State*, 171.

287 Johann Kaspar Bluntschli, *The Theory of the State* (1875) (Ontario: Batoche Books, 2000), 66.

significance'.<sup>288</sup> By denying a distinction between modern and ancient states, this approach offers a unitary approach to the nature of the state throughout human history (see also Chapter 8, par. 3).

### 7/1/9 *Definition of the state through political ideologies*

A more recent popular way to define the state has been to reverse the question: instead of defining the state, scholars describe the state on the basis of a theory or an ideology. In this way we can speak of the state under Marxism or Social Democracy or conservatism or feminism or religious fundamentalism (see, for example, Pierson's 'state-society relationship'<sup>289</sup>).

### 7/1/10 *The connection of states with violence*

The distinctive characteristic in Weber's definition is physical force, violence. Perhaps this is the basic reason why this definition has been so successful, too: it identifies a characteristic that seems all too familiar to each of us who is living in a state today (and since the time it was formulated). Similarly, sociology seems to accept that 'the ultimate and, no doubt, the oldest means of social control is physical violence.'<sup>290</sup>

In the same vein, that of placing violence at the basis of state explanation, North et al. have taken Weber's approach to its limits, claiming the existence of a 'natural state' that 'reduces the problem of endemic violence through the formation of a dominant coalition whose members possess special privileges'.<sup>291</sup> This positions states as being natural to humans because violence is endemic. This is, after all, Abrahms' approach too, when he claims that 'The study of the state, seen thus, would begin with the cardinal activity involved in the serious presentation of the state: the legitimating of the illegitimate.'<sup>292</sup>

On the connection of the state with coercion (the state being the organisation exercising supreme coercion over all other organisations within a territory), see note 11/2/1.

288 Caporaso, 'The European Union and Forms of State', 31.

289 Pierson, *The Modern State*, 58; see also Dryzek and Dunleavy, *Theories of the Democratic State*, 226.

290 Berger, cited in Gianfranco Poggi, *The State: Its Nature, Development, and Prospects* (Cambridge: Polity Press, 1990), 5. This therefore supports Poggi's approach to states, as an expression of political power.

291 Wallis and Weingast, *Violence and Social Orders*, 18.

292 Abrams, 'Notes on the Difficulty of Studying the State', 76.

7/1/11 *The connection of states with war*

Tilly's famous dictum that 'war made the state, and the state made war'<sup>293</sup> has opened up a fruitful path to further research on this basis.<sup>294</sup>

In the same vein, see also Tilly's own definition of the state: '[a]n organization which controls the population occupying a definite territory is a state insofar as (1) it is differentiated from other organizations operating in the same territory; (2) it is autonomous; (3) it is centralized; and (4) its divisions are formally coordinated with one another'.<sup>295</sup>

7/1/12 *The connection of states with justice*

The connection of states with justice (whatever justice may mean to anyone,<sup>296</sup> for example, for Spencer justice is 'to defend the natural rights of man—to protect person and property—to prevent the aggressions of the powerful upon the weak', whereby 'the administration of justice is the sole duty of the state.'<sup>297</sup>) has famously been made by Rawls; however this is a connection steeped in time,<sup>298</sup> and is not missing from current theory either.<sup>299</sup>

7/1/13 *What the problem with the current definitions is*

The biggest problem with all the existing definitions of the state is that (with a few exceptions, see Hegel or Marxism<sup>300</sup>) they treat the state as one option among many. As noted by Nettl, 'What social scientists have done

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293 Charles Tilly, *The Formation of National States in Western Europe* (Princeton: Princeton University Press, 1975), 42.

294 See, for example, David Webster, 'Warfare and the Evolution of the State: A Reconsideration', *American Antiquity* 40/4 (1975); Ronald Cohen, "Warfare and State Formation: Wars Make States and States Make Wars," in *Warfare, Culture, and Environment*, ed. R. Brian Ferguson (Orlando, FL: Academic Press, 1984), 329–58.

295 Tilly, *The Formation of National States in Western Europe*, 70.

296 Consider Aristotle: 'Justice is not the same in every constitution, so that differences in notions of justice are inevitable' (Aristotle, *The Politics*, 329 (1309a33)). See also note 13/2/2.

297 Herbert Spencer, *The Man Versus the State: With Six Essays on Government, Society, and Freedom* (1884), ed. Eric Mack (Indianapolis: Liberty Classics, 1981), 86.

298 Plato, *The Republic*, 57 (369a).

299 See, for example, Miller, *Political Philosophy*, 74.

300 Which are, however, equally problematic for their own specific reasons—see Chap. 13, pars. 7 and 8 respectively.

is to provide a framework of analysis in which the state is one possible concretization of structures, one political dimension, or even one system of social bonds—but not the only one.<sup>301</sup> Of course, this invites the question of whether other options exist too; if yes, what are they? Where have they been in all these thousands of years of recorded human history?

Another important problem with current definitions of the state is that they confuse the state with its citizens. For sociologists, the state is inseparably connected with humans, it is, in fact, humans acting in some capacity.<sup>302</sup> This is evident in Poggi's approach: 'the modern state is perhaps best seen as a complex set of institutional arrangements for rule operating through the continuous and regulated activities of individuals acting as occupants of offices'.<sup>303</sup> It is also the basic problem with Nettl's functionalist definition, that the state 'is a collectivity that summates a set of functions and structures in order to generalize their applicability'—he insists that the state is a group of people, a collectivity, which later forces him to admit that 'the state is a "sociocultural phenomenon"'.<sup>304</sup>

Humans, however, are not the state—the state is not a group of people, it is not a social group. It is much more than that, it is all the Things and Beings on its information platform.<sup>305</sup> In fact, it is through the state that Things and Being receive their meaning—as is evident for that state's citizens and from their point of view (see also the Unique Human Observer Perspective, note 1/1/1).

In addition, by conflating the state with its citizens, we run the risk, first, of confusing the state with its government or its public sector (see Chapters 12 and 11, par. 4, respectively) and, second, of 'humanising' the state, giving it an anthropomorphic nature (see also note 11/4/5).

### 7/1/15 A Janus?

The inconclusiveness of the various, partial approaches to the state leads to Bourdieu's assertion that 'The state is a Janus about which it is impossi-

301 Nettl, 'The State as a Conceptual Variable', 559.

302 See, for example, Durkheim's 'the state is the very organ of social thought' (Émile Durkheim, *Professional Ethics and Civic Morals* (1904), trans. Cornelia Brookfield (London: Routledge, 2018), 50).

303 Poggi, *The Development of the Modern State*, 1.

304 Nettl, 'The State as a Conceptual Variable', 565.

305 See also R. F. Stalley, 'Introduction', in Aristotle, *Politics*, trans. Ernest Barker, ed. R. F. Stalley (Oxford: Oxford University Press, 1995), xi.

ble to state a positive property without simultaneously stating a negative property, a Hegelian property without a Marxist property, a progressive property without a regressive and oppressive property. This is troubling for those people who like to think that everything will turn out rosy'.<sup>306</sup> This thus opens the door to relativity.

### On paragraph 3

#### *7/3/1 State omnipresence*

On state omnipresence, consider, 'Always and in every case, the state is an institution of unlimited scope, an institution that in principle knows no external constraints other than those imposed upon it by sheer physical nature'.<sup>307</sup> Of course, the fact that the state is omnipresent in each and every human communication, makes it also omniscient: because it warrants each and every human communication and interaction it is unavoidably competent (or, better put, co-competent) in it.

The state's omnipresence does not make it omnipotent, however, because, quite simply, the state does not have a will (see also Chapter 16, par. 3). By the same token, its omnipresence does not imply a path to totalitarianism or serfdom (which is a matter of government and political system, see Chapters 12 and 12.1, respectively).

### On paragraph 4

#### *7/4/1 On naming and name studies*

On naming and name studies (the study of onomastics), see, for example, *The Oxford Handbook of Names and Naming*.<sup>308</sup>

On the registry ('naming system') being necessary to any naming system see, for example, Bowman et al.<sup>309</sup>

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306 Bourdieu, *On the State*, 98. The Janus analogy was not absent from Marxist theory, either (see Nicos Poulantzas, *State, Power, Socialism* (1978), trans. Patrick Camiller (London: Verso, 2001), 12).

307 Steinberger, *The Idea of the State*, 183.

308 Carole Hough (ed.), *The Oxford Handbook of Names and Naming* (Oxford: Oxford University Press, 2016).

309 Mic Bowman, Saumya K. Debray and Larry L. Peterson, 'Reasoning About Naming Systems', *ACM Transactions on Programming Languages and Systems* 15/5 (1993).

7/4/2

The effect of public recognition, and its existence throughout human history, has been noted : ‘Thus, that central aspect of registration which concerns public recognition may well constitute an eternal and universal characteristic of all human communities, with or without literacy or a technology of written records.’<sup>310</sup>

7/4/3 *The state can be understood as a natural blockchain*

In an informational approach, the state can be understood as the first, and only natural, blockchain.<sup>311</sup>

The blockchain *per se*, as a technical construct recently developed, is not natural but artificial, in the sense that it requires (human) creation and maintenance (which explains why it remains mostly used for the management of money).

7/4/4

On cosmopolitanism (i.e. the existence of only one state for all humans) and why it cannot work, see Chapter 19, par. 10.

7/4/5

On statelessness, see note 7/1/1.

## **On paragraph 5**

7/5/1 *On anonymous communication*

Although of course possible, anonymous communication is based on (the assumed existence of) named humans.

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310 Keith Breckenridge and Simon Szreter (eds.), *Registration and Recognition: Documenting the Person in World History* (Oxford: Oxford University Press, 2012), 17.

311 On the blockchain, and its definition, see, for example, J. Yli-Huomo et al., ‘Where Is Current Research on Blockchain Technology?—A Systematic Review’, *PLOS ONE* 11/10 (2016); Michael Crosby et al., ‘Blockchain Technology: Beyond Bitcoin’, *Applied Innovation Review* 2 (2016); or Zibin Zheng et al., ‘An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends’, paper presented at the 2017 IEEE International Congress on Big Data (BigData Congress), Honolulu (2017).

Two individuals choose to communicate anonymously because they are aware that they do have names, that each of them has a unique identifier that they are consciously and deliberately momentarily foregoing (for their own aims and purposes). In other words, the term anonymous would not exist to characterise a marginal, momentary and fleeting case if it was not the exception to the rule, an antithesis that would not exist without the thesis (so, in opposite terms, not in the sense of black/white or hot/cold, but in the sense of dressed/undressed or willing/unwilling).

Anonymous communication is of marginal use to humans, and only in special cases. It is difficult to imagine anonymous communication extending to more than a few hours (keeping in mind that even on the Internet people have aliases) and a specific scope (the communication of travel instructions, discussions 'with strangers' during travel or brief co-habitation (e.g. in cafes, bars)). In practice, all of human life (transactions and relationships) is carried out between identified or identifiable individuals. Humans invariably interact and transact making use of their names, choosing to hide them from others only when they have good reason to do so (for example, in cases of political dissent within oppressive regimes, for therapeutic purposes, for confessional purposes within a religious context etc.).<sup>312</sup> Whatever the case may be, for the purposes of this analysis, anonymity is the choice of an individual who invariably already has a name.

### On paragraph 8

7/8/1

On the right to registration, see note 7/1/1.

7/8/2

Immigrants (meaning non-citizens, but not slaves) have always existed within states. They have faced difficulties within their adopted states that would sound familiar in any historical period. For example, Aristotle was an immigrant in Athens; Athenians never really liked him or trusted him (conversely, while Plato was an Athenian, he apparently never liked nor trusted Athenians).

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312 Anonymous, 'To Reveal or Not to Reveal: A Theoretical Model of Anonymous Communication', *Communication Theory* 8/4 (1998).

## On paragraph 10

7/10/1

Consider also Kant's concluding methodological approach:

*If a person cannot prove that a thing exists, he may attempt to prove that it does not exist. If neither approach succeeds (as often happens), he may still ask whether it is in his interest to assume one or other possibility as a hypothesis, either from theoretical or from practical considerations. In other words, he may wish on the one hand simply to explain a certain phenomenon (as the astronomer, for example, may wish to explain the sporadic movements of the planets), or on the other, to achieve a certain end which may itself be either pragmatic (purely technical) or moral (i.e. an end which it is our duty to take as a maxim).<sup>313</sup>*

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313 Kant, *Political Writings*, 173.

## *Notes on Chapter 7.1*

### **On paragraph 2**

7.1/1/1

The definitions quoted are from the Cambridge<sup>314</sup> and the Oxford<sup>315</sup> dictionaries respectively.

7.1/1/2

On the links between the Internet and the sea, see note 1/11/3.

### **On paragraph 3**

7.1/3/1 *On the EU's definition of online platforms*

The EU's definition usefully covers what it is that states basically do, as seen in Chapter 7, par. 6: they store and disseminate personal information at the request of their citizens. However, this definition needs to be amended in two ways, one less obvious than the other. Information platforms may also create information, either alone (for example, on the platform itself) or with their users (for example, all the personal information that would not have been created if the platform did not exist). Therefore, states not only store and disseminate but also create information with or for their citizens. The less obvious way in which the law's definition of information platforms should be amended is that the state is not a service provider (see note 11/4/9).

7.1/3/2

On the business model of 'free', see Andreson's (introductory, but also first-to-identify) analysis.<sup>316</sup>

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314 Definition of platform from *Cambridge Advanced Learner's Dictionary & Thesaurus*, 'Platform' (Cambridge: Cambridge University Press).

315 *Oxford English Dictionary*, 'Platform (*n.*), sense I.1.a'.

316 Chris Anderson, *Free: The Future of a Radical Price* (New York: Hyperion, 2010).

7.1/3/3

On the characterisation of users of contemporary online information as ‘digital serfs’ on account of the limited freedoms and opportunities for information processing they are afforded by their operators, see, for example, Fairfield’s analysis,<sup>317</sup> as well as Chapter 17, par. 11.

### **On paragraph 7**

7.1/7/1

On a spatial representation of the state, see also Mann: ‘I shall argue in this chapter that the state is merely and essentially an arena, a place ... and yet this is the very source of its autonomy.’<sup>318</sup>

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317 Joshua A. T. Fairfield, *Owned: Property, Privacy, and the New Digital Serfdom* (Cambridge: Cambridge University Press, 2017).

318 Mann, ‘The Autonomous Power of the State’, 112.

## Notes on Chapter 8

### On paragraph 1

8/1/1

Against the claim that states are natural to humans, it could be argued that, even under the approach advocated in this book, states are still products of human mental activity and thus artificial (i.e. it is not claimed in this book that states grow in Nature).

Notwithstanding the fact that it is not only what grows in Nature that is considered natural<sup>319</sup> to a Being (i.e. nests being natural to birds; see also Chapter 5, par. 5), states are natural because they individualise humans by means of a name.<sup>320</sup> And there is no myth, archaeological finding or recorded history in humanity where names have not been used by humans (in other words, a nameless human, a human with no name is unheard of).<sup>321</sup>

If names have, therefore, been used by humans since the time they gained self-consciousness (and as a means thereof), and it is states that make the use of names possible, states are as natural to humans as their names (and human language, through which names are expressed).

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319 For example, on 'mankind's natural inheritance of artifice' (referring to religion and human reasoning), see Oakeshott, *On Human Conduct*, 33. Of course, in this case, states go well beyond (actually, they precede) that point, because to Oakeshott the 'seed of religion, like that of reasoning, is in the nature of man' (ibid.), whereas here it is claimed that humans, in order to reason and believe, first need to have become individuals—through their states.

320 On humans having names simply because they are humans, see Chap. 8.1, par. 1.

321 See, for example, Gilgamesh (Anonymous, *The Epic of Gilgamesh: The Babylonian Epic Poem and Other Texts in Akkadian and Sumerian*, trans. Andrew George (London: Penguin Classics, 1999)), or, from a different point of view, Adam and Eve (see also footnote nr. 348).

8/1/2

This philosophy therefore, corrects, by way of complementing Aristotle's claim that states are natural to humans:

*When several villages are united in a single complete community, large enough to be nearly or quite self-sufficing, the state comes into existence, originating in the bare needs of life, and continuing in existence for the sake of a good life. And therefore, if the earlier forms of society are natural, so is the state, for it is the end of them, and the nature of a thing is its end.*<sup>322</sup>

Aristotle's thinking, steeped as it was in his teleology,<sup>323</sup> is, however, flawed, above all else because he artificially put an end to state development with the city-state, so as to prove his point, despite the fact that the city-state has since been greatly surpassed—and may even have been so in his day (see also note 13/2/2).

In the same vein, states are natural to humans but do not predate them: their creation was simultaneous, turning humans into individuals (and thus not into either animals or God(s)). In this way, the basic question of political philosophy, of whether the individual or society (the state) came first, and therefore which one precedes the other (and thus is entitled to take precedence)<sup>324</sup> is resolved: neither.

Similarly, Aristotle was correct to claim that 'the man without a polis is like a hand without a body',<sup>325</sup> in spite of his inability to justify this claim, because, quite simply, a nameless, non-individualised human is unthinkable—one has never existed (i.e. any such human would be a Thing, just as Aristotle claims a 'stone hand' is<sup>326</sup>). Humans are 'social animals'<sup>327</sup> not simply because they live in states (*poleis*), but because they cannot live (a meaningful, human life) outside them (see note 8/1/3).

Other issues with Aristotle's political philosophy can be addressed in the same manner: the hand–body metaphor used to describe the relationship

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322 Aristotle, *Politics*, trans. Benjamin Jowett (Oxford: Clarendon Press, 1885), 3 (1252b).

323 Similarly, the nature of a Thing is not its end—its nature depends on its actual uses, which can vary vastly (see note 4/5/1).

324 See, for example, Aristotle, *Politics*, II (1253a 18).

325 *Ibid.*, II (1253a18–23).

326 *Ibid.*, II (1253a18), and this is, of course, the case after a human dies, see Chap. 2, par. 3.

327 In other words, political animals (*zoon politikon*), see also note 0/1/9.

between individuals and their state does not mean that ‘the individual has no value apart from his contribution to the larger whole which is the city’,<sup>328</sup> because the state has no purpose (see Chapter 11, par. 7) and states need their citizens (to augment their information processing; see Chapter 10). Accordingly, there is no chasm between ‘Aristotle’s political philosophy [and] the individualism which has dominated western political thought since the Renaissance’,<sup>329</sup> because the state is a natural individualisation mechanism for humans.

### 8/1/3 On (a/the) meaningful life

The term ‘meaningful life’ whenever used in this book to characterise human life denotes the life we all know and hopefully appreciate (hence, ‘meaningful’, at least from the Unique Human Observer Perspective, see note 1/1/1), and not the life of an animal, organisation or artificial Being.<sup>330</sup>

Although what is considered ‘meaningful’ in human life can vary vastly throughout space and time, never meeting agreement even within the same state, the term here is used in the most general and neutral way,<sup>331</sup> that is, as the only way of life humans know and have recorded in their history, which is gravely different both to any other life known to humans and to any other life that could have potentially been lived by humans (e.g. as nameless (numbered, managed in bulk) members of a hive). The lives of any and all (lucky or unlucky, privileged or non-privileged) groups of humans in all periods of human history are therefore considered ‘meaningful’ here, regardless of how we assess the quality, content and context (and perhaps meaningfulness from an ethical point of view, which, however, lies outside the scope of this book) of their lives.

Accordingly, any human life that is not identifiable, meaning pertaining to non-individuals, is not a ‘meaningful’ human life. Luckily such examples cannot be found historically (because a name and citizenship are automatically provided to all at birth), but can only be found in dystopian literature

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328 Stalley, ‘Introduction’, xxviii.

329 Ibid., xxx.

330 See also Chap. 1, par. 9, as well as Chap. 2, par. 12.

331 Therefore, not taking Aristotle’s meaning of the ‘good life’ (see, Aristotle, *Politics*, 319 (1252a)), which, for Aristotle, provides the purpose for the state (ibid., 357 (1280b29)), nor the *summum bonum* (see note 0/1/7).

(science fiction). A non-individualised human, a human without need of a name would, as correctly put by Aristotle, either be an animal or a God.<sup>332</sup>

### 8/1/4 On language and the state

It is not possible to determine whether language preceded the state or vice versa.<sup>333</sup> If it is true that humans, as their distinctive characteristic, have been a speaking animal<sup>334</sup> from early on in the emergence of *Homo sapiens*,<sup>335</sup> was the development of human language made possible because each human had a name that was warranted by a state (presumably then no more than a family or a small group of people), or did the fact that human language is creative<sup>336</sup> lead to the need for each human to have a different name? Whatever the case may be, language and state are intertwined notions, in the sense that the one developed alongside the other (and, in their particular, time-specific appearances, each appeared and disappeared in human history time and again).<sup>337</sup>

332 Aristotle, *Politics*, 322 (1253a25).

333 Consider also Gombrich: 'We do not know how art began any more than we know how language started' (Gombrich, *The Story of Art*, 39.)

334 Tellingly, Marx and Engels thought that it was 'production' that distinguished humans from animals ('Men can be distinguished from animals by consciousness, by religion or anything else you like. They themselves begin to distinguish themselves from animals as soon as they begin to produce their means of subsistence, a step which is conditioned by their physical organization. By producing their means of subsistence men are indirectly producing their actual material life' (Karl Marx and Friedrich Engels, *A Critique of the German Ideology* (1846), trans. Tim Delaney and Bob Schwartz (London: Progress Publishers, 1968), 7). Ultimately, any 'distinctive characteristic' identified to distinguish between humans and other animals underlies the respective philosophy (e.g. Reason—see also Chapter 4.1, par. 8—etc.). Consider also Nietzsche, who based his 'sovereign individual' on the ability to 'make promises' (Nietzsche, *On the Genealogy of Morals*, 41).

335 See D. Crystal and R. H. Robins, 'Language', *Encyclopedia Britannica*.

336 As to the basic difference from other animals, see *ibid*.

337 See also Hobbes who, unable to solve the above problem using the principle of priority, said that 'The first author of Speech was God himself' (Hobbes, *Leviathan*, 20); Locke, a few years later, basically agreed with him on God being the provenance for language (and sociability, 'a necessity to have fellowship with those of his own kind') (John Locke, *An Essay Concerning Human Understanding* (1690), ed. Roger Woolhouse (London: Penguin, 2004), 527). To contractarian authors, thinking in 'state of nature' terms, language is the origin of conflict—it is only when language was invented that conflict began (see, in particular, Rousseau: 'It would be sad for us to be forced to admit that this distinctive and nearly unlimited faculty [speech] was the source of all man's unhappiness and, in time, draws him out of

On states actually making human language possible, see Chapter 8, par. 4.

On language approached from an informational perspective as an artificial Being, see Chapter 2, par. 16.

Within the context of politics, the government (which should not be confused with the state; see Chapter 12, par. 1) may assign one or more purposes to a language. Essentially states-as-shaped-by-governments and language have coexisted in a relationship that is sometimes harmonious and sometimes conflictual, if not antagonistic, throughout human history. There have been times when new states were formed through the actions of their governments on the basis of the language spoken by their citizens, times when states died for exactly this same reason, happily multilingual states and staunchly ‘one state, one language’ states—all of these, however, are the result of political choices, that is, of the relationship between a government (not a state) and a language.<sup>338</sup>

In the same context, the purposes assigned to a language by a government may vary considerably, to include anything from the formation of a state culture (see also note 8.1/4/4) to standardisation for administrative purposes,<sup>339</sup> or even the oppression of unwanted minorities. Of course, the political potential of language has never been absent from theory. For example, Hobbes considered that ‘the Sovereign is the ultimate authority over the meanings of the words that we use.’<sup>340</sup>

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that primordial condition in which he would savour peaceful and innocent days; and that it was this faculty, causing over the centuries his acumen and his errors, his vices and virtues to flourish, which eventually makes man a tyrant over himself and nature’; Jean-Jacques Rousseau, *Discourse on the Origin of Inequality* (1754), trans. Franklin Philip (Oxford: Oxford University Press, 1994), 34).

338 See Chap. 8.1, par. 4.

339 On orthography, see, for example, Pierre Bourdieu, ‘Rethinking the State: Genesis and Structure of the Bureaucratic Field’, in George Steinmetz (ed.), *State/Culture: State-Formation After the Cultural Turn* (Ithaca: Cornell University Press, 1999), 53; in the same context, see also James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), 53.

340 Christopher Brooke, ‘Introduction’, in Thomas Hobbes, *Leviathan* (London: Penguin, 2017), xxii. In the *Elements of Law*, Hobbes imagined that ‘In the state of nature, where every man is his own Judge, and differeth from [other altered from others], concerning the names [and altered from And] appellations of things; and from those differences, arise quarrells, and breach of Peace, it was necessary, there should be a Common measure of all things, that might fall in Controversie; as for example, of what is to be called Right, what Good, what, vertue, what Much, what little, what meum, and Tuum, what a Pounce, what a Quart etc.’ (Thomas Hobbes,

8/1/5

On how an approach based on a political theory of information differs from other state formation and state justification theories, see Chapter 13.

## On paragraph 2

### 8/2/1 *On family and the state*

States are as natural to humans as family. In essence, families are themselves Beings, in fact organisations, that emerged naturally for humans and serve no specific purpose, that is, they were not created consciously by any Being for a specific purpose (see note 5/2/2). As such, the similarities with the Being that is the state are clear.

These similarities have not, of course, been missed by either political philosophy or science. In fact, political philosophy imagined, and anthropology confirmed<sup>341</sup> (in terms of organisational units), that the precursor of states is the family. It is apparent that as humanity took its first steps, the role of the state was played by families. This is, after all, an assumption

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*Elements of Law* (1650), ed. Johann P Sommerville (Oxford: Oxford University Press, 2024), 281).

See also Bourdieu, who claims that the state provides ‘the fundamental consensus on the meaning of the social world’ (Bourdieu, *On the State*, 4), or, in other words, that ‘the state is the name that we give to the hidden, invisible principles—indicating a kind of *deus absconditus*—of the social order’ (ibid., 6). He also considers the state as the ‘producer of principles of classification’ (with further references to Durkheim’s ‘primitive forms of classification’ and Cassirer’s ‘symbolic form’ (ibid., 165).

Nietzsche grasped the controlling power necessary to form language, but connected it with ‘the right of the masters’ and ‘the power of the rulers’ (Nietzsche, *On the Genealogy of Morals*, 13).

See also Orwell’s ‘Newspeak’ in his novel *Nineteen Eighty-Four* (George Orwell, *Nineteen Eighty-Four* (London: Constable, 2021)), Scott’s use of the term ‘legibility’ when it comes to ‘state projects’ (Scott, *Seeing Like a State*, 9), and Bourdieu’s ‘operations of totalization and objectification’ (Bourdieu, ‘Rethinking the State’, 61).

341 See, for example, Service: ‘But if over 99 percent of human history has passed before the origin of institutionalized political systems, how did societies govern themselves? Obviously they must have done essentially the same way that our domestic families and modern primitive societies do, entirely by means of personal-social sanctions and by familistic allocations of authoritative status (as to elders) to praise, blame, and settle disputes’ (Elman R. Service, *Origins of the State and Civilization: The Process of Cultural Evolution* (New York: Norton, 1975), 9).

shared by, among others, Hobbes,<sup>342</sup> Locke<sup>343</sup> and Rousseau,<sup>344</sup> the idea having originated with Aristotle.<sup>345</sup> What is effectively imagined is that humans were at first organised into small family groups headed by the father (patriarch), where, as Rousseau put it, 'none alienates his freedom except for reasons of utility'.<sup>346</sup>

The above does not contradict the approach of states as information platforms. In these small extended families and tribal communities, the role of the state as the identification mechanism was held by the family. However they were organised and regardless of the size of the populace, the fact remains that within these families names were given, and warranted, by the family-state, which also created the information processing environment (language) suitable for its (few) members to live in. Or, in other words, families, as states, were small enough units to warrant a unwritten name and an obvious, and equally unwritten, citizenship—that is, belonging to a family that was distinct and different from another, neighbouring, family. Of course, as soon as the groups got bigger and writing was invented, states were formed (see Chapter 9).

8/2/2

On names and naming, see Chapter 8.1.

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342 Hobbes, *On the Citizen*, 112.

343 Locke, *Two Treatises of Government*, 301.

344 Jean-Jacques Rousseau, *Discourse on Political Economy and the Social Contract* (1762), trans. Christopher Betts (Oxford: Oxford University Press, 1994), 46. See also, for example, Nettl who claimed that for Hegel, 'The basic power of the state for him rested on love—with hypnotic and erotic overtone. The state becomes a transfer and extension, in terms of social progress, from the relationship between children and parents in a family to the relationship of subjects and state in society' (Nettl, 'The State as a Conceptual Variable', 573).

345 Aristotle, *Politics*, 9 (1252b2).

346 Rousseau, *Discourse on Political Economy and the Social Contract*, 46. See, however, Laslett's clarification (while introducing Locke's theory) that it is a mistake to suppose that patriarchal power is political power (Laslett, 'Introduction', 107).

## 8/2/3 On the 'state of nature'

There is much speculation about humans' 'state of nature'. This phrase refers to an imagined and assumed<sup>347</sup> prehistoric time when humans roamed the world (exactly how, however, is anybody's guess, as even our earliest archaeological findings are dated too late for this imaginary age),<sup>348</sup> and which constitutes the political philosopher's cornerstone.

Images and perceptions differ vastly among political philosophers as to how exactly humans lived in this state of nature, and are suitably constructed each time to suit the theory that is put forward. Iconically, Hobbes' state of nature is contrasted with Rousseau's.<sup>349</sup> According to the former, human life in a state of nature would be 'war of all against all',<sup>350</sup> whereas for the latter, 'men who are living in their original condition of independence are not in a sufficiently continuous relationship with each other for a state either of peace or war to exist, they are not naturally enemies.'<sup>351</sup> (Both however acknowledge the role of family as the first political society, see note 8/2/1.) Locke adopts an intermediate position (or rather a position that justifies Rousseau's approach, which came later), that men in a state of nature are judges of their own case (whether right or wrong, according to Reason; see note 4.1/1/1), a condition that may or may not lead to war (war being only incidental).<sup>352</sup>

Behind each of the above lines of thought, a series of philosophers, and theories, line up. The underlying, basic idea is, of course, a disagreement

347 On whether Hobbes differs (for example, to Rawls), see Richard Tuck, 'Introduction', in Thomas Hobbes, *On the Citizen*, trans. Michael Silverthorne, ed. Richard Tuck (Cambridge: Cambridge University Press, 1998), xxvi.

348 From this point of view, the 'state of nature' is a secularist's equivalent to the Garden of Eden. Similarly, from a religious viewpoint, in Genesis God created, and named, Adam (Genesis 2:19), and then 'Adam named his wife Eve' (Genesis 3:20), providing us, therefore, with the beginnings of the religious explanation of the state as an information platform, granting humans a name and a citizenship.

349 For a 'bridging' interpretation, see, however, Peter J. Steinberger, 'Hobbes, Rousseau and the Modern Conception of the State', *The Journal of Politics* 70/3 (2008), 596.

350 Hobbes, *On the Citizen*, 60. In any event, consider also Plato's 'in cold fact all states are by nature fighting an undeclared war against every other state' (Plato, *The Laws*, 54 (626a)).

351 See Rousseau, *Discourse on Political Economy and the Social Contract*, 51, which ultimately supports the theory of the 'noble savage' (ibid., 24). However, see also Christopher Bertram ('Introduction', in Jean-Jacques Rousseau, *Of the Social Contract and Other Political Writings* (1762) (London: Penguin, 2012), xviii) for a (perhaps forced) attempt to create a system using Rousseau's state of nature explanation.

352 Locke, *Two Treatises of Government*, 276 and 78.

as to whether humans are, by nature, born evil or not.<sup>353</sup> Indicatively and broadly (the list by no means claiming to be comprehensive or even accurate), behind the Hobbesian approach of violence being essentially natural, line up Weber's definition of the state in the early twentieth century (see also note 7/1/3), Tilly's 'states make war and war makes states' (see note 7/1/11), and North's explanation of natural states based on violence.<sup>354</sup> Along the same lines comes Nietzsche's characteristically graphic approach:

*I used the word 'state': it goes without saying what I mean by that—some horde or other of blond predatory animals, a race of conquerors and masters which, itself organized for war and with the strength to organize others, unhesitatingly lays its fearful paws on a population which may be hugely superior in numerical terms but remains shapeless and nomadic.*<sup>355</sup>

Behind the Rousseau's approach line up a mix of philosophies, such as Spencer's laissez-faire concept<sup>356</sup> and Rawls' 'original position', which presupposes anything but a violent way out from the 'veil of ignorance'.<sup>357</sup> Others, for example, Hume, deny its reality, while their thinking remains firmly within the bounds of social contract theory (assuming thus that the contract was entered immediately, naturally, among humans as soon as they formed a society).<sup>358</sup>

Whatever the case may be, what is important to note for the purposes of this analysis is that all of the above approaches fall under social contract theory (see also note 13/2/1). According to all of them, it was insecurity or difficulties or even a need for collaboration to achieve higher ends that led to the (artificial!) formation of the state, through a contract among consenting humans.

An original position, a clean slate, a point-zero, has not only been crucial to every political philosophy since Plato, but is also key in religion and mythology. This is how all natural disaster (flooding) stories, for example in

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353 See also Chap. 5.1, par. 9. The question, of course, is not absent from Eastern philosophies either (in Confucianism, see, for example, Dingxin Zhao, *The Confucian-Legalist State: A New Theory of Chinese History* (Oxford: Oxford University Press, 2015), 333).

354 North, Wallis and Weingast, *Violence and Social Orders*.

355 Nietzsche, *On the Genealogy of Morals*, 66.

356 Spence, *The Man Versus the State*, 197.

357 Rawls, *Justice as Fairness*, 14.

358 Hume, *A Treatise of Human Nature*, 544.

Greek mythology, the Old Testament or Plato's Laws,<sup>359</sup> can be explained, too: they offer a clean starting point for humans to make anew their decisions, change their ways and, apparently, agree on new conditions for their lives.

The limitations of all 'state of nature' theories are easy to identify; not only are they assumed and completely imaginary, but, more importantly, they are also malleable to whatever theory (or religion) they later come to justify. In other words, they put the cart in front of the horse (i.e. they take for granted that a social contract or an original position exists, hence there must have been a 'state of nature' before that).

On the contrary, if seen from an informational point of view, a 'state of nature' is not necessary for the role of states as information platforms for their citizens, because, from this perspective, their existence is natural to humans: states came to life as soon as humans gained self-consciousness and started to communicate with each other. While, therefore, social contract theory needs an imagined state of nature for humans in order to construct its state models, such an exercise of imagination (which ultimately very much depends on its authors' political beliefs each time) is not necessary for the approach taken by this book.

#### *8/2/4 On the so-called early societies*

In contrast to the discussion of the state of nature (see note 8/2/3) is the discussion on the so-called early societies. Although the discussion on this topic is also speculative, unlike the case of the 'state of nature', it is not entirely so because this speculation is based on the few archaeological findings we have in our hands that date from the earliest human states. Of course, the two (meaning early societies and the state of nature for humans) are interconnected, because they could coincide—however, importantly, they also may not. The state of nature has been a fixed staple in political philosophy since the time of Plato (as seen in note 8/2/3, although understood differently by each different thinker so as to serve his own conclusions), whereas the existence and life of the early societies are evidenced by dynamic, factual scientific findings that may change fundamentally with any new, important discovery—or not.

Whatever the case may be with regard to prehistoric political communities, Creveld (who groups them into (a) tribes without rulers, (b) tribes

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359 Plato, *The Laws*, 122 (677a).

with rulers (chiefdoms), (c) city-states, and (d) empires) makes it clear that, even during the (initial) time of tribes without rulers, humans were organised into sodalities,<sup>360</sup> therefore having a name and a citizenship afforded by them.<sup>361</sup>

Whatever speculation (which also reflects the speculators' own preferences) there is regarding prehistoric societies where a lack of findings leads to inconclusive results, today it seems that the older idea of a 'natural progression' from simpler to more complex or egalitarian and then to stratified societies has been abandoned in favour of 'multilinear evolution'.<sup>362</sup> Notwithstanding, however, the many and frequently conflicting theories on state creation, Scheidel notes that (as corroborated by pre-Columbian American experience) 'the process of state creation has to be conceived of as systemic'.<sup>363</sup> However, it needs to be emphasised that, unlike his approach, in which 'from very small beginnings some five thousand or more years ago, the state soon became the demographically dominant type of human political organization',<sup>364</sup> with very few people living outside them, the approach of this book is that states exist naturally for humans and that therefore no human has ever been stateless.<sup>365</sup>

### 8/2/5 Why states fail (why do states die)?

Individuality in information processing by humans (see Chapter 5.1, par. 7), as well as humans' natural instinct to compare (see Chapter 5.1, par. 9), also answers the perennial question of why states fail, why states die.<sup>366</sup>

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360 Martin Van Creveld, *The Rise and Decline of the State* (Cambridge: Cambridge University Press, 1999), 3.

361 On registration (rights) in the early societies, see, for example, C. A. Bayly, 'Foreword', in Keith Breckenridge and Simon Szreter (eds.), *Registration and Recognition: Documenting the Person in World History* (Oxford: Oxford University Press, 2012).

362 Scheidel, 'Studying the State', 9.

363 Ibid., 13.

364 Ibid.

365 See also Clive Gamble, 'Hunter Gatherers and the Origin of States', in John A. Hall (ed.), *States in History* (London: Basil Blackwell, 1986), 22.

366 In the meaning of state breakdown or dissolution (see Chap. 15), and not loss of competitiveness or failure of government (for which various causes have been identified, see, for example, Rotberg: 'Nation-states exist to provide a decentralized method of delivering political (public) goods to persons living within designated parameters (borders)' (Robert I. Rotberg, *When States Fail: Causes and Consequences* (Princeton: Princeton University Press, 2004), 3)).

Although according to Scheidel, ‘We must conclude that no single general theory of state breakdown has so far been developed’,<sup>367</sup> comparison among humans, as well as competition for the same objectives in information processing in an informational environment of scarcity (information in the analogue world is finite; see Chapter 1, par. 16), could serve as a general cause for state failure.

While aggression (war) can be easily explained through this approach, when it comes to internal collapse and disintegration (as happened to the Mycenaean states and Western Imperial Rome), including all historical cases where insurgence did not ultimately overturn a result caused by war, it is again the individuals’ need to augment their information processing that drives it. Specifically, in this case, the citizens believe that their information processing needs would be better served under another state (or, alternatively, within the same state, in which they unobjectionably continue to live<sup>368</sup>).

### On paragraph 3

#### *8/3/1 On the distinction between modern and ancient states*

The dominant view (in fact, unanimous, in a rare case of general consensus) in theory<sup>369</sup> distinguishes between modern states, which appeared in

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367 Schiedel, ‘Studying the State’, 41. However he also notes ‘a mismatch between available and required resources—triggered by population growth, or by investment in complexity, or by growing logistical loads’ (ibid).

368 This, therefore, does not account for social revolutions (e.g. the French, Russian and Chinese), because they are state-specific and anti-government, but does account for nation-building revolutions (e.g. the American, Greek, Belgian, Italian etc.) because they led to the formation of new states (see also Chap. 18).

This approach is therefore, in essence, not dissimilar to Luttwak’s ‘ethnogenesis’ (Edward Luttwak, *The Grand Strategy of the Byzantine Empire* (Cambridge, MA: Harvard University Press, 2009), 16).

See also Bense, who claims that in all modern state foundings ‘the state becomes the facilitating agent for the realization of the collective destiny of a people, whether it be their racial superiority within the community of nations, their glorification of a deity through religious discipline, their responsibility for the construction of a proletarian utopia, or the creation and preservation of democratic rights and principles’ (Richard Franklin Bense, *The Founding of Modern States* (Cambridge: Cambridge University Press, 2022), xiv).

369 See, for example, Runciman’s opening sentences on the ‘origins of states’: ‘The plurals in my title carry two implications, neither of which I take to be controversial, if they ever were: first, that there is more than one kind of ‘original’ state; second, that

Western Europe in the eighteenth century and still exist today (often also connected with the nation-state, see Chapter 18), and those preceding them (broadly falling under the categories of kingdoms, empires, city-states and tribes). However, this is a functional distinction; it is true that modern (post-eighteenth century) states are far more organised, in the sense of centralisation, than their predecessors.<sup>370</sup> This development may have followed a change in state thinking, but it might well be that it came about when it did because it was only at this point in time that it was possible to achieve such organisation. Older states may have wanted to have the same level of organisation but lacked the means to achieve it (or to achieve it for prolonged periods of time—there was a time when certain empires were quite organised in the sense of the modern state). Such notable unanimity, one should note, is, however, at odds with the dominant contemporary definition of the state, that of Weber (see note 7/1/3): the legitimate use of force is surely not a time-specific definition.

In any event, the distinction between ancient and modern states is an arbitrary, retrospective one that, aside from being temporary (what will ‘modern’ mean a hundred years from now?), may serve current research or teaching purposes well but at the same time creates expectations of

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there is more than one way in which states originate’ (Runciman, ‘Origins of States’, 351). See also Fried’s ‘pristine states’ (Fried, ‘The State, the Chicken, and the Egg or What Came First?’, 37) or Wright’s ‘primary states’ (Henry T. Wright, ‘Toward an Explanation of the Origin of the State’, in Ronald Cohen and Elman R. Service (eds.), *Origins of the State: The Anthropology of Political Evolution* (Philadelphia: Institute for the Study of Human Issues, 1978), 49). Such consensus has led Passerin d’Entrèves to claim that ‘Let us admit at once that, if the use of this modern word should lead us to ignore the substantial differences which exist between the political structures of those periods and our own, then to speak of the “State” in referring to the Greek polis, or to the *res romana*, or to the medieval *communitas perfecta*, would have to be condemned out of hand as an abuse of language’ (Passerin d’Entrèves, *The Notion of the State*, 34). His point is not unjustifiable, of course, because no one attempts to ignore differences in political structures over time.

On the break of modern state with any such concept in the Middle Ages, see Otto Brunner, *Land and Lordship: Structures of Governance in Medieval Austria* (Philadelphia: University of Pennsylvania Press, 2015), 150, or Passerin d’Entrèves, *The Notion of the State*, 29.

See also MacIver, who makes use of the term ‘state-type’ to cover states throughout human history (MacIver, *The Modern State*, 338).

- 370 On state centralisation, see note 4/12/1. See also Gill, who claims that, ‘what distinguishes the modern state from its earlier forebears is the much enhanced capacity of the modern state to achieve its goals’ (Graeme Gill, *The Nature and Development of the Modern State* (New York: Palgrave Macmillan, 2003), x).

uniqueness that may well be unfounded and unjustified (for instance, the Pharaohs ran an elaborate administrative mechanism within what was basically a nation-state, and which remained effective for thousands of years). Indeed, from an observer's perspective, as Bourdieu noted (carefully keeping away from Western states), 'what is there in common between the military state in Peru, the Aztec state, the Egyptian empire, the Chinese Han empire and the Japanese state after the Meiji restoration?'<sup>371</sup>

### 8/3/2 On the (optimal) size of states

Although the discussion on whether a state needs to have a minimum size has most likely been indirectly resolved by the emergence of nation-states (as nations rarely number a few hundreds or even dozens of individuals), this was an ongoing discussion in the past, with the dominant opinion disassociating the notion of the state from a minimum number of individuals.<sup>372</sup>

The size of the state has been a useful tool, at least for Strayer in his approach to state theory. Strayer calls a 'state' those instances that have succeeded in resolving the problem of the integration of large populations at the cost of a specific work, work that was lacking in small cities, by means of the deployment of specific instances of mobilisation,<sup>373</sup> thus making the size of the state, and the successful overcoming of relevant centralisation problems (and thus centralisation), the critical element of (modern) states.

While this may appear a closed discussion, it may have some relevance when it comes to the distinction between ancient and modern states; although ancient city-states (and a few medieval ones) were small in size and number of citizens<sup>374</sup> they did have a claim to statehood (thus strengthening the idea that states are natural to humans and have always accompanied them as a necessary part of their existence).

371 Bourdieu, *On the State*, 38. However, Bourdieu's state creation theory (that 'the state is the product of the gradual accumulation of different kinds of capital—economic, physical force, symbolic, cultural or informational'; *ibid.* 186) misses the point that, in order for these different kinds of capital to be created in the first place, a state is already necessary (or, that 'gradual' implies an initial starting point of non-existence).

372 In full awareness of the fact that, at the time, they would be placing, for example, the British Empire alongside small communities in the Balkans (see also Lowie, *The Origin of the State*, 7, or Meyer, *Geschichte des Altertums*, 11).

373 Quoted in Bourdieu, *On the State*, 188.

374 In ancient Greece there were city-states of as few as 190 people (Roderick Beaton, *The Greeks: A Global History* (New York: Basic Books, 2021), 78).

On a political plea for small states, see Kohr's maxim: 'there seems only one cause behind all form of social misery: bigness.'<sup>375</sup>

### On paragraph 4

8/4/1

The fiction of the state is not far from the Hegelian approach of the state as an Idea (or a 'social institution', see note 13/6/1; see also Steinberger, a neo-Hegelian, who claims that 'the idea of the state is that the state is an idea'<sup>376</sup>).

Consider also Engels: 'the state presents itself to us as the first ideological power over man'.<sup>377</sup>

### On paragraph 5

8/5/1

Consider also Aristotle's definition of the state as a *koinonia*.<sup>378</sup> The separation of state and society, each to be considered independent of the other and to be examined individually and on its own terms, came much later,<sup>379</sup> perhaps with the advent of Christianity.

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375 Kohr, *The Breakdown of Nations*, xviii. In the same vein, see also Rousseau (most likely writing with Geneva in mind): 'the more the State expands, the more freedom is diminished' (Jean-Jacques Rousseau, *The Social Contract and Other Early Political Writings* (1762), trans. Victor Gourevitch, (Cambridge: Cambridge University Press, 1997), 84.

376 Steinberger, *The Idea of the State*, 15.

377 Quoted in Abrams, 'Notes on the Difficulty of Studying the State (1977)', 64.

378 'Society' (Aristotle, *Politics*, 1252a1), even if translated into English as, for example, 'association' (ibid., 7) or 'partnership' (Aristotle, *Politics*, trans. Harris Rackham (Cambridge, MA: Harvard University Press, 1944), 3); see also Aristotle, *The Politics*, 54.

379 See, for example, Poggi's 'No longer, as with the Greek politeia, is the state directly identified with the society at large' (Poggi, *The Development of the Modern State*, 97); see also note 13/2/2.

On the difficulties that this breakup caused, even in simple terminology, see, for example, Strauss (translating 'city' as 'country' or 'fatherland', as opposed to 'state', in Strauss, *The City and Man*, 30).

Finally, on this (needless) separation, see Abrams's remark: 'It seems necessary to say, then, that the state, conceived of as a substantial entity separate from society has proved a remarkably elusive object of analysis. Aridity and mystification rather than understanding and warranted knowledge appear to be the typical outcomes of work

## 8/5/2 On the definition of society

There are as many definitions of 'society' as books, theories and approaches to it, each one reflecting the viewpoint (and aspirations) of the viewer<sup>380</sup> (a trait which is, after all, not avoided in this book either). For example, Hayek, in the context of his libertarian approach, simply defined society as a 'spontaneous order' of humans.<sup>381</sup> In any event, on the same topic (the definition of 'society'), see, for example, North et al.<sup>382</sup> or Mann.<sup>383</sup>

Under the informational approach advocated in this book, the state is not the result of a social group (or any one of its potential cleavages); on the contrary, the social group is a result of the state<sup>384</sup> (see also note 8/5/3 on smaller social groups within a state/a society). Admittedly, this

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in both the traditions within which the analysis of the state has been regarded as a significant issue in the recent past' (Abrams, 'Notes on the Difficulty of Studying the State (1977)', 61). On a possible way out of this 'dualism', see also Mitchell ('Society, Economy, and the State Effect', 82).

380 See, for example, Kelsen, who looked for an 'element of unity' but who, as a jurist rejected mutual influence or common interests as such an element and traced it instead to law (Kelsen, *General Theory of Law and State*, 183).

381 In Hayek, *Law, Legislation and Liberty*, 44; 'spontaneity' being a major component of his analysis in any case (see, for example, Friedrich A. Hayek, *The Constitution of Liberty: The Definitive Edition*, vol. XVII, ed. Ronald Hamowy (Chicago: University of Chicago Press, 2011), 8).

In any event, again within the context of his political agenda to discredit socialist approaches to society, Hayek was careful to make it clear that state and society are not identical: 'Societies form but states are made' (Hayek, *Law, Legislation and Liberty*, 473).

382 'The aggregate of individuals collectively dealing with a range of individual decisions in such a way to produce common and shared beliefs about choices, consequences, and outcomes' (North, Wallis and Weingast, *Violence and Social Orders*, 13).

383 'A network of social interaction at the boundaries of which occur a relative interaction cleavage' (Michael Mann, 'States, Ancient and Modern', *European Journal of Sociology/Archives Européennes de Sociologie* 18/2 (1977), 263, with further references).

384 Something to which a number of scholars would be adamantly opposed; see, for example, Mann, *The Sources of Social Power*, xi, who also quotes Wallerstein.

is an approach mostly advocated by political philosophers<sup>385</sup> and not by sociologists<sup>386</sup> (see also note 8/5/3).

8/5/3 On 'civil society'

States being natural to humans, there cannot be (at first, at least) any distinction between a state and (its) civil society. Hegel's perception of civil society as '[the stage of] difference which intervenes between the family and the state'<sup>387</sup> was correctly followed by the remark that its 'formation follows later in time than that of the state'.<sup>388</sup> In this way, however, 'civil society' becomes artificial, something devised by individuals; its relationship with 'society' notwithstanding, what is important at this stage is to clarify that 'civil society' in this regard is an artificial societal actor that can (and often does) compete in policymaking, but against the government,<sup>389</sup> not the state. The state is a natural, neutral information processing infrastructure that is managed, and thus political choices about it are made by its

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385 On Hobbes and Rousseau (but not Locke) also considering that the contract (and thus, the state) 'was constitutive of society itself', see David Boucher and Paul Kelly (eds.), *The Social Contract From Hobbes to Rawls* (London: Routledge, 2005), 120.

In the same vein, see also Plato's 'society must be formed of individuals' (Plato, *The Republic*, 277 (544e)). Admittedly, Plato did not make it easy to distinguish between state and society. In *The Republic* (e.g. in 544a) he uses the terms 'polis' and 'politeia', which apparently created numerous difficulties for those translating his work into English. Lee's translation of the two ('state' and 'society', respectively) lies closer to the approach adopted in this book—and is not unjustified because of Plato's intention to connect the character of the state with that of humans (e.g. in 544e). Other translators have translated the term 'state' as 'government' (Rowe in Plato, *The Republic*) and 'city' as 'constitution' (Grube, in Plato, *Plato: Complete Works*, ed. John M. Cooper (Indianapolis: Hackett Publishing, 1997))—all of which are indicative of the difficulties translators are faced with.

386 See, for example, MacIver: 'Before the state began, there was society' (MacIver, *The Modern State*, 446). This thus leads unavoidably to a conflict between state and society: 'When the state in its fullest pride of power claimed to be everything, society still said to it, "thus far and no further"' (ibid).

However, see also Latour 'on the invention of this very notion of society' (Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005), 161.

387 Hegel, *Outlines of the Philosophy of Right*, 181.

388 Ibid.

389 See, for example, Mann's wording 'The central question for us here, then, is what is the nature of the power possessed by states and state elites. In answering I shall contrast state elites with power groupings whose base lies outside the state, in "civil society"' (Mann, 'The Autonomous Power of the State', 54).

government (see Chapter 12). Consequently, it is the government that any concept of ‘civil society’ competes with and not the state.

On the (Marxist approach of the) ‘false separation of state from civil society’, see Poulantzas.<sup>390</sup>

### On paragraph 7

8/7/1

Social (pack) animals, particularly bees, have always fascinated philosophers: see, for example, Cassirer<sup>391</sup> or Wiener,<sup>392</sup> and, above all, Plato;<sup>393</sup> specifically, however, on whether they have a state, see Hobbes.<sup>394</sup>

In an evolutionary context, in the words of Baumeister,

*A certain kind of hairless primate evolved the capacity to create a psychological self so that it could survive and reproduce better. This was part of a broader movement by which these primates (humankind) evolved the ability to create culture because culture enabled them to survive and reproduce far better than any other primates, mainly by creating more resources (starting with food), and sharing them.*<sup>395</sup>

8/7/2

On the claim that it is not Reason that differentiates humans from other animals, see Chapter 4.1, par. 8.

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390 Poulantzas, *State, Power, Socialism*, 50.

391 Cassirer, *An Essay on Man*, 224.

392 Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society* (Cambridge: Riverside Press, 1950), 94.

393 See, for example, Plato, *The Republic*, 520b or 552c; see also Aristotle, *Politics*, 1253a7.

394 Hobbes, *On the Citizen*, 71.

395 Roy F. Baumeister, *The Self Explained: Why and How We Become Who We Are* (Guilford Publications, 2023), 12, with further bibliography.

## *Notes on Chapter 8.1*

### **On paragraph 1**

8.1/1/1

Consider Plato: ‘there is a sense in which nature has not only somehow endowed the human race with a degree of immortality, but also planted in us all a longing to achieve it, which we express in every way we can. One expression of that longing is the desire for fame and the wish not to lie nameless in the grave.’<sup>396</sup>

8.1/1/2

On the state creating the processing environment necessary for its citizens to live in, see Chapter 11, par. 3.

In the philosophy of language, names and naming occupy a central space. The question, in this case, is regarding the relationship between proper names (names of humans, names of cities etc.) and particular objects: do they only refer to them or do they also describe them? The relevant analysis greatly exceeds the scope of this book. However, it needs to be noted that one among its basic approaches lies close to the approach taken in this book. Specifically, as regards proper names, the individual having a name (because it is only individuals that interest us here) is necessarily defined by a cluster or family of descriptions—which are summarised into the given name;<sup>397</sup> the state holds the role of the ‘cluster or family of descriptions’ in this regard.

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396 Plato, *The Laws*, 183 (721c).

397 See, for example, John R. Searle, ‘Proper Names’, *Mind* 67/266 (1958); a view, however, that did not remain uncontested (see, for example, Saul A. Kripke, *Naming and Necessity* (Cambridge, MA: Harvard University Press, 1980), 32).

8.1/1/3

It was Luhmann that first noted the ‘unbeatable advantage’ that names provide for humans.<sup>398</sup>

8.1/1/4

On the fact that states have given names to their citizens even in non-literate times and cultures (mythology included, see also note 8/1/1), see, for example, the primitive West African Ashanti tribe.<sup>399</sup>

8.1/1/5 *Religious names*

It should also be noted that the first thing monks and others entering the religious life lose is their names and nationalities; these are replaced by ones provided by their religion, in essence they become citizens in the state (the City of Man, not the City of God, in the Augustinian meaning).

### On paragraph 3

8.1/3/1 *Naming regulations*

The discussion on naming regulations, meaning the regulations of each state that restrict the names parents can give to their children, largely exceeds the space available in this book.<sup>400</sup>

During antiquity (surnames only being introduced during the Middle Ages) individuals had only one name (e.g. Socrates, Aristotle, Abraham, Sara, Isaak, David); however, in order to achieve individualisation, these were followed by their city (for example, ‘Thucydides the Athenian wrote the history of the war fought between Athens and Sparta’).<sup>401</sup>

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398 Luhmann, *Die Politik der Gesellschaft*, 190.

399 E. Adamson Hoebel, *The Law of Primitive Man: A Study in Comparative Legal Dynamics* (Harvard University Press, 1954), 238.

400 An indicative list may be found at *Wikipedia*, ‘Naming Law’; for the US see, for example, Carlton F. W. Larson, ‘Naming Baby: The Constitutional Dimensions of Parental Naming Rights’, *George Washington Law Review* 80 (2011).

401 Thucydides, *The History of the Peloponnesian War*, trans. Rex Warner (London: Penguin, 1954), 24; see also Peter Widmer, *Der Eigenname und Seine Buchstaben: Psychoanalytische und Andere Untersuchungen* (Bielefeld: Transcript, 2010), 15.

It is not only that humans have had a name and a citizenship in all of recorded history (mythology included, see note 8/1/1) but, most importantly, that the reverse (the de-naming or assignment of a number to human beings or the retraction of citizenship) is reminiscent of totalitarian regimes and the perpetration of crimes against humanity.<sup>402</sup>

#### On paragraph 4

##### 8.1/4/1

The finding that it is states that create the processing environment necessary for humans to live in, a process that in turn becomes self-referential, helps to resolve Bourdieu's basic difficulty: 'To endeavor to think the state is to take the risk of taking over (or being taken over by) a thought of the state, that is, of applying to the state categories of thought produced and guaranteed by the state and hence to misrecognize its most profound truth.'<sup>403</sup>

##### 8.1/4/2

On the use, and importance, of names, see Nietzsche: 'This has caused me the greatest difficulty, and continues to cause me the greatest difficulty: to bear in mind that what things are called is unspeakably more important than what they are.'<sup>404</sup>

##### 8.1/4/3

On the relationship of language with the state (as well as with its government), see note 8/1/4.

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402 See the use of 'prisoner numbers' in Auschwitz-Birkenau (*Auschwitz.org*, 'Prisoner Numbers').

403 Bourdieu, 'Rethinking the State', 52.

404 Nietzsche, *The Joyous Science*, 75.

### 8.1/4/4 On culture and the state

Certain scholars claim that the state is responsible for the ‘constitution and regulation of social identities, ultimately of our subjectivities’,<sup>405</sup> making it thus a set of cultural forms.<sup>406</sup> While the importance of the cultural role of the state cannot be underestimated (and is certainly compatible with its role as an information processing platform, because human culture is, ultimately, a large dataset), this approach does not account for state creation (if the state is a set of cultural forms, how did these cultural forms develop in the first place?).

On the wider topic of the relationship between state and culture, see Steinmetz.<sup>407</sup>

## On paragraph 7

### 8.1/7/1 Pseudonymity and anonymity in the digital world

A lot of effort has been put into the formulation of personal data protection law to define when anonymity actually exists both in the analogue and the digital worlds. The case is not yet closed.<sup>408</sup> For the moment, the defining line is relative to the potential de-anonymiser: if that party can with some modest effort identify the anonymised individual then no anonymity exists. It appears that, as with security, we can never have 100 % anonymity.

On anonymous communication, see also note 7/5/1.

Of course, the fact of anonymity *per se* in the digital world also needs to be noted. This is not an obvious development, nor one that should be taken for granted. In the analogue world, anonymous communication is of limited use and of a limited term. The digital world being artificial and completely controlled (see Chapter 1, par. 17), anonymity could have been excluded from it. However, it was not. Also, because the law so allows, anonymity (or pseudonyms) in a specific relationship could presumably continue forever (in the end contradicting its main purpose, that of actual individual obfuscation, i.e. by creating a new identity).

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405 Philip Corrigan and Derek Sayer, *The Great Arch: English State Formation as Cultural Revolution* (London: Blackwell, 1985), 2.

406 See also Bourdieu, *On the State*, 141.

407 George Steinmetz, *State/Culture: State-Formation After the Cultural Turn* (Ithaca: Cornell University Press, 1999).

408 There is little point in including here references to a long, and ongoing, discussion; see its latest iteration in the European Data Protection Board’s ‘pseudonymisation guidelines’, issued on 17 January 2025 (Guidelines 01/2025).

### 8.1/7/2 Names in science fiction

If science fiction serves to illustrate how humans see themselves from a (safe) distance, what is noteworthy is that non-human entities do not have names; only humans (or ‘aliens’, therefore humanised Beings) do. Most of the time, robots and other machines (the effigies of artificial Beings; see Chapter 2, par. 12) are identified by their type, not by their name—for example, C-3PO or R2-D2 in Star Wars.<sup>409</sup>

### 8.1/7/3 Obfuscation

In the digital realm, with the assistance of computer programs, more than one name, or unique identifier, per individual is possible (although, of course, these are traceable back to the actual individual at all times). Many exchanges among individuals are unnecessarily based on names, in fleeting transactions. One does not need to use a name to reserve a table in a restaurant or to order a drink or in a priority queue. The importance of not actually using your name when not necessary (in a way reminiscent of ‘thou shalt not speak His Name’) has already been acknowledged<sup>410</sup>—here only the fact of its existence also in the digital world (see also note 8.1/7/1) needs to be noted.

## On paragraph 9

### 8.1/9/1

On the history of the Internet Corporation for Assigned Names and Numbers (ICANN), the successor of Internet Assigned Numbers Authority (IANA), see, for example, the relevant Wikipedia or Britannica entries;<sup>411</sup>

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409 George Lucas (dir.), *Star Wars: A New Hope* (20<sup>th</sup> Century Fox, 1977).

410 On obfuscation see, for example, Finn Brunton and Helen Nissenbaum, *Obfuscation: A User’s Guide for Privacy and Protest* (Cambridge, MA: MIT Press, 2015).

411 See *Wikipedia*, ‘ICANN’, and M. Hall, ‘ICANN’, *Encyclopedia Britannica*, respectively.

on state takeover, and the broader topic of transnational private regulation, see, for example, Cafaggi.<sup>412</sup>

There is, of course, a rich bibliography as well as case law on domain names.<sup>413</sup>

## On paragraph 10

### 8.1/10/1

On the legal treatment today of artificial Beings, specifically their connection with the legal status of slaves, see, for example, Pagallo.<sup>414</sup>

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412 Fabrizio Cafaggi, 'Transnational Private Regulation: Regulating Global Private Regulators', in Sabino Cassese (ed.), *Research Handbook on Global Administrative Law* (London: Edward Elgar, 2016).

413 For example, see Jeanette Soderlund Sause and Malin Edmar, *Domain Names: Strategies and Legal Aspects* (London: Sweet & Maxwell, 2018).

414 Ugo Pagallo, 'Apples, Oranges, Robots: Four Misunderstandings in Today's Debate on the Legal Status of AI Systems', *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 376/2133 (2018).

On the need for AI individualisation, see Vagelis Papakonstantinou, 'The AI Act and a (Sorely Missing!) Right to AI Individualization; Why Are We Building Skynet?', *European Law Blog* (16 July 2024).

## *Notes on Chapter 9*

### **On paragraph 1**

9/1/1

Today we believe that human language developed around 150,000 to 200,000 years ago, or even earlier than that. Whatever the case may be, states materialised in the analogue world as soon as these first humans were able to identify themselves with a name and speak the words of their group (tribe or extended family), which were different from those of any other group of humans they encountered.

As soon as (most likely, at the same time) they added the names of animals, plants and tools to their language skills, the state as an information platform was born (see par. 2).

Agriculture and writing followed, around 150,000 years later (around 15000 BC and 5000 BC, respectively).

On the relationship between language and the state, see note 8/1/4.

9/1/2 *On writing*

According to Schmandt-Besserat, 'plain tokens were linked to the rise of rank society, but it was the advent of the state which was responsible for the phenomenon of complex tokens';<sup>415</sup> tokens being 'the immediate precursor of cuneiform writing'<sup>416</sup> that itself was developed in Mesopotamia in the late fourth millennium BC. Accordingly, names (alongside commodities) could be found on these tokens. In the same vein, Powell claims that 'without direct evidence, we can nonetheless accept that the motivation for the discovery of the phonetic principle through the rebus applied to logograms was the desire to record personal names and names of places and names of things'.<sup>417</sup>

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415 Denise Schmandt-Besserat, *How Writing Came About* (Austin: University of Texas Press, 1992), 107.

416 *Ibid.*, 7.

417 Barry B. Powell, *Writing: Theory and History of the Technology of Civilization* (Chichester: John Wiley & Sons, 2009), 246.

One should always keep in mind that the Internet, which opened up the digital world, was also created for state purposes—the (continued) processing of information under adverse circumstances (i.e. a nuclear attack).<sup>418</sup>

9/1/3

On family and the state, see note 8/2/1; on the so-called early societies, see note 8/2/4.

9/1/4

Materialisation of the state is perhaps also what Bourdieu had in mind when, in his own definition of the state, he claimed that ‘the construction of the state as a relatively autonomous field exerting a power of centralization of physical force and symbolic force, and constituted accordingly as a stake of struggle, is inseparably accompanied by the construction of the unified social space that is its foundation’.<sup>419</sup> In other words, the state first has to come into being through a unified social (or, in this case, information) space, which is its foundation, and then, necessarily, it has to be materialised in order to carry out its functions (through physical and symbolic force, as per the Weberian and Bourdieusian approach, or information processing, from the viewpoint of this book).

### On paragraph 3

9/3/1

Tamanaha outlined a genealogical view of law based on complex social arrangements (that becomes necessarily as soon as more than 500 individuals are involved).<sup>420</sup> In the same vein, Van Creveld noted the existence of leaders and followers, or of special councils, whenever ‘public tasks’ were ‘beyond the capacity of single family groups’ even in (initial) ‘tribes without rulers’.<sup>421</sup>

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418 On ARPANET, the forerunner of the Internet, see, for example, K. Featherly, ‘ARPANET’, *Encyclopedia Britannica*, 10 April 2025.

419 Bourdieu, *On the State*, 123.

420 Brian Tamanaha, *A Realistic Theory of Law* (Cambridge: Cambridge University Press, 2017), 82.

421 Van Creveld, *The Rise and Decline of the State*, 3 and 6, respectively.

## On paragraph 5

### 9/5/1 *On territoriality and the state*

The need for analogue-world territory for a state to exist is clear (if not natural) in theory, and can be seen, for example, in Weber's approach that the state has 'a compulsory association with a territorial basis'.<sup>422</sup> For the informational approach to this topic, see Chapter 17.

## On paragraph 6

### 9/6/1 *On the breakdown of territoriality for state information processing infrastructures*

State information that has been stored within the state's territory since the invention of writing can now be stored anywhere in the digital world, leading to the loss of traditional state sovereignty.<sup>423</sup> To make things worse, with digital-born information, no copies are stored locally (see Chapter 1.1, par. 17). Admittedly states have recently regained control over storage, mandating localisation,<sup>424</sup> but this is an ongoing issue.

See also notes 1.1/17/1 and 16/7/1.

## On paragraph 7

### 9/7/1

The finding that there is order in the state may, among others, be used to characterise it as an 'organisation' (see Chapter 2, par. 9).

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422 Quoted in Christopher W. Morris, 'The State', in George Klosko (ed.), *The Oxford Handbook of the History of Political Philosophy* (Oxford: Oxford University Press, 2011), 577.

423 Vagelis Papakonstantinou, 'The Cybersecurity Obligations of States Perceived as Platforms: Are Current European National Cybersecurity Strategies Enough?', *Applied Cybersecurity & Internet Governance* 1/1 (2022).

424 See the notions of 'data nationalism' or 'data localisation' (in, for example, Christopher Kuner, 'Data Nationalism and Its Discontents', *Emory Law Journal* 64 (2014), or Dan Svantesson, 'Data Localisation Trends and Challenges: Considerations for the Review of the Privacy Guidelines', *OECD Digital Economy Papers*, no. 301 (2020)).

9/7/2

On the state as a 'political organisation', see note 11/4/2.

9/7/3

On state centralisation, see note 4/12/1; on hierarchy being natural to humans, see note 6/7/1.

## Notes on Chapter 10

### On paragraph 1

10/1/1

Consequently, the approach advocated in this book is in complete disagreement with Rousseau (who perhaps confuses the state with its government), who states: ‘Sometimes you may kill the State without killing a single one of its members.’<sup>425</sup>

### On paragraph 2

10/2/1

Therefore it is not only a matter of preserving the lives of their citizens, but of offering an information-processing environment that is suitable for them. The need of states to preserve the lives of their citizens in order for they themselves (the states) to survive is a basic premise of Hobbesian, and thus social contract, theory.<sup>426</sup>

10/2/2

See Mill’s observation that ‘the worth of a State, in the long run, is the worth of the individuals composing it’,<sup>427</sup> albeit he was referring to the government and the optimal political system, and not to the state.

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425 Jean-Jacques Rousseau, *Of the Social Contract and Other Political Writings* (1762), trans. Quentin Hoare, ed. Christopher Bertram (London: Penguin, 2012), 16.

426 As regards Hobbes, see (admittedly, while discussing the government, not the state) ‘All the duties of sovereigns are implicit in this one phrase: the safety of the people is the supreme law’. And in this regard, ‘[b]y safety one should understand not mere survival in any condition, but a happy life so far as that is possible’ (Hobbes, *On the Citizen*, 143).

427 Mill, *On Liberty, Utilitarianism, and Other Essays*, 111.

10/2/3 *What helps a state to flourish*

Under the topic of what a state needs also falls all the rich and apparently endless discussion on what helps a state to flourish (where ‘flourishing’ lies in the eye of the beholder). It can be assumed that certain types of information processing by its citizens may lead a state to thrive while others may lead it to perish (see also note 8/2/5). For example, the pursuit of money or practical knowledge have been known historically to strengthen states. By contrast, religion, allegedly, has been accused of causing the decline and fall of empires.<sup>428</sup> Put differently, ascetic states are assumed to fare better in difficult times than profligate, sybaritic ones.<sup>429</sup>

All of the above ultimately reveal more about the speaker than about any truth, be they an explanation of the past or a prediction for the future. Their common underlying riff, however, is political: that the government, having identified whatever (it thinks) helps, should motivate (through nudging, or worse) its citizens to follow.

**On paragraph 5**

10/5/1

This alignment of interests between states and their citizens is far from the dominant theory in political philosophy, where conflict between the two (at least in Western thought) is taken for granted. See, for example, Skinner: ‘Since that [Hobbesian] time, the idea that the confrontation between indi-

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428 As famously noted by Gibbon with regard to the Roman Empire: ‘As the happiness of a future life is the great object of religion, we may hear without surprise or scandal that the introduction, or at least the abuse, of Christianity had some influence on the decline and fall of the Roman empire’ (Edward Gibbon, *The History of the Decline and Fall of the Roman Empire* (1776), abridged edn., ed. David Womersley (London: Penguin, 1994), 458). The issue of the Byzantine Empire remains disputed (see, for example, Warren Treadgold, ‘Book Review: Luttwak, *The Grand Strategy of the Byzantine Empire*’, *The Medieval Review* (2010)).

429 A perennial topic, at least in Imperial Roman literature. See, for example, Strabo on the unfortunate Sybarites: ‘However, by reason of luxury and insolence they were deprived of all their felicity by the Crotoniates within seventy days’ (Strabo, *Geography*, trans. Horace Leonard Jones, vol. 3 (London: William Heineman, 1924), 47).

viduals and states furnishes the central topic of political theory has come to be almost universally accepted'.<sup>430</sup>

See also Chapter 13, particularly par. 10.

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430 Quentin Skinner, *Visions of Politics: Volume 2, Renaissance Virtues* (Cambridge: Cambridge University Press, 2002), 368.

## Notes on Chapter 11

### On paragraph 1

11/1/1

On the nature of Beings and Things, see Chapter 1, par. 2.

### On paragraph 2

11/2/1 *The state is an organisation (its connection with coercion)*

The nature of the state as an organisation (however, not a political one, see note 11/4/2) has already been identified in theory. See, for example, Tilly: 'an organization which controls the population occupying a defined territory is a state in so far as (1) it is differentiated from other organizations operating in the same territory; (2) it is autonomous; (3) it is centralized; and (4) its divisions are formally coordinated with one another'.<sup>431</sup>

This approach is frequently connected with coercion: the state is the organisation par excellence within a specific territory, the one that exercises coercion over all other organisations. Again in Tilly's words, 'Let us define states as coercion-wielding organizations that are distinct from households and kinship groups and exercise clear priority in some respects over all other organizations within substantial territories'.<sup>432</sup>

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431 Charles Tilly, 'Reflections on the History of European State-Making', in Charles Tilly (ed.), *The Formation of National States in Western Europe* (Princeton: Princeton University Press, 1975), 70; see also Poggi, *The State*, 19. Weber, for example, considers the state an 'institution' (see Anter, *Max Weber's Theory of the Modern State*, 36).

432 Charles Tilly, *Coercion, Capital, and European States, AD 990–1990* (Cambridge, MA: Blackwell, 1992), 1. On the emphasis on coercion, see also Herman Finer, *The Theory and Practice of Modern Government* (New York: Henry Holt and Company, 1961), 10; and Robert Alan Dahl, *Modern Political Analysis* (New Jersey: Prentice Hall, 1963), 51. On Kelsen's approach (with regard to 'political organisations', which includes the state), see note 11/4/2.

In the same context see also Montesquieu's simplistic approach: 'In a state, that is, in a society where there are laws' (Charles Montesquieu, *The Spirit of the Laws* (1748), eds. Anne M. Cohler, Basia Carolyn Miller and Harold Samuel Stone (Cambridge: Cambridge University Press, 1989), 155.

## On paragraph 4

### 11/4/1 *The state is not a corporation*

The state is not a corporation. This is a ‘a perennial theme of European, and more particularly German, political philosophy’.<sup>433</sup> A corporation is an association of individuals (a legal body, more or less<sup>434</sup>), and as such, the state precedes it (by turning humans into individuals). Could it be then, that the state is the original, basic corporation? From that viewpoint, indeed, a state incorporated as a separate legal body, formed as an association of its citizens, could be the legal body upon which all other legal bodies (companies, state agencies etc.) are based. After all, this is the prevalent legal model upon which modern life is built: the state is a legal body acting sometimes as a public and sometimes as a private actor (therefore, in practice replying in the positive to Runciman’s remark that ‘the state is either a corporation or it is not’<sup>435</sup>). However, this approach basically draws on social contract theory, in which states are incorporated through the agreement of their citizens (to give them some of their freedoms in return for security). While social contract theory is examined in Chapter 13, par. 2, here it is enough to note that any contract entered into (or association incorporated) requires the involvement of individuals, not humans. Consequently, it is subsequent to the natural formation of a state, which happens immediately when humans start to communicate among themselves.

### 11/4/2 *The state is not a political organisation*

The state is not a ‘political organisation’.<sup>436</sup> A political organisation, a polity or a body politic are all connected with politics, with decision-making processes and government. While always keeping in mind that we must

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433 As noted most recently by Runciman when talking of Maitland (Runciman, ‘Is the State a Corporation?’, 90), who, at the turn of the previous century had tried to demonstrate that the topic also had practical consequences (and thus would be of interest to the British, too), among others by translating some of von Gierke’s works (Otto Von Gierke, *Political Theories of the Middle Age*, trans. Frederick William Maitland (Cambridge: Cambridge University Press, 1913)).

434 Runciman, ‘Is the State a Corporation?’, 91.

435 *Ibid.*, 93.

436 See, for example, the Wikipedia definition of the state (*Wikipedia*, ‘State’), or, among many others, Krader’s (Lawrence Krader, *Formation of the State* (Englewood Cliffs, NJ: Prentice-Hall, 1968), vii). All of these approaches practically point to a (state) bureaucracy. See also Kelsen: ‘this merely expresses the idea that the state is a

avoid blurring the boundaries between the state and the government, here it need only be noted that a political organisation (or institution) can only emerge after the *polis* or the *political* have first been formed—through the formation of a state that turns humans into individuals.

However, on the state as an organisation, see note 11/2/1.

#### 11/4/3 *The state is not an association*

Viewing the state as an association is to take the oldest perspective,<sup>437</sup> that which more or less underlies social contract theory (see note 13/2/1).

Consider also Kant's 'A state (civitas) is a union of an aggregate of men under rightful laws'<sup>438</sup> (the emphasis, of course, being on his approach to 'rightful laws').<sup>439</sup>

The legalistic approach also concurs, viewing the state as a voluntary (legal type of) association, admittedly the only one holding supreme power (sovereignty) over its territory (see also note 11/4/1).<sup>440</sup>

#### 11/4/4 *The state is not its public sector*

The state being omnipresent, statehood is not exhausted by focusing on public agents and their activities.<sup>441</sup> While the public sector runs the materialised state (on the materialisation of the state, see Chapter 9), statehood includes all citizens, which naturally connect with the state, as well as all other information processing on its platform.

On the Marxist approach and the question of whether the state is equivalent to the governmental apparatuses through which it manifests itself, see Easton.<sup>442</sup>

Clearly, the above do not refer to government and government actors. These manage the state but do not run it. They are only occasionally part of the public sector and in any case ought to be distinguished from the state (see also Chapter 12).

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coercive order' (Hans Kelsen, *Pure Theory of Law*, trans. Max Knight (Berkeley, CA: University of California Press, 1978), 286.

437 Aristotle, *Politics*, 7 (1252a1).

438 Kant, *Political Writings*, 138.

439 See also MacIver, *The Modern State*, 3.

440 See, for example, Watkins, *The State as a Concept of Political Science*, 63.

441 For the relevant discussion, see Caporaso, 'The European Union and Forms of State', 33.

442 Easton, 'The Political System Besieged by the State', 308.

11/4/5 *The state is not an organism*

Organismic theories of the state (as for example identified by Steinberger<sup>443</sup> or Coker<sup>444</sup>) come in many forms. At their simplest, the state is an organism, similar to a body, complete with head, arms, veins and blood (a theory that culminated in *Leviathan*). In the same context, Bluntschli spoke of the 'organic nature of the state'.<sup>445</sup>

Organismic theories of the state reached new heights with Hegel, who stressed the interdependence between the parts and the whole and between the parts themselves<sup>446</sup>—an approach that, ultimately, can be used to subordinate the individual to the community.<sup>447</sup> Criticism of organismic theories, and identification of their true aim other than illustration, came from Kelsen.<sup>448</sup>

While crucial in demonstrating the interdependence between states and their citizens (after all, a state cannot exist without its citizens; see Chapters 10 and 15, par. 4), this approach is not compatible with the informational state. While there is interdependence between the informational platform (the state) and its citizens (without the platform they cannot exist, and without them the state dies), there is no interdependence among them—meaning, among the parts of the organism; each citizen only needs to augment his or her information processing. Perhaps more importantly, however, there is no need to overstress the interdependence between states and their citizens—in other words, the relationship remains a purely functional one. One serves the other in order for both to continue to exist. In this way we can avoid (Hegelian, as outlined by Popper<sup>449</sup>) accusations of totalitarianism and the absorption of the citizens by the state through an asphyxiating relationship of mutual dependence. While necessary for both,

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443 Steinberger, *The Idea of the State*, 288.

444 Francis William Coker, *Organismic Theories of the State: Nineteenth Century Interpretations of the State as Organism or as Person* (New York: AMS Press, 1967).

445 Bluntschli, *The Theory of the State*, 24; see also Christian Rosser, 'Johann Caspar Bluntschli's Organic Theory of State and Public Administration', *Administrative Theory & Praxis* 36/1 (2014).

446 Hegel, *Outlines of the Philosophy of Right*, 242; see also Steinberger, *The Idea of the State*, 288.

447 See, for example, Hans S. Reiss, 'Introduction', in Kant, *Kant: Political Writings*, trans. H. B. Nisbet, ed. Hans S. Reiss (Cambridge: Cambridge University Press, 1991), 13.

448 In Kelsen, *General Theory of Law and State*, 186.

449 Karl R. Popper, *The Open Society and Its Enemies* (1945) (Princeton: Princeton University Press, 2020).

the relationship does not bind either party to any purpose whatsoever (on states not having any purpose, see par. 7). In other words, as soon as a discussion emerges of what either party 'must' or 'should' do as a result of this relationship, we enter the domain of politics and political theories.

*11/4/6 The state is not a pawn*

The state could be used as a pawn, but it is not one as claimed by Dahl. Dahl essentially adopts Weber's definition of the state as 'the political system made up of the residents of that territorial area and the Government of the area', whereby the government 'successfully upholds a claim to the exclusive regulation of the legitimate use of physical force'.<sup>450</sup> Dahl then claims that 'the State is, then, a pawn of key importance in struggles over power, for the relatively great resources of the State and its exclusive claim to regulate severe physical coercion mean that those who control the State inevitably enjoy great powers'.<sup>451</sup>

*11/4/7 The state is not a cipher*

The idea of the state as a 'passive mechanism' or a 'cipher' that is controlled from outside the political sphere has been identified by Dunleavy and O'Leary<sup>452</sup> as common among five dominant theories of the state. Although it is not useful for the definition of the state, being a characteristic rather than its essence, the metaphor is useful to visualise the lack of purpose of the state (the algorithmic part of the 'cipher', which was obviously not intended as such by the authors, adding a nice touch to concept of the state as an informational platform).

*11/4/8 The state is not a network*

The state is not a network, whether viewed as part of a broader (global) network of power, or ontologically. The former has been suggested as a spin-off of the nation-state theory, which is seemingly being challenged

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450 Dahl, *Modern Political Analysis*, 10.

451 Ibid., 51. Admittedly this sentence is missing in the later editions of his book, see e.g. Robert Alan Dahl, *Modern Political Analysis*, 5th edn. (New Jersey: Prentice Hall, 1991).

452 Dunleavy and O'Leary, *Theories of the State*, 328.

within a globalised world: for example, ‘while nation-states continue to exist, and they will continue to do so in the foreseeable future, they are, and will increasingly be, nodes of a broader network of power’.<sup>453</sup> While the merits of this approach (and its validity, only a few decades after it has been suggested) can be debated, the fact remains that this is a functionalist approach, taking the nation-state (and the theory behind it) as a given.

From an ontological perspective, Latour’s viewing of the state can be considered a constantly negotiated and maintained network or assemblage of diverse elements, the result of associations and connections within a network.<sup>454</sup> However, there is an emphasis on (if not a foundation in) functionality: the state is viewed as a functioning network because of the interconnections of its components, which are considered a given and thus pre-existing.

*11/4/9 The state is not a service provider; states are not service providers for their citizens*

One may think that the state is a service provider, because modern states provide a number of services to their citizens: education, health, infrastructure and security. (In the same vein, it is (apparently) only through states that large-scale projects, e.g. the building of infrastructure, can be undertaken.)

However, this is not what states are, this is not their nature or basic characteristic or basic role. States are natural to humans. They may, among other functions, store and transmit their personal information (see Chapter 14), but this is not providing a service to humans. This processing is natural to (a natural consequence of) the mere fact that personal information exists, that humans became individuals. The processing of their information is not a service offered by states to their citizens but a reality, the same as when rain waters our gardens. Depending on the definition one gives

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453 Manuel Castells, *The Power of Identity, The Information Age: Economy, Society and Culture, Volume II* (London: John Wiley & Sons, 2011), 357. In the same vein, Castells thinks that (nation-)states have lost their sovereignty: ‘Nation-states may retain decision-making capacity, but, having become part of a network of powers and counterpowers, they are dependent on a broader system of enacting authority and influence from multiple sources’ (ibid.); see also note 13/8/1.

454 See Latour, *Reassembling the Social*, 7; the ‘social’ not being ‘a particular sort of thing, but only as a very peculiar movement of re-association and reassembling’.

to a ‘service’<sup>455</sup> one could certainly view this type of processing, meaning the rain, as providing a service, however such a service has nothing to do with modern use of the term in health, education and so on. The state as a service provider is, in fact, a matter for the government, which decides on the quantity and quality of such services, and not for the state itself.

Ultimately, the state is not a service provider because this implies that it has a purpose (the provision of a particular service). However, states do not have any specific purpose at all (see par. 7).

*11/4/10 The state is not a structure nor an actor (but it is both of these things)*

A popular distinction (also running through and distinguishing the various definitions of the state, see Chapter 7) refers to viewing the state as either an actor or a structure. In the latter case, the state is seen as ‘the enduring structure of governance and rule in society’,<sup>456</sup> whereby ‘[t]he term “structure” implies an ongoing, reproductive set of processes, the patterns of which are stable across different agents’.<sup>457</sup> By contrast, the state-as-actor view treats the state as ‘a pure agent, an actor with the ultimate right to decide within a given territory’.<sup>458</sup> The latter view is perhaps dominant, in the sense that both social contract theory and the Weberian approach can be classified as taking it, the former under a *Leviathan*-like mandate and the latter through the exercise of the monopoly on legitimate violence.

While the two approaches are certainly not mutually exclusive (an actor needs a structure, if it is to be effective), the distinction is useful for identifying what each theory considers the main characteristic of the state. In the former case, the state is a passive structure, while in the latter it is an active actor—in both cases run and managed by the government.

The states as information platforms theory merges the two. The state is both a structure and an actor. It is an informational structure, where the ‘reproductive set of processes’ is information processing for its citizens. And it is also an actor, where it tacitly or actively intervenes in all human communications, warranting the identity of each individual.

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455 Of course, within the context of social contract theory, if one considers everything, e.g. security or justice, as a service, then states could be viewed as service providers.

456 R. Benjamin and R. Duvall, ‘The Capitalist State in Context’, in R. Benjamin and S. Elkin (eds.), *The Democratic State* (Lawrence, KS: University of Kansas Press, 1985), 25.

457 Caporaso, ‘The European Union and Forms of State’, 32; see also note 11/4/8.

458 Caporaso, ‘The European Union and Forms of State’, 33.

11/4/11 *The state is not its citizens*

Citizens are necessary for their states—states devoid of citizens do not exist (hence, states need their citizens to augment their information processing, see also Chapter 10). Having said that, however, the state is not its citizens. It is not their totality, because it also includes Things and other Beings. It is also not the sum of their processing, because non-biological Beings process information too (see also note 17/11/1). (Furthermore, the state is not the sum of its citizens' (imagined) will each time, as has also been catastrophically claimed by politics; see also note 18/2/2).

On the same topic, see also Wiener's discounting of the still-popular dictum that the community, because it is larger than the individual, is also more intelligent.<sup>459</sup>

On citizenship, see note 7/1/1; on nationality, see Chapter 18, par. 4.

11/4/12 *The state is not 'the institution of institutions'*

On the state being 'the institution of institutions', see Dyson<sup>460</sup> and Steinberger<sup>461</sup>—neither, however, avoid the fact that an institution must have been materialised.

11/4/13 *State and statehood*

On the (Platonist) distinction between the 'Idea' of the state and statehood, see, for example, Fain ('Once one has laid aside the Idea of the state, is there anything left that is philosophically interesting about the concept of statehood?')<sup>462</sup> or Abrahms.<sup>463</sup>

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459 Wiener, *Cybernetics*, 162.

460 Kenneth Dyson, *The State Tradition in Western Europe: A Study of an Idea and Institution* (New York: Oxford University Press, 1980), 216.

461 Steinberger, *The Idea of the State*, 22.

462 Haskell Fain, 'The Idea of the State', *Nous* 6/1 (1972), 18.

463 Abrams, 'Notes on the Difficulty of Studying the State (1977)'.

## On paragraph 5

11/5/1

See Bourdieu on state genesis not being ‘an increasingly formal, increasingly fair, increasingly bureaucratic and increasingly universal process’,<sup>464</sup> or North et al.: ‘The progression from less to more complex exhibits no teleology’.<sup>465</sup>

11/5/2 *On a cyclical or a linear reading of history*

Although it remains an open discussion as to whether human history is linear or cyclical (the Western linear approach of progress having been initiated by Christian dogma<sup>466</sup> and best epitomised by Gibbons: ‘We may therefore acquiesce in the pleasing conclusion, that every age of the world has increased, and still increases, the real wealth, the happiness, the knowledge, and perhaps the virtue, of the human race.’<sup>467</sup>), the state is not part of this; being natural to humans, it has accompanied them in all the turns their history has made, be they linear or cyclical. The state itself does not follow a preordained order, in spite of the undoubted organisational similarities among states in the same stages of development (see note 11/9/2), with today’s world being one of exemplary state organisational similarity to the nation-state model—if not blind reproduction of it.

On state centralisation, see also note 4/12/1.

## On paragraph 6

11/6/1

On the need to find the timeless characteristics of the state, irrespective of appearances from time to time in human history, see Hegel: ‘As a work of philosophy, it must be removed as far as possible from any attempt to construct a state as it ought to be. The instruction which it may contain

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464 Bourdieu, *On the State*, 195.

465 North, Wallis and Weingast, *Violence and Social Orders*, 270.

466 Saint Augustine, *Concerning the City of God Against the Pagans*, trans. Henry Bettenson and G. R. Evans (London: Penguin, 2003), 487.

467 Gibbon, *The History of the Decline and Fall of the Roman Empire*, 464.

cannot consist in teaching the state what it ought to be; it can only show how the state, the ethical universe, should be understood.<sup>468</sup>

### On paragraph 7

#### 11/7/1 *On the (supposed) purpose of the state*

Ascribing a purpose (any purpose) to the state is the most significant and absolutely common thread among all political philosophies (or, better phrased, among all suggested state theories) that have been formulated so far.<sup>469</sup> Perhaps tied to its equally significant and absolutely common normative content (what *should* be done), not a single political philosopher from Plato onwards has ever failed to attribute a specific purpose to the state (many among them committing the cardinal mistake of confusing the state with its government).

On a mapping of the many purposes ascribed to modern states, see Gill.<sup>470</sup>

Through not giving any purpose to the state, this philosophy stays clear not only of political theories but also moral considerations and ethical values. (Such considerations are mandatory, however, when taking a sociological approach to the state: 'The state is an agency of human purpose, and its character changes as it is directed more to the interests of this or that class within the community, as it serves more this or that set of aims, as its area of purpose narrows or widens.'<sup>471</sup> This approach inevitably leads not only to arbitrariness and subjectivity but also to time-specificity, given that a class-Marxist analysis was semi-mandatory in the not-so-distant past but is now listed only as one of many alternative theories.)

#### 11/7/2

Of course, claiming that the state has no purpose depends on what is meant by 'purpose'. If 'purpose' means any function whatsoever (after all,

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468 Hegel, *Outlines of the Philosophy of Right*, 15.

469 With it considered a significant faux pas not to include one, such that authors try to justify any lack thereof (even if by means of inventing one) in those rare cases where none is, obviously at least, suggested (see, for example, Anter, *Max Weber's Theory of the Modern State*, 15).

470 Gill, *The Nature and Development of the Modern State*, 8.

471 MacIver, *The Modern State*, 423.

any function is itself a purpose),<sup>472</sup> then the state does have a purpose: human unique identification and individualisation—and the creation of a processing environment suitable for humans to live in.

This is not, however, its purpose, but what it does—what processing it carries out as a Being. Human individualisation and identification is not a state's purpose. It is done because states are Beings (organisations) and, as per their nature, they process information because they can and they will. In other words, states are a natural individualisation and identification mechanism, this is not their purpose. The case of the state being perceived as a service provider (see note 11/4/9) is similar to this, if everything (e.g. the rain) is perceived as a service. However, what is meant here by 'purpose' is an intention, a guiding principle (see also note 5/2/2), which, in the case of states, simply does not exist.

### On paragraph 8

#### 11/8/1 *On the (supposed) will of the state*

The state has no rational will to arbitrate or reconcile society; see Poulantzas<sup>473</sup> and Easton.<sup>474</sup>

#### 11/8/2 *On state authority*

For a (reluctant) explanation of state authority see, for example, Green.<sup>475</sup>

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472 On the relationship between function and purpose (as in, purpose is perfection of the function) see Aristotle, *Nicomachean Ethics*, 15 (1097b), and a critique in Christine M. Korsgaard, 'Aristotle's Function Argument', in Christine M. Korsgaard, *The Constitution of Agency: Essays on Practical Reason and Moral Psychology* (Oxford: Oxford University Press, 2008), specifically 138.

473 Poulantzas, *State, Power, Socialism*, 131.

474 Easton, 'The Political System Besieged by the State', 308.

475 Leslie Green, *The Authority of the State* (Oxford: Clarendon Press, 1988).

## On paragraph 9

11/9/1

On the theory that is today prevalent that the state did not develop historically along any predetermined line of progression or through ‘scaling-up’, see, for example, Diener and Hagen.<sup>476</sup>

This finding, that the state has not, so far at least, developed in any linear historical order may (but may not necessarily) conflict with the basic state theory of Hegel. See, for example, ‘the state, the architectonic of its rationality—which, through determinate distinctions between the circles of public life and their rights and through the strict proportion in which every pillar, arch, and buttress is held together, produces the strength of the whole out of the harmony of the parts...’<sup>477</sup>

On the same topic, see also note 19/11/2.

11/9/2

On the finding that states, regardless of whether tribes or empires, ultimately resembled each other organisationally, consider that ‘the range of internal structures does differ across societies in predictable ways’.<sup>478</sup>

## On paragraph 10

11/10/1

This differs fundamentally from Durkheim’s approach to the state. In this respect, Durkheim’s words are worth emphasising: ‘[the state’s] principal function is to think’.<sup>479</sup> ‘The state is “the very organ of social thought”, however it does so “towards an aim that is practical, not speculative. The State, as a rule at least, does not think for the sake of thought or to build up doctrinal systems, but to guide collective conduct.’<sup>480</sup>

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476 Alexander C. Diener and Joshua Hagen, *Borders: A Very Short Introduction* (Oxford: Oxford University Press, 2012), 25.

477 Hegel, *Outlines of the Philosophy of Right*, 9.

478 North, Wallis and Weingast, *Violence and Social Orders*, 270.

479 Durkheim, *Durkheim on Politics and the State*, ed. Anthony Giddens (Stanford: Stanford University Press, 1986), 41.

480 *Ibid.*

In this way he ascribes to the state a role, the role of giving meaning to reality<sup>481</sup> (see also Chapter 8.1). Here, however, it is argued that the state has no role; it only makes processing by individuals possible. Meaning is provided by the individuals (and their governments), not the state, which, in this regard, is only the information-processing structure that makes such processing possible.

11/10/2

The so-called 'Reason of State' is Machiavelli's creation, a political notion that is connected with government rather than the state.<sup>482</sup>

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481 Or (perhaps with a politically biased reading of his works) to 'implement and further individual rights' (Giddens, 'Introduction', 3); see also Horowitz, 'Socialization Without Politicization: Emile Durkheim's Theory of the Modern State'.

482 See, for example, Passerin d'Entrèves, *The Notion of the State*, 44.

## Notes on Chapter 12

### On paragraph 1

12/1/1 *On the distinction between state and government*

Although there is a rich bibliography on the distinction between state and government, the two are often confused both in theory and in public discourse. This is perhaps unavoidable, given the relationship between management and managed organisation: as is also the case with legal bodies, it is difficult to separate the legal body (e.g. a corporation) from its management.

In any event, the confusion between state and government seems particularly prevalent in Anglo-Saxon theory.<sup>483</sup> The Anglo-Saxon approach has been summarily presented by Hayek:

*In English it is possible, and has long been usual, to discuss these two types of order in terms of the distinction between 'society' and 'government'. There is no need in the discussion of these problems, so long as only one country is concerned, to bring in the metaphysically charged term 'state'. It is largely under the influence of continental and particularly Hegelian thought that in the course of the last hundred years the practice of speaking of the 'state' (preferably with a capital 'S'), where 'government' is more appropriate and precise, has come to be widely adopted. That which acts, or pursues a policy, is however always the organization of government; and it does not make for clarity to drag in the term 'state' where 'government' is quite sufficient. It becomes particularly misleading when 'the state' rather than 'government' is contrasted with 'society' to indicate that the first is an organization and the second a spontaneous order.*<sup>484</sup>

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483 See Morris, 'The State', 575; as well as Watkins, *The State as a Concept of Political Science*, 80; or Krader's 'The state is a non-primitive form of government' (Krader, *Formation of the State*, 13).

However, confusion is not uniform, see, for example, the *Guardian* extract quoted in Abrams, 'Notes on the Difficulty of Studying the State (1977)', 58.

On the hostility of, at least recent US theory, towards the notion of the state, see note 0/4/1.

484 Hayek, *Law, Legislation and Liberty*, 46.

Nettl claims that ‘the identification of state with government in the work of certain writers might appear to make sense on the grounds that any other conception of the state is metaphysical and therefore valueless for concrete historical analysis’.<sup>485</sup>

The confusion between the two can take two forms—an obvious one (expressly treating the two as synonyms<sup>486</sup>) and a tacit one. The latter can be more confusing. It has, for example, crept in when trying to define the state: a large part of state theory distinguishes between two forms of definition for the state, one of which claims that ‘the state can be defined by its organisation’,<sup>487</sup> wherein it is seen as an interrelated set of governing institutions. This, however, is government (i.e. the ‘governing institutions’), not the state. At best, ‘state organisation’ is the political system through which a government is appointed, not the state itself.

On the importance of the distinction, see also North et al.<sup>488</sup>

### On paragraph 3

12/3/1

Sidgwick used the (systematic) control exercised by a government as the distinguishing characteristic of ‘political societies’ (the equivalent of the state) when comparing them to non-political (primitive) ones (without going any further towards developing a state theory).<sup>489</sup>

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485 Nettle, ‘The State as a Conceptual Variable’, 570.

486 See, for example, Sidgwick: ‘I think, however, that the development of Government or of the State is one thread or strand of human history which may..’ (Henry Sidgwick, *The Elements of Politics* (1891) (Cambridge: Cambridge University Press, 2012), 5.

487 Erika Cudworth, Timothy Hall and John McGovern, *The Modern State: Theories and Ideologies* (Edinburgh University Press, 2007), 2.

488 North, Wallis and Weingast, *Violence and Social Orders*, 268.

489 See Sidgwick, *The Elements of Politics*, 2.

## On paragraph 4

### 12/4/1 On the separation of powers

The separation of powers, as envisaged by Montesquieu in his *Spirit of the Law*<sup>490</sup> and still applied today, has nothing to do with the separation between state and government.

In essence, the separation of powers relates to the government only, it does not affect the state; it only asks the Being that controls the state (i.e. the government) to break down its functions into three separate Beings (executive, legislative and judicial) without there existing any relationship (specifically, control) among them. The separation of powers is in essence a political system, not a system designating the relationship between the government and the state, which continues to be that of control, notwithstanding how many branches of government there can possibly be (and whether, as practice has shown, any separation of powers within the government is at all feasible).

In view of the above, when 'government' is mentioned in this book it refers to all of its branches together (and not, for example, only to the executive branch).

### 12/4/2

On constitutions, see also Chapter 22, par. 3.

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490 Montesquieu, *The Spirit of the Laws*, 157.

On the attempt to remove the 'hostility' and 'mistrust' among state powers (confusing at all times the state with the government) in light of his state idealism, see Hegel: 'It is only the inner self-determination of the concept, not any other consideration, whether of purpose or advantage, that is the absolute source of the division of powers, and in virtue of this alone is the organization of the state something inherently rational and the image of eternal reason' (Hegel, *Outlines of the Philosophy of Right*, 257). This reflects a type of reasoning that religious thinking would not object to (see, for example, Saint Augustine with his insistence on reproducing Trinity models around us; Augustine, *Concerning the City of God Against the Pagans*, 440 and 458.

### On paragraph 5

#### *12/5/1 The limitations of social contract theory when it comes to political systems and the government*

In social contract theory, the government, like the state, is the result of an agreement among individuals (see note 13/2/1).<sup>491</sup> In this way social contract theory is versatile and at the same time affirmative, granting legitimacy to a government of any kind. It is nice to imagine that the citizens of a state agree to appoint a government (because it is the only rational thing to do), that an agreement is formed between them. However, the nicety of this picture (which has served monarchs, oligarchs and democracies alike well) blurs the cruel fact of the power-grab that lies underneath it. The state is an informational platform that is controlled by a Being (and is itself a dataset, in fact a Being) and this control provides immense power to those individuals that hold it. Competition is inevitable. The way in which this power-grab is achieved and justified on each occasion in human history varies. Entering into a contract or following the will of God are explanations that have been used so far; however these serve to better explain rather the states that were used as their example,<sup>492</sup> than the fact that certain individuals (inevitably) manage to prevail and gain control of the informational platforms that are or were their states for a shorter or longer period of time.

### On paragraph 6

#### *12/6/1*

On the importance of unique names for states, see also Chapter 19, par. 6.

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491 See also Steinberger, noting that, as per social contract theory, 'there can be, by definition, no such thing as a commonwealth without a sovereign' (Steinberger, 'Hobbes, Rousseau and the Modern Conception of the State', *The Journal of Politics* 70/3 (2008), 599).

492 Hobbes, for example, sensibly moved from the will of God theory to that of the people/contract after a king was beheaded two years before the publication of his work, leaving his state still standing.

## On paragraph 10

12/10/1

On the exercise of border control over individuals by states, see, for example, Brett's analysis of 'locality',<sup>493</sup> as well as the seventh defining characteristic for the definition of a state by Dryzek and Dunleavy ('The state must be able to define "citizens", those who are members of its society; and it must be able to control entry to and exit from its territory by citizens and others').<sup>494</sup>

See also Nettl, who claims that, 'In short, the state is the gatekeeper between intrasocietal and extrasocietal flows of action'.<sup>495</sup>

## On paragraph 11

12/11/1

Or, in other words, Morris's claim a few years ago that 'modern states claim a variety of powers for themselves and deny them to non-states'<sup>496</sup> is no longer applicable in the digital realm where 'non-states' are large, international, private online platforms.

12/11/2 *On Leviathan's frontispiece*

There is much discussion of *Leviathan's* frontispiece, specifically about whether there is some discrepancy between the printed and the engraved versions, where apparently the drawing had faces that looked outwards to represent the common will.<sup>497</sup> However, the version that is still in print today, attributed to Abraham Bosse, has the citizens facing inwards.

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493 Annabel S. Brett, *Changes of State: Nature and the Limits of the City in Early Modern Natural Law* (Princeton: Princeton University Press, 2011), 169; see also Immanuel Wallerstein, *World-Systems Analysis: An Introduction* (Durham: Duke University Press, 2020), 46.

494 Dryzek and Dunleavy, *Theories of the Democratic State*, 3.

495 Nettl, 'The State as a Conceptual Variable', 564.

496 Christopher W. Morris, *An Essay on the Modern State* (Cambridge: Cambridge University Press, 2002), 16.

497 See Keith Brown, 'The Artist of the Leviathan Title-Page', in Gabriella Slomp (ed.), *Thomas Hobbes* (London: Routledge, 2017).

## Notes on Chapter 12.1

### On paragraph 1

#### 12.1/1/1 Rawls's 'basic structure'

The political system, as viewed in this book, parallels Rawls's 'basic structure': 'the basic structure of society is the way in which the main political and social institutions of society fit together into one system of social cooperation, and the way they assign basic rights and duties and regulate the division of advantages that arises from social cooperation over time'.<sup>498</sup> This is one of Rawls's fundamental ideas, a necessary one, together with the original position (see note 8/2/3), 'needed to complete other ideas and to order them into a perspicuous whole'.<sup>499</sup>

### On paragraph 2

#### 12.1/2/1

See also Aristotle's long list of constitutions in his *Constitutions* or *Politeiai* (alleged to have reached 158, even during his lifetime);<sup>500</sup> see also the active interest around a hundred years earlier of Greeks in the foreign laws and customs described by Herodotus.<sup>501</sup>

### On paragraph 3

#### 12.1/3/1

Consider also Kant's 'Either one person within the state will rule over everyone, or several persons of equal rank will unite to rule over all others,

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498 Rawls, *Justice as Fairness*, 10.

499 *Ibid.*, 11.

500 Of which only the Constitution of Athens survives (Aristotle, *The Complete Works of Aristotle*, 2341–83.)

501 Herodotus, *The Histories*, trans. R. Waterfield (Oxford: Oxford University Press, 2008).

or all will rule collectively over each (hence also over themselves). That is, the form of the state will either be autocratic, aristocratic, or democratic.<sup>502</sup>

### On paragraph 7

#### 12.1/7/1

On the claim that whichever Being controls the government, it will use the state to serve its need to augment its information processing to the detriment of that state's citizens, given that information in the analogue world is finite, see, for example, Hobbes's 'Kings should be classed as predatory animals',<sup>503</sup> with further references to thinkers dating back to Roman times.

#### 12.1/7/2

Hence, Aristotle, only a few years after Plato, demonstrated that these are not clear-cut distinctions, that is, no assumptions can be made on the *how* simply by looking at the *who*.<sup>504</sup> In other words, it may well be the case that citizens of a state find that they augment their information processing under oligarchies or monarchies, compared to other citizens in neighbouring democracies (comparison being natural to humans, see Chapter 5.1, par. 9).

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502 Kant, *Political Writings*, 161.

503 Hobbes, *On the Citizen*, 3.

504 See, for example, Aristotle, *Politics*, 146 (1292a39).

## Notes on Chapter 13

### On paragraph 1

13/1/1

On the viewing of the state through the prism of various theories and ideologies as a way to define it, and in this manner to indirectly justify it, see also notes 7/1/1 to 7/1/15.

13/1/2

On the ‘craziness of the undertaking’, see Prologue, note 0/1/2.

### On paragraph 2

13/2/1 *On social contract theory*

According to social contract theory, states exist through the agreement of their citizens.<sup>505</sup> A state is a voluntary group of humans that was established (by those humans) for a reason.

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505 The social contract theory is, arguably, best understood metaphorically: ‘In practice it is at least doubtful whether a “natural condition” ever existed among humans, and it is rather inconceivable that humans ever formally gathered up and entered any type of contract among them’. Instead, ‘The social contract is thus to be understood as hypothetical: Are our political institutions and arrangements such that we would agree to them?’ (Christopher W. Morris (ed.), *The Social Contract Theorists: Critical Essays on Hobbes, Locke, and Rousseau* (Oxford: Rowman & Littlefield, 1999), x). This is what all contractarian philosophers set out to prove: that rational choice and/or consent (the bases for any contract) are the best foundations for our political institutions and arrangements (thus, constructing a political theory, and not a political philosophy, see note 13/2/7, as well as 0/1/8).

The social contract theory is the dominant, if not the only, state theory that has existed until now, ‘a single unbroken tradition stretching back from Rawls and Gauthier through Hobbes to the ancient Greeks’ (David Boucher and Paul Kelly, ‘The Social Contract and Its Critics: An Overview’, in David Boucher and Paul Kelly (eds.), *The Social Contract From Hobbes to Rawls* (London: Routledge, 2005), 1). See also note 13/2/2.

In order to avoid a state of nature (see note 8/2/3), whereby if not ‘war of all against all’<sup>506</sup> then certainly unresolvable perpetual conflict would be the norm,<sup>507</sup> humans enter into a contract among themselves to form a state with a specific purpose and assign it a government to serve that purpose.

There are three main points underpinning social contract theory—all are necessary as per its contractual context. First and foremost, that states are artificial, created by the agreement of their citizens. Second, that they are created for a specific purpose each time, for instance, to provide security or to protect human rights (or even to provide justice as fairness). And third, that the state is a society (a political one, see also notes 11/4/2, 11/4/3 and 11/2/1), one among many, meaning that other societies (e.g. ‘civil society’) may coexist with it.

Each of these propositions creates insurmountable theoretical and practical difficulties which are not present when taking the informational approach (which contradicts social contract theory on almost all fronts), which states that states are natural to humans, they have no purpose (but only a need), and state and society coincide within the same state (see Chapters 8 and 11).

A fourth main point underpinning social contract theory is, however, shared by both theories, namely the separation of the state from its government. According to social contract theory, citizens authorise a government to run their state for whatever purpose that state has been created for. The separation of the state from the government, although in a completely different context, is also acknowledged in the informational approach (see Chapter 12).

This note and the ones that follow (13/2/1 to 13/2/7) are not an attempt to analyse social contract theory—such an attempt lies far beyond the scope of this book. Attention will only be given to its most basic premises in order to demonstrate its limitations—which are resolved by taking the informational approach whereby states are natural to humans and have no (specific) purpose whatsoever.

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506 Hobbes, *Leviathan*, 84.

507 See, for example, Locke (‘I easily grant, that Civil Government is the proper Remedy for the Inconveniences of the State of Nature, which must certainly be Great, where Men may be Judges in their own Case, since ‘tis easily to be imagined, that he who was so unjust as to do his Brother an Injury, will scarce be so just as to condemn himself for it’ (Locke, *Two Treatises of Government*, 276). On Rousseau’s approach, see note 8/1/4.

13/2/2 *The origins of social contract theory*

Political (and much of any other) philosophy beginning with Plato, it was his idea of the state as an association among humans that is based on agreement that underpins much of political philosophy (including the social contract spin-off). In essence, regarding the origins of the state, Plato basically claimed that

*Society originates,... because the individual is not self-sufficient, but has many needs which he can't supply himself.... And when we have got hold of enough people to satisfy our many varied needs, we have assembled quite a large number of partners and helpers together to live in one place; and we give the resultant settlement the name of a community or state.*<sup>508</sup>

Aristotle basically picked up Plato's line of thinking on this matter,<sup>509</sup> but with a twist: he believed that states are not artificial, but natural to humans. However, this claim was not further substantiated—or, more accurately, he argued that states are natural to humans because they are the last (referring to city-states) phase of development in a teleological line (see also note 8/1/2):

*The final association, formed of several villages, is the state. For all practical purposes the process is now complete: self-sufficiency has been reached, and while the state came about as a means of securing life itself, it continues in being to secure the good life. Therefore every state exists by nature, as the earlier associations [households, villages] too were natural.*<sup>510</sup>

Cicero's *res publica* was a projection of Roman ideals, which were quickly diminishing around him, onto traditional Greek political philosophy; to

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508 Plato, *The Republic*, 94 (369c). See also Rowe's translation of the same: 'Cities come into existence,... because in fact none of us is self-sufficient; taken by ourselves, each one of us is deficient in many respects.... Thus it will be because one person recruits another to fill this or that need, and another another, and so on, and because our needs are many, that we gather many people together to live in a single location as partners and helpers, calling this shared habitation a "city"' (Plato, *The Republic*, 58).

509 'Observation tells us that every state is an association, [and that every association is formed with a view to some good purpose]' (Aristotle, *The Politics*, 54 (1252a1); see also 198 (1280b29–1281a2).

510 Aristotle, *The Politics*, 59 (1252b27). His ultimately limited approach is reflected a bit later, when he claims that 'Among all men, then, there is a natural impulse towards this kind of association; and the first man to construct a state deserves credit for conferring very great benefits' (Ibid., 61 (1253a29)).

him the state (a *republic*) was ‘the property of the public. But a public is not every kind of human gathering, congregating in any manner, but a numerous gathering brought together by legal consent and community of interest’.<sup>511</sup>

Saint Augustine, in his (ultimately hostile<sup>512</sup>) approach to states, distinguished between an earthly state (that of disintegrating Imperial Rome) and the spiritual, heavenly one: ‘We see then that the two cities were created by two kinds of love: the earthly city was created by self-love reaching the point of contempt for God, the Heavenly City by the love of God carried as far as contempt of self. In fact, the earthly city glories in itself, the Heavenly City glories in the Lord.’<sup>513</sup> He then continues:

*I classify the human race into two branches: the one consists of those who live by human standards, the other of those who live according to God’s will. I also call these two classes the two cities, speaking allegorically. By two cities I mean two societies of human beings, one of which is predestined to reign with God for all eternity, the other doomed to undergo eternal punishment with the Devil.*<sup>514</sup>

In spite of the fact that its basic idea of an artificial association created by agreement is as ancient as Greek philosophy, what is known today as social contract theory was first developed by Hobbes, in his *Leviathan* in 1651<sup>515</sup>

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511 Cicero, *The Republic and The Laws*, trans. N. Rudd (Oxford: Oxford University Press, 2008), 19.

512 As was necessary for the political aims of his theological analysis, which nevertheless had long-lasting consequences which have even today not been fully overcome. See, for example, ‘We may speak of two cities, or communities, one consisting of the good, angels as well as men, and the other of the evil’ (Augustine, *Concerning the City of God Against the Pagans*, 471); or, ‘I have already said that two cities, different and mutually opposed, owe their existence to the fact that some men live by the standard of the flesh, others by the standard of the spirit’ (Ibid., 553).

513 Ibid., 593.

514 Ibid., 595.

515 As famously formulated by Hobbes, outside a sovereign state man’s life would be ‘nasty, brutish, and short’ (Hobbes, *Leviathan*, 9). According to his theory, it is to avoid this fate that individuals form a (social) contract with their respective states, whereby they (individuals) consent to forego some of their freedoms in return for the safety provided by an organised civil society. Once such a social contract has been entered into, the political direction of the state concerned can go in any direction, ranging from democracy to monarchy or oligarchy—with Hobbes being in favour of a strong sovereign (i.e. monarchy).

In this way Hobbes not only formulated the modern approach to the social contract, but he also created the political discourse we are still dealing with today. He was the

(which was itself only made possible after Machiavelli had commodified the state<sup>516</sup> in his work *The Prince* in 1513). From that point on things moved

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first author to purposely and expressly equate the words 'civitas', 'commonwealth' and 'state', which were in wide, if not competing, use until then, thus allowing the generalised use of the latter (see Passerin d'Entrèves, *The Notion of the State*, 33). Notions such as the 'state of nature' (also in *Leviathan*) or interpretations of humans ('homo homini lupus'—in the Epistle Dedicatory of *On the Citizen*), as well as the radical new interpretation of 'natural law', were ideas that, although by no means new during Hobbes's time or conceived by him, he ingeniously brought into a unified theory which every political philosopher ever since has had to address. As noted by Strauss, Hobbes was the founder of modern political philosophy and Plato and Aristotle were the founders of traditional political philosophy (Strauss, *The Political Philosophy of Hobbes*, viii).

Hobbes's genius notwithstanding, his was a work of his time (see also the Foreword to this volume, par. 5). At the time of writing he had lived through a king being ceremoniously beheaded by his citizens in January 1649 and a brutal civil war (that soon led to a second revolution), and he himself faced exile (being in immediate danger). He also taught the son of the murdered king, who was to become the future king (the same as Aristotle, in this regard). Outside his own country, the Peace of Westphalia had created the Westphalian State in 1648 (see also note 16/1/3), while the Mayflower Compact had established a temporary 'civil body politic' in 1620. Due to these events, it is unsurprising that some of his interpretations were influenced by circumstance—for example, his preference for security of the person or for a strong sovereign (whatever form that may take) who enjoys unlimited political power.

Having said that, his decisive break with religion, and the God-derived authority of kings and states, was of immense, life-changing importance. Before *Leviathan* (most) states and kings claimed a direct relationship with God, from whom they derived their authority. After *Leviathan* this was no longer the case. The same was true for individualism. Before Hobbes, individuals were in the background, submissive to the will of God or the king. It was Hobbes who brought them to the fore, gave them the power to decide for themselves on their states and government, and thus gave birth to individualism.

Of course, his theoretical premises did not go uncontested: Hobbes refused to 'rely on human good will and institutional efficacy' (Gauthier, *The Logic of Leviathan*, vi), a criticism that resonates as much today as in his time. Hobbes's individualism was contested, most notably by Rousseau, in a conflict that, through each position's epigones, continues to this day (see also note 8/2/3).

- 516 Machiavelli was the first to commodify the state in just a few lines, in the first chapter of his *The Prince*: 'All states and all dominions that have had and continue to have power over men have been, and still are, either republics or principalities. Principalities are either hereditary, in which instance the family of the prince has ruled for generations, or they are new. The new ones are either completely new... or they are like appendages added to the hereditary state of the prince who acquires them.... Dominions taken in this way are either accustomed to living under a prince or are used to being free; and they are gained either by the arms of others or by one's own, either through Fortune or through virtue' (Niccolo Machiavelli, *The*

at a relentless pace (at least, in political philosophy terms): the theory was furthered first by Locke 40 years later, in 1691, in his *Two Treatises of Government*;<sup>517</sup> upheld by Hume, in spite of his different approach,<sup>518</sup> and then supported by Rousseau, in his *The Social Contract*, in 1762.<sup>519</sup> It was then adopted by and formed the theoretical basis of the American and French revolutions in 1775 and 1789, respectively.

Social contract theory underlies the political philosophy that liberal democracies have been operating on ever since, with the theory still holding strong today, having only had minor amendments to it attempted from time to time.<sup>520</sup> Its latest update<sup>521</sup> came from Rawls, who, in his *Theory of Justice* in 1971,<sup>522</sup> claimed that the (artificially made) state had yet another purpose (but one different from that identified by other political philoso-

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*Prince* (1513), trans. Peter Bondanella (Oxford: Oxford University Press, 2005), 7). This approach, brutal in its simplicity and logic (which was basically also reproduced with regard to religion; see, for example, his approach to the religion of the Romans in Machiavelli, *Discourses*, 34), could not lie further away from the approaches of, for example, Plato, Aristotle or even Cicero on the state. It is the treatment of a state (principality) as a commodity, as something concise and specific that is worth fighting over so as to govern. Machiavelli provides a manual for government acquisition and exercise, but in order to do so he first needed to clarify what it was exactly that was so worthwhile to govern. In this way, he shaped the modern notion of the state (see also, for example, Passerin d'Entrèves, *The Notion of the State*, 30).

What the state was or did, did not concern Machiavelli, however. He took it for granted that government over the state was a worthy cause, justifying his book (if not his entire life). He wrote a manual on government, not on the state. Strauss therefore rightly recognises Machiavelli as the originator of modern political philosophy, paving the way for Hobbes (Strauss, *The Political Philosophy of Hobbes*, xv). Although the break with God and myth may be present 'on the opening of Machiavelli's Discorsi' (Ibid., xvi), still it does not affect the clear break with the past that was accomplished by Hobbes—unless one looks hard to trace it in Machiavelli's work.

517 The Hobbesian politics of fear was already despised by Locke, who followed only a few decades later (Brooke, 'Introduction', xxviii).

518 Hume, *A Treatise of Human Nature*, 541. Hume basically furthered Aristotle's approach with regard to the 'naturalness' of the state, however not without concluding that the state is artificial (a result that Aristotle would also unavoidably have reached if he had taken his analysis further).

519 Rousseau, *The Social Contract and Other Early Political Writings*.

520 This remains true even if the contract remains in the background or in disguise; see, for example, the 'arrangements' in Fain, 'The Idea of the State', 19.

521 See also Boucher and Kelly, *The Social Contract From Hobbes to Rawls*.

522 Rawls, *A Theory of Justice*.

phers): to achieve justice, viewed not as order<sup>523</sup> but as fairness (which he considered something to be objectively and rationally understood by everyone through his 'invisible veil' construction).<sup>524</sup>

### 13/2/3 How many contracts according to social contract theory?

The questions of how many contracts, of what type and of what their basic terms and conditions are (notes 13/2/3, 13/2/4 and 13/2/5, respectively) may sound legalistic (and admittedly they are), but they are unavoidable: it is not that legal analysis has entered the domain of political philosophy in this case, but that political philosophy has used the term 'contract'.<sup>525</sup>

What is basically being discussed when talking about social contract theory is two contracts:<sup>526</sup> first, one among individuals to form a state (a political society, a body politic); and second (obviously, after the first has been concluded), one for that political state to be governed, with its government. (The consequences of this second contract depend on whether it is entered into individually, by each individual, as is the case in the first contract, or collectively, by the body that has just been formed).

For Hobbes, it is two contracts embedded in one three-party contract 'of every man with every man': 'I Authorise and give up my Right of Governing my selfe, to this Man, or to this Assembly of men, on this condition, that thou give up thy Right to him, and Authorise all his Actions

523 As perceived by Aristotle in his *Politics*: 'But justice is the bond of men in states; for the administration of justice, which is the determination of what is just, is the principle of order in political society' (Aristotle, *Politics*, 57 (1253a)). Plato also made the connection between justice and order (see Ernst Cassirer, *The Myth of the State* (New Haven: Yale University Press, 1946), 69).

St Augustine's position, when speaking of the cities of men and God respectively, 'is an absolute one, arising from a theological assumption involving, not simply justice between men, but *true* justice which must take account of man's duty to God' (John J. O'Meara, 'Introduction', in Saint Augustine, *Concerning the City of God Against the Pagans*, ed. John J. O'Meara (London: Penguin, 1986), 63).

The perception of justice as fairness in the context of state building is, therefore, justice's third iteration over time.

524 Rawls, *Justice as Fairness*, 85.

525 On the assumed unwillingness of Locke to actually use the term 'contract', for exactly these reasons, see Laslett, 'Introduction', 114.

526 Pufendorf, however, saw many contracts instead (Samuel Freiherr von Pufendorf, *De Jure Naturae et Gentium: Libri Octo* (1688) (*Translation of Volume Two*), trans. C. H. and W. A. Oldfather, ed. James Brown Scott (London: Wildy and Sons, 1932), 42a).

in like manner.<sup>527</sup> Therefore, in the first contract every human enters into a contract with every other human, creating a state (a commonwealth, a *civitas*—basically, the Leviathan); in the second contract each human gives, on identical terms, authorisation to a sovereign (one human or a group of humans) to rule over them (basically, the head of the Leviathan). While Hobbes makes all of this conditional ('on this condition'), the fact that the contract is entered into at all essentially means that the conditions are satisfied. Therefore, Hobbes imagines two contracts, the first creating a state (among the contracting individuals, i.e. not among non-contracting individuals in that specific contract) and the second the setting of a government upon it.

For Locke, it is basically one contract, to 'end the State of Nature between Men' when 'agreeing together mutually to enter into one Community, and make one Body Politick',<sup>528</sup> and it is this same contract that also establishes the government. Importantly, however, 'Although contractually related to each other, the people are not contractually obliged to government, and governors benefit from governing only as fellow members of the "Politick Body".... They are merely deputies for the people, trustees who can be discarded if they fail in their trust'.<sup>529</sup>

For Rousseau, adopting a less formal and more metaphysical (but significantly less liberal) approach, the social contract is 'a reciprocal commitment between society and the individual, so that each person, in making a contract, as it were, with himself, finds himself doubly committed'.<sup>530</sup> The phrase about each person 'making a contract, as it were, with himself' is

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527 *Leviathan*, 140.

528 Locke, *Two Treatises of Government*, 277. That particular contract is specific to that purpose (establishment of a state), which does not preclude other contracts being entered into while in the 'state of nature', because, according to Locke, and in line with his natural rights theory, 'truth' and the 'keeping of faith' belong to humans anyway (*Ibid.*; on why we should keep our promises, and thus morality, see Chap. 23, par. 4).

529 Quoted in Laslett, 'Introduction', 114, with further references.

530 Rousseau, *Of the Social Contract and Other Political Writings*, 62. See also Betts: 'As Rousseau formulates the contract, then, it enacts a double operation: it is both the creation of a unified social entity consisting of a number of individuals, and their acceptance of that entity's authority over them' (Christopher Betts, 'Introduction', in Jean-Jacques Rousseau, *Discourse on Political Economy and the Social Contract*, ed. Christopher Betts (1994), xv).

of immense significance for understanding the deeply moral (and for this reason illiberal) nature of Rousseau's contract.<sup>531</sup>

Of course, countless questions can be asked about these contracts; if a simple, everyday contract necessitates court decisions for its clarification, one can only imagine what would happen with a contract that instituted a state—and its government. These questions are more or less left unanswered by the social contract theorists, one would imagine both intentionally and unavoidably; unavoidably, because there is only a limited number of questions one can answer in a book; intentionally, because, specifically when it comes to justifying revolution or absolutist regimes (see also note 13/2/4), some things are better left unsaid (in fear of ending up with a Kelsenian, mechanistic approach).

### 13/2/3 *What types of contracts?*

In Hobbes's clear-cut model of two contracts, the creation of a state is performed in the first (we therefore have a contract for the formation of an association, an articles-of-association of sorts; see, however, note 11/4/3), followed by an authorisation to the government to run the state that prevails, the government being an external third party (the existence of which at the time of the contract or its creation thereafter for this purpose being unclear). The government, however, is not a party to the contract (there being, therefore, a contract among parties to the benefit of a third party which has not entered into it—and therefore has no obligation to adhere to it). As seen previously (in note 13/2/2), for this exact reason, Locke shied away from this authorisation to the government, while Rousseau (starting from a different premise) did not alter Hobbes's authorisation to the government, but only noted his preference for it to be a popular assembly.

It is exactly the nature of this second contract in social contract theory, the one which establishes the government, that has attracted the most criticism. Hobbes's model may be clear, but it has been accused of alienating humans' natural rights (supposing, of course, that they exist, see

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531 Rousseau continues, in this regard: 'Here there can be no invoking the principle of civil law which says that no man is bound by a contract with himself, for there is a great difference between having an obligation to oneself and having an obligation to something of which one is a member' (Rousseau, *Of the Social Contract and Other Political Writings*, 62).

The above are, of course, without prejudice to Rousseau's infamous 'forced to be free' quote (Ibid., 23)—and the vast ensuing discussion.

note 20/5/2); Locke preserves these rights, but at the cost of clarity; while Rousseau (on the basis of a ‘common will’, see note 13/2/5) simply did not bother much with the topic.

Contrary to the above mechanistic approach to state creation, Kant (who based his social contract not on agreement but on rational thinking—i.e. Reason) ultimately claimed (in view of the unresolvable limitations of his approach) that the origin of the supreme power (or how a contract actually created a state) ‘for all practical purposes, is not discoverable by the people who are subject to it’.<sup>532</sup>

### 13/2/4 *What are the basic terms and conditions of these contracts?*

Even assuming the basics have been resolved (which most certainly is not the case, see notes 13/2/2 and 13/2/3), considerable effort has been spent on describing the legal mechanisms and the actual provisions of these contracts (by the authors themselves—and where they are not adequately described, on their deciphering by later scholars). This includes answers to questions such as, how can they be terminated by either of the parties? Must they be terminated for cause, and what happens if the other party (i.e. the government) does not concur? If terminated, what happens in the intermediate period until a new contract is entered into? What happens if their subject-matter (the state) is dissolved for any reason?

For Hobbes, in view of the complete transfer of rights (‘give up my Right of Governing my selfe’) from citizens to their government, the revocation of this transfer is only possible in some marginal cases (basically, only in self-defence for survival). Locke seems to sanction revolution<sup>533</sup>—and the same is the case most notably for Rousseau,<sup>534</sup> which explains why his writings have been frequently used by revolutionaries around the globe.

The differences above are not unimportant but they are explainable on the basis of the development of the argument (every next author knew

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532 Kant, *Political Writings*, 143.

533 See Locke, *Two Treatises of Government*, 412, as well as Laslett, ‘Introduction’, 115.

534 See, for example, Book III, Chapter 8 (‘these very exceptions confirm the rule in that sooner or later they produce revolutions which restore things to the order of nature’) or Chapter 15 (‘Any law which the People has not ratified in person is null; it is not a law’) in his social contract (Rousseau, *The Social Contract and Other Early Political Writings*, 101 and 14 respectively).

the text, and criticisms, of his predecessor<sup>535</sup>) and historical circumstance (see also the Prologue, par. 5). In any case, they certainly do not reply conclusively and convincingly to the basic questions posed above (which paved the way for legal realism and Kelsen's state theory).

It is therefore in response to these, inevitable (because we are talking about contracts) questions that the greatest difficulties of social contract theory are met. While in principle an agreement between those governed and their government sounds like an excellent basis for coexistence, any agreement among humans merely sets a basis for collaboration. However, it is never comprehensive enough and it certainly does not warrant full satisfaction of all of the parties' hopes and wishes when they entered into it in the first place—and it is thus an unreliable explanation of why things are as they are.

### 13/2/5 *An underlying common will*

Notwithstanding the legal technicalities of the social contract (which should not, however, itself be perceived legally, i.e. as a typical contract), its most important part is, arguably, not its formation of a state and authorisation of a government (the formulation of which, on account of their artificiality, is deeply flawed) but its identification of a common will<sup>536</sup>—a common will among certain individuals to separate themselves from other individuals and to form a state.<sup>537</sup> How this common will has been created, whether it is justifiable and whether a social contract is the best way to express it are beside the point: a common will (apparently based on shared characteristics, or at least the perception thereof) is necessary for state formation according to social contract theory. This, in turn, opens up the discussion on nation-states and nationalism (see Chapter 18, as well as note 18/2/2).

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535 For example, Hume specifically objected to Locke's basic assumptions (Hume, *A Treatise of Human Nature*, 50).

536 See also Sidgwick's criticism of the social contract theory, on exactly these grounds (Sidgwick, *The Methods of Ethics*, 298).

537 This common will ought not be confused with Rousseau's 'general will' in his own approach to the social contract, a source of much confusion and controversy (for a sympathetic analysis, see Bertram, 'Introduction', xxiii).

13/2/6 On consent. Is it a suitable basis for the social contract?

Common to (or at least popular among) all contractarian theorists is the idea that consent lies at the basis of the social contract. Citizens consent to create a state through a social contract, and they consent to the establishment of a government to manage that state for a particular purpose. Is, however, consent a suitable basis through which to accomplish all this?

Hobbes thought not: 'This is more than consent, or concord; it is a real unity of them all, in one and the same person, made by covenant of every man with every man'.<sup>538</sup>

Kant may have followed social contract theory, but he did not base his argument on consent, but on Reason ('the social contract itself is a requirement of reason, not as an account of the origin of political society, but as a rational criterion of the just polity'<sup>539</sup>). Although in this way the issue of the artificiality of the state (see par. 3) is perhaps resolved (if Reason stands at its basis then a social contract is unavoidable), this approach merely moves the problem towards arbitrariness—regarding what exactly is included in morality and 'just polity' (if it is not ultimately an impediment to change of any kind, including rebellion<sup>540</sup>).

13/2/7 Social contract theory is a moral political philosophy

With agreement set as its basis, social contract theory has been used to justify any type of political system (e.g. a democracy, constitutional or otherwise; an oligarchy; a monarchy) precisely because it is a non-existent, imagined agreement that could include anything its proponents want it to. From this point of view, because it can claim that it is political theory-agnostic, social contract theory can also claim universality, that is, that it is a scientific explanation of the state (see also note 0/1/3).

However, this is not the case, because social contract theory invariably includes a moral component, it tells people how they *should* be, how they *should* behave. This is because it is unavoidably (and unapologetically) tele-

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538 Hobbes, *Leviathan*, 114.

539 Boucher and Kelly, 'The Social Contract and Its Critics', 7; as well as Howard Williams, 'Kant on the Social Contract', in David Boucher and Paul Kelly (eds.), *The Social Contract From Hobbes to Rawls* (London: Routledge, 2005).

540 A counter-intuitive and counter-empirical argument, as noted by Boucher and Kelly ('The Social Contract and Its Critics', 8), where the connection with Rawls's (similarly moralising) approach is also noted.

ological. By ascribing a purpose to the state (this purpose being the *raison d'être* of the social contract itself), humans (including their governments) unavoidably have to strive to reach it.<sup>541</sup> In other words, as Bellamy says, 'as with theories of God-given or natural law, the terms of the contract are likely to be viewed differently by different theorists, according to the moral and empirical presuppositions they bring to bear in their characterizations of human nature and the casual structure of social relations'.<sup>542</sup>

### On paragraph 3

13/3/1

On the finding that it is (a general consensus on) the artificiality of the state that has led practically every thinker engaged with it to unavoidably 'impose a particular vision of the state', see Bourdieu.<sup>543</sup>

13/3/2

As a state justification theory that considers the state to be artificial, social contract theory could not differ more from the informational approach advocated in this book. On the one hand, the social contract claims artificiality and requires individuals' consent to justify the state (or in any case its preferred political system); on the other hand, informational states are considered in this book to be natural to humans, the only individualisation mechanism naturally available to them in order to live a meaningful life.

From this point of view, similarities between the two theories can only be found in their fundamental and underlying individualism. With a caveat, however: individualism in social contract theory, and its epigones, sets the individual at its centre, as a rational political actor (based on an assumed and imagined rationality) who is able to choose. It therefore includes an element of morality, that individuals should be treated in this manner by

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541 Even Hobbes, with his merciless assessment of human nature, ultimately wanted people to change: 'For clearly Hobbes believes that men are not behaving as they should, but can do so. His conclusions are intended to provide advice to men to change their behaviour so that they may succeed in constructing a well-grounded state' (Gauthier, *The Logic of Leviathan*, 20). On the relevant discussion, see also Paul Franco, 'Foreword', in Michael Oakeshott (ed.), *Hobbes on Civil Association* (Indianapolis: Liberty Fund, 2000).

542 Bellamy, *Citizenship*, 41.

543 Bourdieu, 'Rethinking the State', 55.

their political systems. This is not the case, however, for the approach expounded in this book: although it claims that humans need to augment their information processing (which is why they became individuals in the first place), it never claims that they should be assisted to any degree in serving their need(s) by their political systems (see also Chapter 10, par. 4).

#### On paragraph 4

13/4/1

On the theory of originality, the secular counterpart to states' theological provenance, see, for example, Kantorowicz.<sup>544</sup>

13/4/2 *Myth and the state*

On myth being the necessary basis of each state's formation and legitimacy, see Nelson<sup>545</sup> and, of course, Cassirer,<sup>546</sup> as well as Montaigne's ire at the fact:

*Since men are not intelligent enough to be adequately paid in good coin let counterfeit coin be used as well. That method has been employed by all the lawgivers. And there is no polity which has not brought in some vain ceremonial honours, or some untruths, to serve as a bridle to keep the people to their duties; that is why most of them have fables about their origins and have beginnings embroidered with supernatural mysteries.*<sup>547</sup>

From this point of view, notwithstanding artificiality, it could be claimed that 'states are nevertheless natural in so far as they better facilitate God's purpose of the preservation of mankind',<sup>548</sup> ultimately connecting as natural whatever is necessary (as is a basic premise of this book, see Chapter 5, par. 5), but basing such need on much more arbitrary grounds.

13/4/3

On religion, see also Chapter 23, par. 5.

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544 Hermann Kantorowicz, 'The Concept of the State', *Economica* 35 (1932), 9.

545 Nelson, *The Making of the Modern State*, 8.

546 Cassirer, *The Myth of the State*; an analysis that was also a product of its time (see Foreword, par. 5 of this volume).

547 Montaigne, *The Complete Essays*, 715.

548 Boucher and Kelly, *The Social Contract From Hobbes to Rawls*.

## On paragraph 6

### 13/6/1 *On utilitarianism and the social contract*

The quotes in the text are from Bentham's 'A fragment on government',<sup>549</sup> That habit of obedience is, however, ultimately apparently connected with interest: 'so long as the probable mischiefs of obedience are less than the probable mischiefs of resistance: why, in a word, taking the whole body together, it is their duty to obey, just so long as it is their interest, and no longer.'<sup>550</sup> This, therefore connects utilitarianism, at its core, with social contract theory.

On the finding that utilitarians, in spite of their apparently anti-contractarian explanation of the state, did not stay clear of contractarian logic, see Boucher and Kelly: 'Hume, then, did not wish to deny that the origin of government might have rested upon consent. What he wanted to insist upon was the disjunction between its origin and continuing legitimacy.'<sup>551</sup>

On the (non-existent) relationship of the informational approach advocated in this book with utilitarianism, see note 5.1/1/1.

## On paragraph 7

### 13/6/1 *On Hegel and the state*

The quotes in the text are from Hegel's *Philosophy of Right*<sup>552</sup> and Boucher and Kelly.<sup>553</sup>

See also Nettl: 'What Hegel did in an idealized and philosophical concept, Freud later perfected in much more personal terms. The basic power of the state for him rested on love—with hypnotic and erotic overtones.'<sup>554</sup>

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549 Jeremy Bentham, *A Fragment on Government*, ed. J. H. Burns and H. L. A. Hart (Cambridge: Cambridge University Press, 1988), 40.

550 *Ibid.*, 56. See also Hume, *A Treatise of Human Nature*, 602.

551 Boucher and Kelly, 'The Social Contract and Its Critics', 20.

552 Georg W. F. Hegel, *Elements of the Philosophy of Right* (1820), trans. H. B. Nisbet, ed. Allen W. Wood (Cambridge: Cambridge University Press, 1991), 106.

553 Boucher and Kelly, 'The Social Contract and Its Critics', 23.

554 Nettl, 'The State as a Conceptual Variable', 573. Compare also Boucher and Kelly: 'For Hegel, however, it was important to show that the pre-civil state of nature assumed of its members characteristics that they could acquire only in society. The private rights of contract and property are used to legitimize the public rights produced by the legal and social institutions of the state, whereas in reality the opposite is the case, private rights are generated and legitimized by the sphere of public rights. A variation on this Hegelian argument is found in communitarian and

## On paragraph 8

### 13/8/1 *The Marxist approach to the state*

The quotes in the text are from the *Communist Manifesto* (Chapter I)<sup>555</sup> and by Poulantzas,<sup>556</sup> respectively.<sup>557</sup> Marx's critique of contractarianism and liberalism as bourgeois ideology builds upon Hegel's account of the individual as a social creation, although he gives this argument a materialist interpretation. Like Hegel he denies that individuals can have a presocial existence or that their identities are set prior to social interaction.<sup>558</sup> Gau-

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Marxist critiques as well as in contemporary feminism' (Boucher and Kelly, 'The Social Contract and Its Critics', 17).

555 See also 'The specific economic form, in which unpaid surplus-labour is pumped out of direct producers, determines the relationship of rulers and ruled.... It is always the direct relationship of the owners of the conditions of production to the direct producers... which, reveals the innermost secret, the hidden basis of the entire social structure, and with it the political form of the relation of sovereignty and dependence, in short, the corresponding specific form of the State.' Karl Marx, *Capital: A Critique of Political Economy. Volume III* (1894), ed. Friedrich Engels, trans. David Fernbach (London: Penguin Classics, 1991), 927.

556 Istvan Meszaros, *Beyond Leviathan: Critique of the State*, ed. John Bellamy Foster (New York: Monthly Review Press, 2022); Poulantzas, *State, Power, Socialism*, 20. Poulantzas's pet expression, 'undecipherable mystery', is quoted in Easton, 'The Political System Besieged by the State', 307. Easton also quotes Laclau: 'I refer to the work of Nicos Poulantzas. Laclau, a sympathetic Marxist critic, has put it well. "The work of Nicos Poulantzas," he writes, "is of considerable theoretical importance... because Marxist thought did not begin to develop, until the last decade, a systematic theory about the nature and the role of the State in various socioeconomic formations.... We can only welcome a work which tries to establish on the theoretical level the specificity of the political and which systematically avoids purely impressionistic correlations." And as he puts it elsewhere, Poulantzas's work has an "importance [for the development of Marxist political sociology that] can hardly be exaggerated"' (Ibid.).

557 The Marxist approach to the state, as an apparatus for managing common business, is not lost in Castells's approach: 'This simple analytical model sees the state as the institutional system that mediates and manages the dual relationship between domination and legitimation, and between development and redistribution, under the influence of conflicts and negotiations between different social actors' (Castells, *The Power of Identity*, 361).

558 Lawrence Wilde, 'Marx Against the Social Contract', in Boucher and Kelly (eds.), *The Social Contract From Hobbes to Rawls* (London: Routledge, 2005). In Marxist theory the state is viewed as a purpose to a means, a tool in the struggle between classes. See, for example, Giddens, who approaches it from a social theory perspective: "'The state" sometimes means an apparatus of government or power, sometimes the overall social system subject to that government or power.' (Giddens, *The Nation-State and Violence*, 17). The basic tell-tale of a Marxist approach to the

thier (the confusion between state and government notwithstanding) notes that,

*Classical liberal theory emphasizes the distinction of government and citizen, conceiving the government as a restraining agent on the citizen. Classical socialist theory emphasizes the identification of government and citizen, conceiving the government strictly as the agent of the body of citizens. I would suggest that the metaphor of authorization brings out both the basic truth which underlies each of these theories, and reveals the limitations of each truth.*<sup>559</sup>

As noted by Mann, ‘Indeed, according to Marx (and all subsequent Marxists agree with him in this respect) the state itself only emerges with the separation of the direct producer from his surplus—classless primitive societies did not have States.’<sup>560</sup>

## On paragraph 9

13/9/1 *On the welfare state*

On the current definition of the ‘welfare state’ see, for example, Béland et al.: ‘At its narrowest, it may simply describe a given country’s arrangements for income maintenance. At its broadest, it is a descriptor for the full range of economic, social, political, and even cultural traits of a given polity’.<sup>561</sup> Additionally, Pierson states: ‘A brief and institutional definition of social policy would identify it with the main areas of activity of the welfare state: education, health, housing, income maintenance (social security) and personal social services.’<sup>562</sup>

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state is the use of the word ‘apparatus’; see, e.g. Gordon L. Clark and Michael Dear, *State Apparatus: Structures and Language of Legitimacy* (Oxon: Routledge, 2021).

559 Gauthier, *The Logic of Leviathan*, 23. For criticism of the Marxist (instrumentalist) theory see also Bourdieu (‘it always insists on characterizing the state by what it does, and by the people for whom it does what it does, but without investigating the actual structure of the mechanisms deemed to produce its foundation’; *On the State*, 5) or Nettl (‘The State as a Conceptual Variable’, 572).

560 Mann, ‘States, Ancient and Modern’, 264.

561 Daniel Béland et al., ‘Introduction’, in Daniel Béland et al. (eds.), *The Oxford Handbook of the Welfare State* (Oxford: Oxford University Press, 2021), 1.

562 Pierson, *The Modern State*, 100.

On an overall assessment of the welfare state see, once again, Nettl:

*[The W]elfare state—a recent phenomenon and one moreover that has slightly pejorative or at least ironical overtones. It implies a distinct relaxation of individual autonomy and decision-making, the acceptance of priorities and decisions on one's own behalf by an outside collectivity of which one feels not a constituent but merely a recipient part, by which the notion of society is partly collapsed into that of state.*<sup>563</sup>

## On paragraph 10

13/10/1

On state malaise consider, for example, Mann: 'I like the insight that for more than 90 percent of their existence on earth, human groups sought to prevent the emergence of states. I like my argument that only rarely, and because of particular circumstances, did human groups "break through" to states and civilizations.'<sup>564</sup>

Theorists have imagined (perhaps within the context of a self-fulfilling prophecy, through countless repetitions over thousands of years) that this state malaise is attributable to humans as early as during the hunter-gatherer stages. See, for example, Gamble, who connects a 'loss of autonomy' with state formation:

*From there I shall consider what sets the state apart and the frameworks which are needed to investigate the various forms of control associated with its expansion and consolidation as an enduring idea if not an everlasting entity. In this context the loss of autonomy at many social and political scales, rather than the development of complexity, is seen as the central issue when we start asking how and why state formation took place.*<sup>565</sup>

See also note 10/5/1.

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563 Nettl, 'The State as a Conceptual Variable', 577.

564 Mann, *The Sources of Social Power*, xv.

565 Gamble, 'Hunter Gatherers and the Origin of States', 23.

## On paragraph 11

13/11/1

Although, of course, states are natural to humans and cannot be (and have never been) challenged by any time-specific developments, it is nice to use Strange's analogy while trying to explain the 'paradox' of state authority being both challenged and simultaneously strengthened by the what seem to have been (at that time) grave challenges to state authority, meaning international organisations and transnational corporations:

*The situation I propose to describe can best be understood by analogy. In a large and powerful river, where the river is broad and the water is shallow, sandbanks appear. At the upstream end, the river will tend to erode the sandbank. At the downstream end, it will tend to build them up. Occasionally, some sandbanks will be washed away. New ones will appear. But the simultaneous process of erosion and deposition will go on all the time.... [International organizations and transnational corporations] are building up the sandbank of state power at the same time as, in other ways, they are eroding it.<sup>566</sup>*

The digital world is, therefore, expected to simply be added to that list, to hold that role in the future.

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566 Susan Strange, 'Supranationals and the State', in John A. Hall (ed.), *States in History* (London: Basil Blackwell, 1986), 290.

## *Notes on Chapter 14*

### **On paragraph 4**

14/4/1

Consider also Bosanquet's idealised state, whereby 'The State is the ark in which the whole treasure of the individual citizen's head and heart is preserved in a world which may be disorderly and hostile'.<sup>567</sup>

### **On paragraph 5**

14/5/1

In the words of Runciman, 'state is the means by which contingent social arrangements are made secure, and therefore the instrument through which it becomes possible to make plans for the future that have some prospect of being fulfilled'.<sup>568</sup>

### **On paragraph 7**

14/7/1

The grounds for state legitimacy suggested so far have been closely connected to state justification. This perhaps unavoidable, because the reason why anything was created (remembering that, until now, the unanimously agreed upon state theory has claimed that states are artificial) must logically be ongoing for it to be preserved.

Accordingly, within social contract theory, states are claimed to be legitimate either through exercise of the monopoly of violence (see note 7/1/3)

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567 Quoted in David Runciman, 'The Concept of the State: The Sovereignty of a Fiction', in Quentin Skinner and Bo Strâth (eds.), *States and Citizens: History, Theory, Prospects* (Cambridge: Cambridge University Press, 2003), 35.

568 *Ibid.*, 34.

or because they reflect the (rational, in Enlightenment terms) will of the people<sup>569</sup> (the latter being connected with the claim for democracy<sup>570</sup>).

### On paragraph 9

14/9/1

On the many historical examples where a conqueror (usually an empire) allows the conquered to exercise the three types of information processing without actually controlling them (in the sense that, if instructions were given, they would need to be obeyed), see Bourdieu.<sup>571</sup>

See also Nettl, who claimed that ‘a state may be sovereign as well as autonomous or it may merely be autonomous’.<sup>572</sup>

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569 See, for example, Meyer, *Geschichte des Altertums*, II.

570 See Fabienne Peter, *The Grounds of Political Legitimacy* (Oxford: Oxford University Press, 2020), as well as her entry on the same matter in the Stanford Encyclopedia of Philosophy (Fabienne Peter, ‘Political Legitimacy’, in Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (2017)).

571 Bourdieu, *On the State*, 187; in which case the empire is a ‘superstructure’.

572 Nettl, ‘The State as a Conceptual Variable’, 569.

## Notes on Chapter 15

### On paragraph 1

15/1/1

Portugal is perhaps the oldest modern state, established in 1143. Out of the 193 member states of the UN at the time of writing, perhaps a third have been established (as new or successor states) since its creation in 1945.<sup>573</sup>

15/1/2

On the topic of state succession, see also Steinmetz: ‘States are never “formed” once and for all. It is more fruitful to view state formation as an ongoing process of structural change and not as a one-time event.’<sup>574</sup>

### On paragraph 2

15/2/1 *On the birth of a state*

Machiavelli, through his commodification of the state, was the first to formulate in a clear manner the ways in which a new state may come about (see note 13/2/2). His realism was followed by Hobbes: ‘And though sovereignty, in the intention of them that make it, be immortal; yet it is in its own nature, not only subject to violent death, by foreign war; but also through the ignorance, and passions of men, it hath in it, from the very institution, many seeds of a natural mortality, by intestine discord.’<sup>575</sup>

Ultimately, however, as noted by Bense, ‘All modern [state] foundings embody myths, fictions, and abstractions that enlist mass support for the state’s sovereign right to rule’, and, as such, they ‘are grounded in meta-

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573 See also Crawford: ‘At the beginning of the twentieth century there were some fifty acknowledged States. Immediately before World War II there were about seventy-five. By 2005, there were almost 200—to be precise, 192’ (James Crawford, *The Creation of States in International Law*, 2nd edn. (Oxford: Oxford University Press, 2006), 4).

574 Steinmetz, *State/Culture*, 9; see also Scheidel, ‘Studying the State’, 9, with further references.

575 Hobbes, *Leviathan*, 147.

physical assumptions that cannot be constructed or referenced as empirical realities'.<sup>576</sup>

See also note 13/4/2.

15/2/2

Of course, under the juristic approach to the state, such as that of Kelsen, state birth and death are relatively easy to identify. They are, namely, '[t]he point of time when a State begins to exist, that is, the moment when a national legal order begins to be valid, as well as the moment in which a national legal order ceases to be valid, is determined by positive international law according to the principle of effectiveness'.<sup>577</sup> This leaves open, however, the issue of who drafts such positive international law and who enforces it in practice<sup>578</sup> (on states in the international arena, see Chapter 19).

15/2/3

On violence, and Tilly's famous dictum that 'states make war and war makes states', see note 7/1/11.

### On paragraph 3

15/3/1

On there never being a void in city succession, see Aristotle: 'If a city is a form of association, and if this form of association is an association of citizens in a constitution, it would seem to follow inevitably that when the constitution undergoes a change in form, and becomes a different constitution, the city will likewise cease to be the same city.'<sup>579</sup>

15/3/2 *State succession and social contract theory*

Social contract theory, which implies an original (imagined) 'state of nature' where no state or government exists and individuals voluntarily enter

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576 Bensel, *The Founding of Modern States*, 474.

577 Kelsen, *General Theory of Law and State*, 219.

578 On this topic, see, for example, Crawford, *The Creation of States in International Law*.

579 Aristotle, *Politics*, 90 (1276b1).

into a contract to (artificially) create one, thus deals only with difficulties with state failure and succession. This is because each time a state succeeds another, a necessary (imagined) stage must have occurred whereby the individuals belonging to the previous state returned to their original 'state of nature', thus terminating the old contract, before entering into a new one (presumably under exactly the same terms as the previous one, because the social contract never changes). While this scheme may make sense to theorists and philosophers, it reflects a laboratory procedure that lies as far from reality and real life as it could ever be.

With regard to revolutions, see also Kant: 'and the transition to a better one [state] would not then be a metamorphosis but a palingenesis'.<sup>580</sup>

### 15/3/3 No individual in limbo

An important difference between the informational approach of this book and social contract theory is that, whereas here it is claimed that the connection of an individual with its state cannot be broken (see Chapter 8, par. 6), Hobbes, for example, claims that if no protection is given, 'he that wants protection, may seek it anywhere'.<sup>581</sup> This may mean that in an interim period an individual is in limbo, in between changing states.<sup>582</sup>

The informational connection between an individual and its state, being natural, never expires and is unchangeable and unbreakable. From the point of view of the state, only state succession, immediate and automatic, is possible, never termination. Of course, it goes without saying that an individual can change his or her citizenship, either voluntarily or involuntarily (see also note 7/1/1).

## On paragraph 4

### 15/4/1

On why do states die, see note 8/2/5.

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580 Kant, *Political Writings*, 162.

581 Hobbes, *Leviathan*, 221.

582 This is not the same as, for example, the situation in the film *The Terminal* (Steven Spielberg (dir.), *The Terminal* (DreamWorks Pictures, 2004)), in which an individual was deprived of his legal citizenship, and thus had to live in the transit area of an airport for a prolonged period of time: in this case the state acknowledged the citizen's existence, the bond was never broken—only the (political) right to citizenship was denied (see also note 7/1/1).

15/4/2

Admittedly, the claim that a state dies when its citizens no longer need it to augment their information processing perhaps implies a rationality that does not seem to be supported by history. In fact, very few cases have been recorded in which citizens have voluntarily exchanged their state for another. However, this rationality perhaps serves to explain all cases of non-revolution (or unsuccessful revolutions or any other type of social unrest) by citizens in the event of violent change (or alleged unsuitability) in their states (see also note 8/2/5).

### On paragraph 6

15/6/1

The issue of whether a subsequent state assumes the obligations of its predecessor is an old one, which even Aristotle carefully avoided.<sup>583</sup>

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583 See Stalley's comment on Aristotle's *Politics* 1276b in Aristotle, *Politics*, 351.

## Notes on Chapter 16

### On paragraph 1

#### *16/1/1 Definition of sovereignty*

The definition of sovereignty is a perennial topic in political philosophy. Hobbes famously responded with his seven powers that ‘make the essence of sovereignty’.<sup>584</sup> Hobbes’s approach is descriptive, identifying ‘powers’ (see also note 16/2/3) and adding them to a list. In this way he replicated the approach of Bodin, who, a hundred years earlier, had provided his own list of the ‘true markes of Soveraigntie’, which acknowledged the supremacy of the legislative power.<sup>585</sup> Hobbes made a clear break from the past, whereas, for example, for Bodin, sovereignty was simply and comprehensively ‘the most high, absolute, and perpetuall power over the citizens and subjects in a Commonweale’.<sup>586</sup>

In his idealistic approach to the state, Hegel claimed that sovereignty ‘depends on the fact that the particular functions and powers of the state are not self-subsistent or firmly grounded either on their own account or in the particular will of individuals, but have their roots ultimately in the unity of the state as their simple self’.<sup>587</sup>

Efforts to define sovereignty have never yet ceased; see, for example, Diener and Hagen,<sup>588</sup> Sorensen,<sup>589</sup> among others.

#### *16/1/2 Internal and external sovereignty*

In the context of the post-Westphalian state (see note 16/1/3), in which we are arguably still living today, the notion of sovereignty has a twofold

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584 Hobbes, *Leviathan*, 115. See also Goldsmith, ‘Hobbes’s “Mortall God”’.

585 Jean Bodin, *The Six Bookes of a Commonweale* (1576), ed. Kenneth Douglas McRae (Cambridge: Harvard University Press, 1962), 153.

586 *Ibid.*, 84.

587 Hegel, *Outlines of the Philosophy of Right*, 265.

588 Diener and Hagen, *Borders*, 6.

589 Sørensen, ‘The Transformation of the State’, 106.

character, an internal one (the 'vertical aspect'),<sup>590</sup> meaning the absolute authority of the state over its citizens, and an external one (the 'horizontal aspect'),<sup>591</sup> namely the relationship of a state with other states.

### 16/1/3 On the Westphalian state

Internal sovereignty, meaning the right of the state to manage its own affairs internally (but the notion is frequently extended to also cover much of state function and organisation), is connected to the Peace of Westphalia of 1648 which resulted in the creation of the 'Westphalian state'. It is in this conception of the state that we are arguably still living today.

*The Westphalian system refers to the organization of the world into territorially exclusive, sovereign nation-states, each with an internal monopoly of legitimate violence. Its defining properties include political institutions with (1) a monopoly of legitimate violence; (2) a continuous centralized staff capable of extracting taxes and administering; and (3) authoritative institutions and personnel who make policy over a range of issues. States have varied historically in numerous ways but they are alike in that they are juridical equals and are sovereign over their territories.*<sup>592</sup>

In Gross's words:

*The Peace of Westphalia, for better or worse, marks the end of an epoch and the opening of another. It represents the majestic portal which leads from the old into the new world. The old world, we are told, lived in the idea of a Christian commonwealth, of a world harmoniously ordered and governed in the spiritual and temporal realms by the Pope and Emperor.... In the political field it marked man's abandonment of the idea of a hierarchical structure of society and his option for a new system characterized*

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590 Lael Daniel Weinberger, 'The Relationship Between Sphere Sovereignty and Subsidiarity', in Michelle Evans and Augusto Zimmermann (eds.), *Global Perspectives on Subsidiarity* (Dordrecht: Springer, 2014), 61.

591 Ibid.

592 Caporaso, 'The European Union and Forms of State', 34; see also, among many others, Diener and Hagen, *Borders*, 40 (specifically on the implications for borders). Friedrich notes that '[t]he state as an institutional manifold and its concept as forged in the sixteenth century developed in response to the challenge presented by the church's secular ambitions' (Carl J. Friedrich, *Man and His Government. An Empirical Theory of Politics* (New York: McGraw-Hill, 1963), 548).

*by the coexistence of a multiplicity of states, each sovereign within its territory, equal to one another, and free from any external earthly authority.*<sup>593</sup>

Challenges to the Westphalian state have been numerous for the past 375 years. Notwithstanding contemporary claims that the ‘state is dead’ (see note 0/4/1), and the gradual diminishing of, what appeared under Hobbes to be, a sovereign’s absolute right and the ascendancy of constitutional democracy through the works of Locke and Rousseau,<sup>594</sup> the most recent breach of Westphalian-type state sovereignty came with the challenge to states’ internal absolute right to do anything they want within their borders through the conventions of the UN and the international laws on human rights.<sup>595</sup>

In any event, on the modern challenges to the Westphalian state (as well as on the realisation that the familiar Westphalian state is being transformed), see, for example, Sorensen.<sup>596</sup>

## On paragraph 2

16/2/1

Total control, which belongs by definition to the state, helps to explain the ‘meta-capital’ of Bourdieu’s state: ‘The state is the culmination of a process of concentration of different species of capital: capital of physical force or instruments of coercion (army, police), economic capital, cultural or (better) informational capital, and symbolic capital.’<sup>597</sup>

16/2/2 *On the relationship between sovereignty and legitimacy*

The relationship between sovereignty and the legitimacy of states and (their) governments needs to be clarified.

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593 Leo Gross, ‘The Peace of Westphalia, 1648–1948’, *American Journal of International Law* 42/1 (1948), 28.

594 See Claire Finkelstein, ‘Introduction’, in Claire Finkelstein and Michael Skerker (eds.), *Sovereignty and the New Executive Authority* (Oxford: Oxford University Press, 2018), xvii.

595 See Jacob Weinrib, ‘Sovereignty as a Right and as a Duty: Kant’s Theory of the State’, in Claire Finkelstein and Michael Skerker (eds.), *Sovereignty and the New Executive Authority* (Oxford: Oxford University Press, 2018), 21.

596 Sørensen, ‘The Transformation of the State’, 161.

597 Bourdieu, *Rethinking the State*, 57.

A state is always sovereign (the only Being that can achieve sovereignty) on the information platform that it, after all, created itself. However, it may not be legitimate to its citizens, because (most) states still live in a prehistoric 'state of nature' (see Chapter 14, par. 11).

A government is never sovereign over its state even though it strives to be; however, it does have control over it (see par. 6).

A government, however, is natural to a state, it cannot not exist (see Chapter 12, par. 7). Sometimes certain processing operations a government undertakes are controlled (directly, as in the past, or indirectly, as in today's globalised world) by another state's government (i.e. another government can allow or prohibit them). In this admittedly common situation, neither state legitimacy nor sovereignty nor the state's government's control are affected: it is only with regard to specific operations that control is not exercised by the government (whether this makes that government unbearable to its citizens or the relevant political system untenable is another, political, matter).

### *16/2/3 Why the state is frequently seen as a monolith*

The fact that states by definition control all processing within their territory, simply on account of the fact that they and their citizens exist, with sovereignty therefore being simply a reflection of their intertwined relationship, helps to explain the simile of the powerful monolith that is often used to describe the state.<sup>598</sup>

See also the Cambridge Dictionary, which defines 'monolith' as either 'a large, powerful organization that is not willing to change and that does not seem interested in individual people' or 'a group of people who are thought of as being all the same'.<sup>599</sup>

### *16/2/3 On state power*

As has been seen, power is the ability of a Being to ignore controls (prohibitions) over a specific processing, and to carry it out anyway (see Chapter 6, par. 9). So seen, state power has no meaning, at least from an informational

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598 See, for example, Clark and Dear, *State Apparatus*, 1; Hayek, *Law, Legislation and Liberty*, 481.

599 Definition of 'monolith' from the *Cambridge Advanced Learner's Dictionary & Thesaurus*, 'Monolith' (Cambridge: Cambridge University Press).

point of view. The term acquires meaning (as is the case with sovereignty) through its connection with the government. It is in this way that the juxtaposition between the state as a power mechanism and the state as a mechanism for justice, with the former ultimately connecting the state to war and the latter to ethical principles,<sup>600</sup> makes sense. The same can also be said of the idea of setting the 'institutionalisation of power' as the state's purpose (essentially, as a democratic antidote to oligarchies), as some sociologists<sup>601</sup> would suggest.

State power has been famously described by Mann as 'the infrastructural power of the state' (as distinct from the 'despotic' power of the same), meaning the state's institutional capability to exercise control and implement policy choices within the territory it claims to govern, its sources being ideological, economic, political and military.<sup>602</sup>

However, it is possible for different states to exercise each of these sources of power in various degrees at different times, although Gill claims that maximum state capacity, meaning the ability of the state to achieve whatever goals it sets for itself, is achieved when all types of power are equally yielded by the state.<sup>603</sup> State capacity is the term suggested by scholars to explain 'state strength', and therefore covers everything from economic growth and development, democratisation and democratic stability, citizenship regimes, social welfare provision, identity politics and political culture to state surveillance, nationalism, civil violence, the intensity of international wars and state-sponsored violence against the state's own populace.<sup>604</sup>

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600 See MacIver, *The Modern State*, 428.

601 For example, Nettl, 'The State as a Conceptual Variable', 563.

602 Mann, *The Sources of Social Power*, 130; in an earlier exposition of his ideas, Mann wondered, 'if infrastructural powers are a general feature of society, in what circumstances are they appropriated by the state? How does the state acquire in certain situations, but not others, despotic powers? What are the origins of the autonomous power of the state? My answer is in three stages, touching upon the necessity of the state, its multiplicity of functions, and its territorialized centrality' (Mann, 'The Autonomous Power of the State', 119). His focus, however, on centrality and infrastructure led him to distinguish between stateless societies in human history.

603 Gill, *The Nature and Development of the Modern State*, 252.

604 See Hillel Soifer and Matthias vom Hau, 'Unpacking the Strength of the State: The Utility of State Infrastructural Power', *Studies in Comparative International Development* 43/3 (2008), 220, with further references. For an attempt to integrate power into political institutions (rational choice) theory, see Moe, 'Power and Political Institutions'.

What the above approach fails to notice is information processing. It is information processing that is the main source of states' power. It is information processing that lies at the basis of all of Mann's four sources of power: ideology, the economy, politics, and even military mobilisation and force are all dependent on information processing (which makes the state natural to humans, not despotic). Therefore, Gill's parsimony<sup>605</sup> can be taken to the extreme: there is only informational power, the power to control the processing of information.

*16/2/4 The break with rationalism*

Strauss claims that, because of the imposition of the reason of one (or a few) over the unavoidably varying reasons of the many, as deemed necessary by Hobbes, 'the break with rationalism is thus the decisive presupposition for the concept of sovereignty',<sup>606</sup> thus highlighting a fundamental difficulty of representative democracy (and highlighting the importance of Kant's efforts), which is only mediated through consent (see also note 13/2/6).

**On paragraph 4**

*16/4/1*

On the connection of sovereignty with omnipotence, see Watkins<sup>607</sup> (who also correctly identifies legal sovereignty as a 'fiction', in contrast with political sovereignty, which is a 'limit'<sup>608</sup>).

*16/4/2*

On the relationship with property, see Chapter 24, par. 7.

**On paragraph 5**

*16/5/1*

Similarly, the church (to denote collectively any organisation controlling religion at any time and in any place) has a similar relationship with

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605 Reducing Mann's sources of power from four to three (Mann, *The Nature and Development of the Modern State*, 24).

606 Strauss, *The Political Philosophy of Hobbes*, 160.

607 Watkins, *The State as a Concept of Political Science*, 49.

608 *Ibid.*, 56.

God(s), who is (are) omnipresent—religion itself holding the role of the political system.

### On paragraph 6

#### 16/6/1 *On divisible or indivisible sovereignty*

Putting sovereignty in its proper place (as being natural for the state and an unattainable goal for the government) helps to address the basic question, asked since Hobbes, of whether sovereignty is divisible or indivisible.

For Hobbes, because sovereignty is absolute and indivisible,<sup>609</sup> it goes without saying that one body (be it a monarch or an assembly/parliament) should exercise it. As we know, in democratic states this approach has been abandoned for the benefit of the separation of powers between the legislative, the executive and the judiciary. Of course, the exercise of power by one body continues to be the case in oligarchies and theocracies.

#### 16/6/2

On the impossibility of absolute sovereignty, see also Krasner,<sup>610</sup> as well as Diener and Hagen.<sup>611</sup>

On the government's unreachable but still ever-present objective to control all processing on the platform that is its state, see also the response provided by the individualistic theories (meaning the distinction between the public and the private sphere) in Chapter 26, par. 4.

#### 16/6/3 *On self-sufficiency*

If sovereignty for the government is an unattainable goal, perhaps it should content itself with self-sufficiency.<sup>612</sup>

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609 Hobbes, *Leviathan*, 120. His thinking was, of course, in line with Bodin's (see note 16/1/1). On this topic, see also Goldsmith, 'Hobbes's "Mortall God"'.  
610 Stephen D. Krasner, *Sovereignty: Organized Hypocrisy* (Princeton: Princeton University Press, 1999).

611 Diener and Hagen, *Borders*, 6.

612 An idea as old as Aristotle's 'autarkeia' (Aristotle, *Politics*, 10 (1252b27)); see also John Maynard Keynes, 'National Self-Sufficiency', *The Yale Review* 22/4 (1933).

**On paragraph 7**

16/7/1

On the breakdown of territoriality for state information processing infrastructures as another challenge to state sovereignty in the digital world, see note 9/6/1.

## *Notes on Chapter 17*

### **On paragraph 3**

17/3/1

The connection of a state with a geographical (analogue world) territory is connected with the Peace of Westphalia (on the Westphalian state, see note 16/1/3). This connection has not been left unquestioned, however.<sup>613</sup>

The need to disentangle the state from its geographical territory was identified by Runciman (notwithstanding the confusion of a state with its government), although in the context of a 'state as corporation': 'Territory is easy enough to locate, as is, to a lesser extent, the seat of government. But if the state, in its own terms, is something more than these, then the likelihood is that it will also be something other than spatial.'<sup>614</sup>

### **On paragraph 4**

17/4/1

On territory not being necessary for a state, see Meyer, giving the examples of the Athenians in 480 BC, the Spartans in 366 BC and the Dutch in 1672.<sup>615</sup>

17/4/2 *On digital (Internet) states*

The finding that a territory is not necessary to a state invites the question of whether exclusively digital (Internet) states are possible.

Although a territory is not necessary to a state, humans live in both the analogue and the digital worlds. Consequently, a digital-only state cannot

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613 See, for example, Thomas Baldwin, 'The Territorial State', in Hyman Gross and Ross Harrison (eds.), *Jurisprudence: Cambridge Essays* (Oxford: Oxford University Press, 1992), 211.

614 Runciman, 'Is the State a Corporation?', 93.

615 Meyer, *Geschichte des Altertums*, 10. See also Baldwin, 'The Territorial State', 214.

exist. Even if it ever was attempted,<sup>616</sup> it would unavoidably compete (coexist, as a supplement) with the analogue world where each individual lives. (It is a different matter as to whether (political) agreements could be struck between analogue-world states and purportedly digital-world ones.)

### On paragraph 5

#### *17/5/1 On extraterritoriality*

There exists a rich legal (and philosophical) analysis of extraterritoriality. See, for example, Ryngaert<sup>617</sup> or, specifically for human rights, Gibney et al.<sup>618</sup> and Milanovic<sup>619</sup> (but also Miller<sup>620</sup>).

In the field of digital technologies, the phenomenon is particularly felt in regulation. See, for example, on the part of the EU, its GDPR and, on the part of the US, its Semiconductor Chip Protection Act<sup>621</sup> (which ultimately indicate each entity's stronger concerns or interests).

### On paragraph 8

#### *17/8/1 Analogue- and digital-world addresses*

Territory in the analogue world is different from in the digital. The differences are due to the fact that information in the analogue world is finite, while in the digital world it is infinite (see Chapter 1, par. 16). Differences are easy to observe, for example, when comparing analogue-world and digital-world addresses.

Analogue-world addresses are unique, non-proprietary and state-run, but finite in number. Addresses are unique, because they are a tool of

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616 For example, through the attempts to offer e-residency or e-nationality (as offered by Estonia), or through the creation of metaverse sovereign states.

617 Cedric Ryngaert, *Jurisdiction in International Law* (Oxford: Oxford University Press, 2015), 101.

618 Mark Gibney et al., *The Routledge Handbook on Extraterritorial Human Rights Obligations* (London: Routledge, 2022).

619 Marko Milanovic, *Extraterritorial Application of Human Rights Treaties: Law, Principles, and Policy* (Oxford: Oxford University Press, 2011).

620 Sarah Miller, 'Revisiting Extraterritorial Jurisdiction: A Territorial Justification for Extraterritorial Jurisdiction Under the European Convention', *European Journal of International Law* 20/4 (2009).

621 See Vagelis Papakonstantinou and Paul De Hert, *The Regulation of Digital Technologies in the EU: Act-ification, GDPR Mimesis and EU Law Brutality at Play* (London: Routledge, 2024), 113.

individualisation. There is no identical address anywhere on the planet. However, they are non-proprietary: once created, anyone can use them, regardless of whether they live or work there, or whether or not they have ever physically been there at all. Control over them is exercised by the state, which creates them and manages them. Finally, they are finite in number because on the planet there can only be a limited number of addresses.

The situation for electronic addresses (domain names) is very different. While they are also unique, they are proprietary, and infinite in number. Their strongest similarity with analogue-world addresses is their uniqueness, because they, too, serve as tools for individualisation. However, because they are infinite, they are proprietary: they can be the object of property (see Chapter 24). Also, they are not state-run: states manage them only locally, within their respective digital territory, but they are centrally managed for the whole planet by an international organisation.

### **On paragraph 12**

17/12/1

Although a state's territory is constructed by its citizens, this should not be taken to mean that a state is its citizens (see also note 11/4/11). Whatever processing the citizens do is added to the information platform that is their state, but they are not the state themselves. However, the state needs them, that is, there is no state without its citizens (see Chapter 10).

### **On paragraph 14**

17/14/1 *On borders*

In the analogue-world, 'borders separate the meaning and function of one geographic area from another.... [T]he word borders is normally associated with the idea of territory, or a geographic area intended to regulate the movement of people and things while also conveying certain behavioral expectations'.<sup>622</sup>

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622 Diener and Hagen, *Borders*, 3.

There is, of course, a rich bibliography on analogue-world borders, see, for example, Prescott,<sup>623</sup> Walther et al.,<sup>624</sup> Agnew<sup>625</sup> and Nail<sup>626</sup> (for a neo-Kantian approach).

### On paragraph 15

#### 17/15/1 On (systems') interoperability

Interoperability is defined in EU law as 'the ability to exchange information and mutually to use the information which has been exchanged',<sup>627</sup> see also, for example, Samuelson.<sup>628</sup>

#### 17/15/2 On (the EU right of) data portability

On the EU individual right to data portability, see, for example, De Hert et al.<sup>629</sup>

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623 John Robert Victor Prescott, *The Geography of Frontiers and Boundaries* (London: Routledge, 2014).

624 Olivier J. Walther et al., 'Border Studies at 45', *Political Geography* 104 (2023).

625 John Agnew, *Geopolitics: Re-Visioning World Politics* (London: Routledge, 2004).

626 Thomas Nail, *Theory of the Border* (Oxford: Oxford University Press, 2016).

627 European Parliament and Council Directive 2009/24/EC on the legal protection of computer programs (Codified version) (Text with EEA relevance), OJ LIII (23 April 2009), Recital 10.

628 Pamela Samuelson, 'The Past, Present and Future of Software Copyright Interoperability Rules in the European Union and United States', *European Intellectual Property Review* 34/3 (2010).

629 Paul De Hert et al., 'The Right to Data Portability in the GDPR: Towards User-Centric Interoperability of Digital Services', *Computer Law & Security Review* 34/2 (2018).

## On paragraph 16

### 17/16/1 On cybersecurity

On the emerging topic of cybersecurity law and policy, see, for example, Kosseff,<sup>630</sup> Kuner et al.,<sup>631</sup> Porcedda<sup>632</sup> and Papakonstantinou.<sup>633</sup>

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630 J. Kosseff, 'Defining Cybersecurity Law', *Iowa Law Review* 103/3 (2018).

631 Christopher Kuner et al., 'The Rise of Cybersecurity and Its Impact on Data Protection', *International Data Privacy Law* 7/2 (2017).

632 Maria Grazia Porcedda, *Cybersecurity, Privacy and Data Protection in EU Law: A Law, Policy and Technology Analysis* (London: Bloomsbury Publishing, 2023).

633 Vagelis Papakonstantinou, 'Cybersecurity as Praxis and as a State: The EU Law Path Towards Acknowledgement of a New Right to Cybersecurity?', *Computer Law & Security Review* 44 (2022).

## Notes on Chapter 18

### On paragraph 1

#### 18/1/1 On nations

There is, of course, a huge bibliography on nations (and nation-building).<sup>634</sup> (See, however, Spruyt's 'States made nations'.<sup>635</sup>)

However, although in the context of this bibliography a nation is treated as a relatively recent phenomenon, not more than a few centuries old, one must not forget that ancient 'nations' were able to identify themselves as being opposed to other 'nations', even if their states did not coincide (for example, the ancient Greeks against the ancient Persians, Lydians etc.).<sup>636</sup>

#### 18/1/2 On nation-states

On the vast topic of identification of the state with a nation (a notion which emerged 200 years ago), see, for example, Nettl,<sup>637</sup> Friedrich,<sup>638</sup> Poggi,<sup>639</sup>

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634 See, for example, Renan, Smith, Hobsbawm, Wimmer or Wallerstein (Ernest Renan, 'What Is a Nation?' (1882), in Ernest Renan, *What Is a Nation? and Other Political Writings*, ed. M. F. N. Giglioli (Columbia University Press, 2018); Anthony D. Smith, *The Ethnic Origins of Nations* (Oxford: Blackwell, 1986); Eric J. Hobsbawm, *Nations and Nationalism Since 1780: Programme, Myth, Reality* (Cambridge: Cambridge University Press, 1990); Andreas Wimmer, *Nation Building: Why Some Countries Come Together While Others Fall Apart* (Princeton: Princeton University Press, 2018); Wallerstein, *World-Systems Analysis: An Introduction*).

635 Spruyt, *The Sovereign State and Its Competitors: An Analysis of Systems Change*, 192.

636 See also Hans Kohn, *The Idea of Nationalism: A Study in Its Origins and Background* (London: Routledge, 2005), 27.

637 Nettl, 'The State as a Conceptual Variable', 566.

638 Friedrich, *Man and His Government*, 547.

639 Poggi, *The State*, 26.

Tivey,<sup>640</sup> Hall,<sup>641</sup> Anter<sup>642</sup> and Paul<sup>643</sup> (all of whom offer further bibliographies as well as different perspectives of the subject).

On the formation of the nation-states of today (in spite of very few genuine 'nation-states' actually existing today), see, for example, Smith.<sup>644</sup>

### 18/1/3 On nationalism

It would seem that the dominant definition of nationalism is that of Gellner ('a principle which holds that the political and national unit should be congruent'<sup>645</sup>), although the term has, almost since the beginning, lost its objective, scientific context. See, therefore, for example, Diener and Hagen, who correctly identify, 'the new religion of the nation—that is nationalism'.<sup>646</sup> In the same vein, see also Anderson's 'imagined political communities'.<sup>647</sup>

Nationalism is (often, but not necessarily) connected with nations and nation-building (and also with the idea of a 'Fatherland', an exploration into which philosophers such as Kant freely ventured). See also, therefore, note 18/1/1, as well as (conservative) criticism of it, such as that provided by Kedourie.<sup>648</sup>

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640 Leonard James Tivey (ed.), *The Nation-State: The Formation of Modern Politics* (New York: St Martin's Press, 1981).

641 John A. Hall, *Coercion and Consent: Studies on the Modern State* (Cambridge: Polity Press, 1994), 124.

642 Anter, *Max Weber's Theory of the Modern State*, 118.

643 Thazha V. Paul et al., *The Nation-State in Question* (Princeton: Princeton University Press, 2003).

644 Anthony D. Smith, 'State-Making and Nation-Building', in John A. Hall (ed.), *States in History* (London: Basil Blackwell, 1986), 228.

645 Ernest Gellner, *Nations and Nationalism* (Ithaca: Cornell University Press, 1983), 1.

646 Diener and Hagen, *Borders*, 10.

647 Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 2006), 6.

648 Elie Kedourie, *Nationalism* (London: Hutchinson, 1960).

**On paragraph 2**

18/2/1

On commonalities in the processing methods (morality, reason) of groups of individuals as being distinguishable from others, see Nietzsche's explanation of 'what is commonness'.<sup>649</sup>

18/2/2 *On the 'common will' (of a people)*

Formation of a 'common will' among certain individuals (a closed group) is necessary for social contract theory (see note 13/2/5). Once identified, the relationship between that 'common will' and individuals may go either way. For some (most famously Rousseau, but also all of the nineteenth-century Romantics), the individual needs to subordinate itself to the community,<sup>650</sup> while for others, the opposite is true— individuals have inalienable rights vis-à-vis the community (see Chapter 26, particularly par. 4). Any (political) variation on the spectrum between these two extremes is also possible.

18/2/3 *On whether nations have different characters*

The question of whether nations have different characters is an age-old and apparently inexhaustible one, traceable at least as far back as the texts of Aristotle.<sup>651</sup> In any event, see, for example, Jennings' quote of de Maistre ('Nations, de Maistre believed, quite definitely had different characters'<sup>652</sup>) or Montesquieu, who believed that in every people there is a 'general spirit' to which their laws must be adapted.<sup>653</sup> On the same topic as perceived in literature see, for example, Kundera on the 'Slavic soul',<sup>654</sup> or Borges on Argentinians.<sup>655</sup>

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649 Nietzsche, *Beyond Good and Evil*, 163.

650 Reiss, 'Introduction', 13.

651 Aristotle, *Politics*, 266 (1327b18).

652 Jeremy Jennings, 'Rousseau, Social Contract and the Modern Leviathan', in David Boucher and Paul Kelly (eds.), *The Social Contract From Hobbes to Rawls* (London: Routledge, 2003), 124.

653 Montesquieu, *The Spirit of the Laws*, 231; see also MacIver, *The Modern State*, 437.

654 Milan Kundera, 'The Tragedy of Central Europe', *The New York Review of Books* 31/7 (1984), par. 5.

655 Jorges Luis Borges, *Selected Non-Fictions*, ed. Eliot Weinberger (New York: Viking, 1999), 309.

The issue remains an open question (the replies ultimately shedding more light on the characters of the respondents than on the answer to the question itself).

### On paragraph 3

18/3/1

There may be some merit in attempting to reply to Tilly's two questions<sup>656</sup> from the perspective of a political philosophy of information: (1) nation-states (in the place of other states) become the dominant organisation in an area when their citizens (or the majority of their citizens) imagine that replacing their current state with another will improve their information processing; (2) the chief forms taken by nation-states (or, for the same purposes, that will be taken in the future) are those that each time their citizens imagine will improve their information processing.

### On paragraph 5

18/5/1

On algorithmic bias (which would ultimately lead to commonalities among otherwise identical computer programs as artificial Beings), see, for example, Friedman and Nissenbaum.<sup>657</sup>

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656 '1. Under what conditions do national states (rather than some other sort of political structure) become the dominant organizations in an area? 2. What are the chief forms taken by national states, and what causes one or another of them to appear?' (Tilly, 'Reflections on the History of European State-Making', 602). In fact Tilly poses three questions (adding '3. What determines how strong, durable, effective, and responsive to its own population a national state is?'); the third however is abstract (who defines 'durability, effectiveness and responsiveness?').

657 Batya Friedman and Helen Nissenbaum, 'Bias in Computer Systems', *ACM Transactions on Information Systems* 14/3 (1996).

## Notes on Chapter 19

### On paragraph 2

19/2/1

On the claim that states are still in a (social contract–relevant) ‘state of nature’, see famously, Hobbes: ‘And what else are countries but so many camps fortified against each other with garrisons and arms, and their state (since no common power restrains them, even though an uncertain peace, as fragile as a short truce, exists between them) is to be regarded as a natural state, i.e. a state of war?’<sup>658</sup> See also Kant: ‘The situation in question is that in which one state, as a moral person, is considered as existing in a state of nature: in relation to another state, hence in a condition of constant war’. He also noted that, ‘in their external relationships with one another, states, like lawless savages, exist in a condition devoid of right’,<sup>659</sup> before famously suggesting that moral imperatives apply to states as well as to humans.

Bull, in his ‘anarchical society’, provides a useful juxtaposition between the three dominant approaches to whatever international world order exists (or may exist), meaning among the Hobbesian, Kantian and Grotian ones, before putting forward his (Grotian) theory that an international society (a society made of states—not of humans) does exist, formed through dealings among states and based on rules and institutions that they (the states) form each time (transformations throughout human history notwithstanding), based on the requirement to coexist and cooperate.<sup>660</sup>

On the same topic, see also Moe: ‘The international system is the paradigmatic state of nature, an anarchy in which there is no overarching authority, property rights are ultimately unprotected, and every nation is out for itself’.<sup>661</sup>

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658 Hobbes, *On the Citizen*, 126.

659 Kant, *Political Writings*, 165.

660 Hedley Bull, *The Anarchical Society: A Study of Order in World Politics*, 4th edn. (Basingstoke: Palgrave Macmillan, 2012), 23.

661 Moe, ‘Power and Political Institutions’, 225.

19/2/2 *International world order*

Notwithstanding note 19/2/1, the topic of international world order (if any) is, of course, vast.<sup>662</sup> Contemporary attempts aside (on the UN, see note 19/5/1), the topic seems to be burdened by parallels with and perceptions of state order and state government (and governance) as suggestions on how to achieve it.

**On paragraph 4**

19/4/1

On the UN's basis for natural human rights theory, see, for example, Henkin<sup>663</sup> or Donnelly.<sup>664</sup>

**On paragraph 5**

19/5/1

As repeatedly quoted in Crawford, 'The formation of a new State is... a matter of fact, and not of law'.<sup>665</sup> In the same vein, Wallerstein stresses that sovereignty is, fundamentally, only a claim, 'and claims have little meaning unless they are recognized by others'.<sup>666</sup>

In any event, on the UN itself, see, for example, Kelsen,<sup>667</sup> Claude,<sup>668</sup> or Weiss and Daws.<sup>669</sup>

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662 See, for example, Wallerstein, Bull, Ikenberry or Morgenthau (Wallerstein, *World-Systems Analysis: An Introduction*; Bull, *The Anarchical Society*; G. John Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After Major Wars* (Princeton: Princeton University Press, 2001); Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, 6th edn. (New York: Alfred A. Knopf, 1985)).

663 Louis Henkin, *The Age of Rights* (New York: Columbia University Press, 1990), 6.

664 Jack Donnelly, *Universal Human Rights in Theory and Practice*, 3rd edn. (Ithaca: Cornell University Press, 2013), 29.

665 Crawford, *The Creation of States in International Law*, 4.

666 Wallerstein, *World-Systems Analysis*, 44.

667 Hans Kelsen, *The Law of the United Nations: A Critical Analysis of Its Fundamental Problems* (London: Stevens & Sons, 1951).

668 Inis L. Claude, *The Changing United Nations: Options for the Future* (New York: Random House, 1967).

669 Thomas G. Weiss and Sam Daws (eds.), *The Oxford Handbook on the United Nations*, 2nd edn. (Oxford: Oxford University Press, 2018).

## On paragraph 7

19/7/1

On the ‘modern states system’, see also Poggi:

*The modern states system is made up of coordinate, juxtaposed, sovereign units. Individual states are not the organs of the states’ system, for they are not posited and empowered by it; states do not derive their faculties of rule from the states system, but possess them rather under equal, self-standing title. The states do not presuppose the system, they generate it.*<sup>670</sup>

## On paragraph 10

19/10/1

Kant, on the other hand, saw the need for ‘a universal union of states’ that would be, however, ‘analogous to the union through which a nation becomes a state’.<sup>671</sup>

Other than Kant, on cosmopolitanism (mostly, but not exclusively, in the state context), see, for example, Held,<sup>672</sup> Habermas,<sup>673</sup> Beck<sup>674</sup> and Archibugi.<sup>675</sup>

## On paragraph 11

19/11/1 *The EU*

There is, of course, a tremendous bibliography on the EU. For a possibly concise but elucidating account of its making and operation over the past

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670 Poggi, *The Development of the Modern State: A Sociological Introduction*, 88.

671 Kant, *Political Writings*, 171.

672 David Held, *Democracy and the Global Order: From the Modern State to Cosmopolitan Governance* (Cambridge: Polity Press, 1995).

673 Habermas, *The Postnational Constellation*, 58.

674 Ulrich Beck, ‘The Cosmopolitan State: Redefining Power in the Global Age’, *International Journal of Politics, Culture, and Society* 18/3 (2005).

675 Daniele Archibugi, *The Global Commonwealth of Citizens: Toward Cosmopolitan Democracy* (Princeton: Princeton University Press, 2008).

70 years,<sup>676</sup> see, for example, Hallstein,<sup>677</sup> Weiler and Wind,<sup>678</sup> Dinan<sup>679</sup> or Moravcsik<sup>680</sup> (as well as MacCormick<sup>681</sup> for a perhaps more focused account within the context of this book).

In spite of the already vast bibliography (particularly taking into account that the EU has a history of only 70 years), there is no consensus on its actual nature—on what the EU really is.<sup>682</sup>

On the EU resembling, or developing into, a traditional state, see, for example, Habermas,<sup>683</sup> Bickerton<sup>684</sup> and Glencross.<sup>685</sup> Ultimately, the degree to which the EU resembles a state depends on which account of the ‘authority claims’ of a state we adopt.<sup>686</sup>

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676 On the premises of the EU, and how they play out in terms of a ‘world state’, see Gaskin: ‘And the example is always followed “for the avoidance of war” in every institution from super-states to merchant banks and socialist communes. Hobbes is addressing rational human beings aware of the potential for civil discord, not hypothetical savages unaware of the possibilities of civil peace’ (Gaskin, ‘Introduction’, xxxv). Of course, Gaskin continues, ‘As Warrender remarks, “on Hobbes’s assumptions, it would thus be rational to form a World State” (or, one might add, at the very least a United Nations with sovereign and coercive powers)’ (Gaskin, ‘Introduction’, xliii).

677 Walter Hallstein, *Europe in the Making* (New York: Norton, 1969).

678 Joseph H. H. Weiler and Marlene Wind, ‘European Constitutionalism Beyond the State’, in Joseph H. H. Weiler (ed.), *The Constitution of Europe* (Cambridge: Cambridge University Press, 1999).

679 Desmond Dinan, *Ever Closer Union: An Introduction to European Integration*, 4th edn. (Boulder: Lynne Rienner Publishers, 2010).

680 Andrew Moravcsik, *The Choice for Europe: Social Purpose and State Power From Messina to Maastricht* (London: Routledge, 1998).

681 Neil MacCormick, *Questioning Sovereignty: Law, State, and Nation in the European Commonwealth* (Oxford: Oxford University Press, 1999), 126.

682 See, for example, De Witte, Weiler or Walker (Bruno de Witte, ‘The European Union as an International Legal Experiment’, in Gráinne de Búrca and Joseph H. H. Weiler (eds.), *The Worlds of European Constitutionalism* (Cambridge: Cambridge University Press, 2012); Joseph H. H. Weiler, ‘The Transformation of Europe’, *Yale Law Journal* 100/8 (1991); Neil Walker, ‘Reframing EU Constitutionalism’, in Jeffrey L. Dunoff and Joel P. Trachtman (eds.), *Ruling the World? Constitutionalism, International Law, and Global Governance* (Cambridge: Cambridge University Press, 2007)).

683 Jürgen Habermas, *The Crisis of the European Union: A Response* (Cambridge: Polity Press, 2012), 45.

684 Christopher Bickerton, *European Integration: From Nation-States to Member States* (Oxford: Oxford University Press, 2012), 74.

685 Andrew Glencross, *The Politics of European Integration: Political Union or a House Divided?* (Chichester: Wiley-Blackwell, 2014), 212.

686 Nicholas William Barber, *The Constitutional State* (Oxford: Oxford University Press, 2010), xiii.

19/11/2

Although here a non-linear development is advocated (see Chapter 11, par. 5), see, however, Spruyt, who developed the theory that modern states are the result of a competitive evolutionary process, whereby, during the Middle Ages and thereafter, ‘the system selected out those types of units that were, competitively speaking, less efficient. In other words, the competitive nature of the system determined the nature of the constitutive units’,<sup>687</sup> leading to the formation of modern states.

### On paragraph 12

19/12/1

On the technical terms of systems interoperability and integration, see, for example, the ISO/IEC/IEEE formal definitions: ‘interoperability [is the] capability of objects to collaborate, that is, the capability mutually to communicate information in order to exchange events, proposals, requests, results, and flows’;<sup>688</sup> ‘integration [is the] process of combining software components, hardware components, or both into an overall system’ (whereas an ‘integration test [is the] progressive linking and testing of programs or modules in order to ensure their proper functioning in the complete system’).<sup>689</sup>

### On paragraph 14

19/14/1

On the law-making phenomenon of ‘brutality’ in EU law when regulating digital technologies, see Papakonstantinou and De Hert.<sup>690</sup>

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687 Spruyt, *The Sovereign State and Its Competitors*, 180.

688 ISO/IEC/IEEE, *Systems and Software Engineering – Vocabulary (ISO/IEC/IEEE 24765:2017)* (2017), 237 (3.2089:4).

689 Ibid., 230 (3.2032 and 3.2033).

690 Papakonstantinou and De Hert, *The Regulation of Digital Technologies in the EU*.

19/14/2

On the EU legislating from a higher level, released of internal politics and strife, and the benefit for Europeans as a result of this, see, for example, Majone.<sup>691</sup>

### On paragraph 16

19/16/1

The removal of geographical constraints to allow informational archipelagos of states to be formed could also address the issue of Brexit. Perhaps the British would feel better forming part of an archipelago with the US or Australia; by the same token, perhaps Canada lies closer to the EU.<sup>692</sup>

### On paragraph 21

19/21/1 *On federalism*

On federalism and contemporary challenges to its foundations (with the addition of alternative models), see, for example, Hooghe and Marks<sup>693</sup> or Bednar.<sup>694</sup>

19/21/2 *On empires*

On the modern take on ancient empires and empire-building, see, for example, Burbank and Cooper (significantly, who also question the linear

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691 Giandomenico Majone, 'The Rise of the Regulatory State in Europe', *West European Politics* 17/3 (1994), 163.

692 A not entirely original idea. See, for example, *Economist*, 'Why Canada Should Join the EU', 2 January 2025.

693 Liesbet Hooghe and Gary Marks, *Community, Scale, and Regional Governance: A Postfunctionalist Theory of Governance* (Oxford: Oxford University Press, 2016).

694 Jenna Bednar, 'Federalism Theory: The Boundary Problem, Robustness, and Dynamics', in John Kincaid (ed.), *A Research Agenda for Federalism Studies* (Cheltenham: Edward Elgar, 2019).

development towards nation-states),<sup>695</sup> or Darwin (who attempts to break the Western stronghold on the term and its usage).<sup>696</sup>

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695 Jane Burbank and Frederick Cooper, *Empires in World History: Power and the Politics of Difference* (Princeton: Princeton University Press, 2010), 2.

696 John Darwin, *After Tamerlane: The Rise & Fall of Global Empires, 1400–2000* (London: Allen Lane, 2007), 13.

## *Notes on Chapter 20*

### **On paragraph 2**

20/2/1

The laws of Nature, meaning the laws of science, are to be distinguished from what has been called the ‘natural law’ of human behaviour,<sup>697</sup> which is in fact a type of morality (see also note 20/5/2).

20/2/2

Consider also Passerin who thought that, under a Hobbesian approach, ‘The laws of nature and of God are not properly laws until they are interpreted and sanctioned by the sovereign.’<sup>698</sup>

### **On paragraph 3**

20/3/1

On the replacement of religion with Reason during the Enlightenment, little needs to be said. Within the context of this analysis, see, for example, Locke’s explanation of ‘Property’, catering both for ‘natural reason’ or ‘revelation’ as explanations of humanity’s origins (emphasis added): ‘Whether we consider *natural reason*, which tells us, that men, being once born, have a right to their preservation, and consequently to meat and drink, and such other things as nature affords for their subsistence; *or revelation*, which gives us an account of those grants God made of the world to Adam, and to Noah, and his sons’.<sup>699</sup>

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697 See, for example, Hobbes: ‘A LAW OF NATURE, (*lex naturalis*) is a precept, or general rule, found out by reason, by which a man is forbidden to do, that, which is destructive of his life, or taketh away the means of preserving the same; and to omit, that, by which he thinketh it may be best preserved’ (Hobbes, *Leviathan*, 86).

698 Passerin d’Entrèves, *The Notion of the State*, 108.

699 Locke, *Two Treatises of Government*, 285.

On the historical role of religion, see also Nietzsche:

*Let us compress this whole state of affairs into a few brief phrases: in order for its existence to be possible at all, the philosophical spirit has at first always been obliged to disguise and mask itself in the types of the contemplative man established in earlier times, that is, as priest, magician, prophet, above all, as a religious man.*<sup>700</sup>

20/3/2

From this point of view, in contrast to what Raz claims, there cannot be (and there has never been) any human society not governed by law (in the meaning of regulations).<sup>701</sup>

### On paragraph 5

20/5/1

Questions on the law and its nature have occupied legal philosophers for centuries—to the extent that some discomfort appears to have recently affected the field.<sup>702</sup>

20/5/2 *On natural law*

The discussion on whether natural law (a law that applies to all humans regardless of their circumstances) exists or not is a never-ending one, most likely because it is political, connected to each person's hopes and beliefs.

Any attempt to even summarise developments on a topic that is (almost) as old as written history (it was Greek philosophy, and poetry, that first wondered whether a 'natural law' might exist and if it did whether it would be different to any specific city-state laws<sup>703</sup>) would be unavoidably superficial and thus pointless. Today, to all intents and purposes, we have

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700 Nietzsche, *On the Genealogy of Morals*, 94.

701 Joseph Raz, *The Authority of Law: Essays on Law and Morality*, 2nd edn. (New York: Oxford University Press, 2009), 120.

702 See, for example, Tomasz Gizbert-Studnicki, 'The Most Important Problems of Legal Philosophy and the Nature of Law', *Belgrade Law Review* 69/4 (2021), 774.

703 Famously first formulated (in all its natural cruelty and demonstrable dead-ends) by Creon in Sophocles' *Antigone*; see also W. K. C. Guthrie, *A History of Greek Philosophy: Volume 3, The Fifth Century Enlightenment* (Cambridge: Cambridge University Press, 1962), 55.

come to believe in the existence of natural law, at least in the liberal part of the planet (thus, this is still a political discussion) in the form of the UN and its work on human rights.

Specifically, however, when it comes to political philosophy, it could be broadly noted that the clear break with a (Christian) religious past (promoting the existence of God-originating natural rights) came with Hobbes,<sup>704</sup> who disagreed with his semi-contemporaries Grotius, Althusius and Pufendorf.<sup>705</sup> Their disagreement, and each of these philosophers' lines of thinking, has been kept alive ever since by a series of important political (and legal) philosophers.<sup>706</sup>

In view of the above, by way of clarification, under the informational approach discussed in this book, no natural law exists, that is, all law (regulation) is invented law (put another way, 'natural law' is a type of morality, see note 20/2/1).

### 20/5/3 *What the law (regulation) is not*

Law is not a tool/instrument of the state used to exercise its legitimate monopoly of power or for any other purpose it is claimed to (politically) serve (security and social justice included). This line of thinking is confusing the political system (government), specifically its objectives (however these are formulated each time), with the state and the law.

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704 'The civil laws are the rules of good and evil, of the just and the unjust, the honourable and the dishonourable, and that therefore one must accept what the legislator enjoins as good, and what he forbids as evil' (Hobbes, *On the Citizen*, 132).

705 As noted by Strauss, 'Traditional natural law is primarily and mainly an objective "rule and measure", a binding order prior to, and independent of, the human will, while modern [after-Hobbes] natural law is, or tends to be, primarily and mainly a series of "rights", of subjective claims, originating in the human will' (Strauss, *The Political Philosophy of Hobbes: Its Basis and Its Genesis*, viii). See also Hobbes: 'what is not contrary to right reason, all agree is done justly and of Right' (Hobbes, *On the Citizen*, 27).

706 It is important to note that social contract theory was made to work using both approaches (for example, Kant, a social contract theorist, agreed with natural law theory; see Reiss, 'Introduction', 10).

It is also important to note that not all social contract theorists felt comfortable with the (on the basis of their fundamental assumption, unavoidable) tenets of natural law—see, for example, Rousseau's attempt to downplay the importance of natural law in his theory by employing the term 'natural right' (Victor Gourevitch, 'Introduction', in Jean-Jacques Rousseau, *The Social Contract and Other Early Political Writings*, trans. Victor Gourevitch (Cambridge: Cambridge University Press, 1997), xi).

20/5/4 Law (regulation) and software code

Regulation can be embedded in software code. Although this realisation does not address any of the crucial issues that pertain to it (e.g. how any specific regulation came to be, who made it, who its recipients are, how it is imposed, whether it is effective), the fact remains that, as formulated by Lessig, ‘code is law’<sup>707</sup> in the sense that it can effectively control behaviour in digital environments (see also Chapter 1, par. 17, and Chapter 2, par. 18).

**On paragraph 6**

20/6/1

Therefore Kelsen’s view that the theory of state is a branch of the theory of law,<sup>708</sup> while of course serving his theory of the juristic concept of the state,<sup>709</sup> does not seem justified: the state predated (positive) law and not vice versa.<sup>710</sup>

20/6/2 *On the state–law dualism or monism*

Kelsen merged the concept of the state with the concept of the law, rejecting the until his time dominant (e.g. Jellinek’s but also Gierke’s) state and law dualism.<sup>711</sup> He felt that this dualism was ‘a superfluous doubling or duplication of the object of our cognition’, and argued that ‘the State is not a power apart from, or back of, the legal order’. He therefore famously suggested the ‘necessary unity of State and law’.<sup>712</sup>

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707 Lawrence Lessig, *Code: Version 2.0* (New York: Basic Books, 2006), 1.

708 Hans Kelsen, *General Theory of Law and State*, 182.

709 ‘The State is that order of human behaviour that we call the legal order’ (Ibid., 188).

710 Of course, following Kelsen’s reasoning on the priority of the juristic over the sociological concept of the state (Ibid., 183), then the correct order would be (a) the informational, (b) the juristic and (c) the sociological concept of the state.

711 Ibid., 191.

712 Ibid.

### On paragraph 7

20/7/1 *On the connection of regulation with use*

On the connection of regulation with use, see Bellamy: ‘law [is] about how we could use ourselves and our things and those of others, and the use they may make of us and our things’.<sup>713</sup> See also note 4/5/1.

### On paragraph 9

20/9/1

The discussion of whether power should be embedded in the (digital-world) system could perhaps be visualised in practice in the context of the question of whether governments should have a key to encryption software, or whether online platforms should provide ‘backdoor’ access for law enforcement agencies.<sup>714</sup>

### On paragraph 10

20/10/1

On positive law’s hierarchical organisation, see Kelsen;<sup>715</sup> On the connection between the Hobbesian hierarchical system in *Leviathan* and Kelsen’s positive law approach, see Goldsmith.<sup>716</sup>

20/10/2

The organisation of the law must not be confused with the organisation of the state: see Chapter 9.

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713 Bellamy, *Citizenship*, 39.

714 An open and still much-debated topic. See, for example, the European Parliament’s Briefing (Piotr Bąkowski, ‘Access to Data for Law Enforcement: Lawful Interception’, European Parliamentary Research Service, Briefing PE 775.881 (July 2025).

715 For example, Kelsen, *Pure Theory of Law*, 221.

716 Goldsmith, ‘Hobbes’s “Mortall God”’, 27.

## Notes on Chapter 21

### 21/1/1 Permissions or prohibitions?

Evidently, permissions given to one Being to process are at the same time prohibitions to process addressed to another Being. Put differently, a prohibition to one to process (i.e. processing is not allowed) is a permission to another to do so, with processing operations taking place naturally and at all times in both the analogue and the digital worlds. In other words, rights are permissions to process, but it depends on the perspective—at the same time and with regard to the same processing, one's permission may be another's prohibition. (Whether permission is, in fact, coercion plus freedom is a question that belongs to metaphysics.<sup>717</sup>)

The above more or less also addresses the issue of positive and negative human rights (one's protected sphere is another's prohibition to act, and vice versa), notwithstanding that the distinction has proven extremely useful to Berlin, who has used it to analyse the various, and frequently contradicting, facets of human freedom and liberty.<sup>718</sup>

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717 See Kant's *Metaphysics of Morals*, quoted in Kant, *Political Writings*, 134.

718 In Berlin, *Liberty*; without, however, avoiding confusing the two terms (or rather consciously using them interchangeably).

## *Notes on Chapter 22*

### **On paragraph 1**

22/1/1 *On the history (and emergence) of human rights*

Human rights are a relatively recent concept, with a history of no more than a few hundred years (and their existence being still not globally accepted). Broadly, their emergence coincides with that of the 'modern state' (see Chapter 8, par. 3) to such an extent that human rights are said, first by Locke<sup>719</sup> and then by others, to be at the foundation of state creation (within social contract theory, see also note 13/2/1).

22/1/2

On the issue of negative and positive human rights (freedoms), see note 21/1/1.

### **On paragraph 3**

22/3/1

Hegel, in line with his idealist approach to the state, thought that the constitution, as an idea, already existed, but had developed alongside that of the state.<sup>720</sup>

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719 Using his chosen term of 'property': 'Men being, as has been said, by Nature, all free, equal and independent, no one can be put out of this Estate, and subjected to the Political Power of another, without his own Consent. The only way whereby any one devests himself of his Natural Liberty, and puts on the bonds of Civil Society is by agreeing with other Men to joyn and unite into a Community, for their comfortable, safe, and peaceable living one amongst another, in a secure Enjoyment of their Properties, and a greater Security against any that are not of it' (Locke, *Two Treatises of Government*, 330; see also note 1/16/3).

720 Hegel, *Outlines of the Philosophy of Right*, 263.

22/3/2

On the history and development of constitutions, see, for example, Dicey,<sup>721</sup> McIlwain<sup>722</sup> and Böckenförde.<sup>723</sup>

### On paragraph 6

22/6/1

Admittedly, social contract theorists used similar logical inferences to derive whatever system of (natural) rights they felt like. See, for example, Hobbes, who, starting from ‘The first law of nature (the foundation) is: to seek peace when it can be had; when it cannot, to look for aid in war’,<sup>724</sup> went on to devise a system of ‘natural’ laws as detailed as the first-born’s right to the father’s possessions and that mediators of peace should have immunity.<sup>725</sup> For another example, see Locke, who, on the basis of (all) men being God’s servants, observed, ‘From this common-sense starting-point... proceeds to two inferences, that we are all free and we are all equal; free of each other, that is to say, and equal to each other.’<sup>726</sup>

### On paragraph 7

22/7/1

See also Kant: ‘The human beings who make up a nation can,... in an intellectual sense or for the purposes of right,... be thought of as the offspring of a common mother (the republic), constituting, as it were, a single family (*gens, natio*) whose members (the citizens) are all equal by birth.’<sup>727</sup>

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721 A. V. Dicey, *An Introduction to the Study of the Law of the Constitution*, 10th edn. (London: Macmillan, 1979).

722 Charles Howard McIlwain, *Constitutionalism: Ancient and Modern* (Ithaca, NY: Cornell University Press, 1947).

723 Ernst-Wolfgang Böckenförde, ‘The Rise of the State as a Process of Secularization’, in Ernst-Wolfgang Böckenförde, *Religion, Law, and Democracy: Selected Writings*, ed. Mirjam Künkler and Tine Stein (Oxford: Oxford University Press, 2020).

724 Hobbes, *On the Citizen*, 34.

725 Hobbes, *On the Citizen*, 51.

726 Laslett, ‘Introduction’, 93.

727 Kant, *Political Writings*, 164.

### On paragraph 8

22/8/1

On all humans having (some) control over all (Things and Beings) within their state, see Hobbes: 'Nature has given each man a right to all things'.<sup>728</sup>

### On paragraph 9

22/9/1 *On a (platform) right to cybersecurity*

From this point of view, it is cybersecurity that is a platform (natural) right, whereas (analogue world) security of the person is not.<sup>729</sup>

### On paragraph 11

22/11/1 *Natural human rights*

On the theory of natural rights, as intrinsically connected with natural law, see note 20/5/2.

For an attempt to bridge the otherwise unbridgeable, see Morris ('Can artificial rights be natural?').<sup>730</sup>

### On paragraph 14

22/14/1 *Digital constitutionalism*

On the notion of 'digital constitutionalism',<sup>731</sup> see, for example, Celeste<sup>732</sup> or De Gregorio.<sup>733</sup>

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728 Hobbes, *On the Citizen*, 28.

729 See also Papakonstantinou, 'Cybersecurity as Praxis and as a State'.

730 Morris, 'Can Artificial Rights Be Natural?'

731 Whereby, 'constitutionalism' is 'the principles that should guide those creating and shaping the state. It does aspire to provide the starting point for such an account: any plausible account of constitutionalism must rely on an account of the nature of the state' (Barber, *The Constitutional State*, xiii).

732 Edoardo Celeste, 'Digital Constitutionalism: A New Systematic Theorisation', *International Review of Law, Computers & Technology* 33/1 (2019).

733 Giovanni De Gregorio, 'The Rise of Digital Constitutionalism in the European Union', *International Journal of Constitutional Law* 19/1 (2021).

## Notes on Chapter 23

### On paragraph 1

23/1/1

Consider also Montaigne: ‘Laws gain their authority from actual possession and custom: it is perilous to go back to their origins; laws, like our rivers, get greater and nobler as they roll along: follow them back upstream to their sources and all you find is a tiny spring, hardly recognizable; as time goes by it swells with pride and grows in strength.’<sup>734</sup>

23/1/2

The connection of morality with written regulation (which, in turn, is formed through need and opportunity instead of as the result of any pre-existing natural law) means that the viewpoint of Machiavelli and Hobbes is adopted here, in contrast with that of Locke and Rousseau (with whom Kant and his epigones also ought to be grouped because their Reason-based morality ultimately borders natural law, i.e. it is something pre-existing that is only waiting to be discovered somehow).

That same approach (the connection of morality with written regulation that has become well-embedded on the information platform that is the state) addresses the perennial difficulty of moral philosophies, as identified by Nietzsche’s ridiculing of (and cutting loose from his erstwhile teacher) Schopenhauer:

*Just listen, for example, to the almost admirable innocence with which Schopenhauer portrays his own task, and draw your conclusions as to the scientific nature of a ‘science’ whose past masters still talk like children or old women: ‘The principle’, he writes in *The Fundamental Problems of Morality*, ‘the axiom about whose content all moralists really agree, *neminem laede, immo omnes, quantum potes, juva*<sup>735</sup>—that is really the tenet that all moralists endeavour to account for—the real foundation of*

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734 Montaigne, *The Complete Essays*, 658.

735 *Harm no one; rather help everyone as much as you can.*

*morality, which people have been seeking for thousands of years like the philosophers' stone.*<sup>736</sup>

Of course, Nietzsche's critique, and attempt to offer an alternative, would prove to be catastrophic for humanity a few decades later.<sup>737</sup>

### 23/1/3 A universal morality?

The above also address why morality sometimes, in its most basic form, is (or seems to be) universal. The fact that humans anywhere on the planet will, for example, help those in need or honour their parents or keep their promises (see also par. 4), reflects regulations (to not hurt others, to obey elders or to observe contracts) that, at their crudest (e.g. in the Bible's Ten Commandments or the code of Hammurabi, for example) are so steeped in human history, so widely implemented that they have been turned into morality (or Plato's 'ancestral law'<sup>738</sup>).

The similarity among these basic, ancient texts reflects the similar conditions humans were faced with in the analogue world (with information in the analogue world being finite, humans needing to augment their information processing and states being natural to humans), as well as the need and opportunity behind humans' processing (actions).<sup>739</sup> On the same topic (but not taking the same approach), see Spinoza's 'universal human nature'.<sup>740</sup>

If one comes to think of it, all laws (and hence) morality come from the one basic law 'thou shalt not kill', which itself is self-explanatory among pack animals such as humans, who also use language and are uniquely identifiable in space and time, with this ultimately being Kelsen's *Grundnorm*. The expansion of this basic law, as embedded in law after thousands of years, becomes morality—in other words, it is in this way that Kant's moral synthetic a-priori judgements have been produced (they do not,

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736 Nietzsche, *Beyond Good and Evil*, 75.

737 See also note 0/1/8, as well as note 23/3/1.

738 'All the rules we are now working through are what people generally call "unwritten customs", and all this sort of thing is precisely what they mean when they speak of "ancestral law"' (Plato, *The Laws*, 268).

739 In this context, consider also Guicciardini's finding since the sixteenth century: 'In every nation, we find nearly all the same or similar proverbs, expressed in different words. The reason is that these proverbs are born of experience, or observation of things; and that is the same, or at least similar, everywhere' (quoted in Erasmus, *The Adages of Erasmus*, xxx).

740 Spinoza, *Theological-Political Treatise*, 61.

therefore, objectively exist, nor are they reachable through the use of (pure) reason).

### On paragraph 3

23/3/1

Nietzsche, our arch-diagnostician<sup>741</sup> and arch-critic of (any) morality, devoted practically all of his (unsurpassable) critical efforts to this project. Claiming that ‘Every moral code, in opposition to *laissez-aller*, is an example of tyranny against “nature”, and against “reason”, too’, he immediately affirms that

*... the strange fact is that everything on earth that exists or has existed by way of freedom, subtlety, daring, dance, and perfect sureness, whether it be in ideas, or in governance, or in oratory and rhetoric, in the arts as well as in manners, has developed only by virtue of the ‘tyranny of such despotic laws’; and seriously, it is very likely that this is what is ‘nature’ and ‘natural’—and not that laissez-aller!*<sup>742</sup>

23/3/2

On any philosophy ultimately revealing the philosopher’s convictions see, again, Nietzsche’s playful warning: ‘In every philosophy there is a point when the philosopher’s “conviction” makes its entrance; or, in the language of an old mystery play: *adventavit asinus pulcher et fortissimus* [the ass entered/beautiful and most brave]’.<sup>743</sup>

### On paragraph 4

23/4/1

The fact that humans should keep their promises is basically a premise of natural law<sup>744</sup> (if it does not predate that), and one that every polit-

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741 See Michael Tanner, *Nietzsche: A Very Short Introduction* (Oxford: Oxford University Press, 2000), 44.

742 Nietzsche, *Beyond Good and Evil*, 76.

743 *Ibid.*, 10.

744 Karl Olivecrona, ‘Bentham’s “Veil of Mystery”’, *Current Legal Problems* 31/1 (1978), 228. On the social contract theory hitting a theoretical wall whenever its proponents

ical philosopher has felt that he must deal with. It was addressed in *Leviathan*,<sup>745</sup> and has since been used as a simple way to expose the basic moral assumption(s) behind (moral) political philosophies.<sup>746</sup>

For his part, on the same question, Spinoza thinks that ‘everyone can act with deceit by the right of nature and is not obliged to stand by promises except where there is hope of a greater good or fear of a greater evil.’<sup>747</sup>

23/4/2

On the connection of humans’ ability to make promises with their acquisition of self-consciousness in prehistoric times, see Nietzsche.<sup>748</sup>

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were asked this question, see Boucher and Kelly, ‘The Social Contract and Its Critics’, 21.

745 Hobbes, *Leviathan*, 96; or, for example, Immanuel Kant, *Groundwork of the Metaphysics of Morals* (1785), trans. Mary J. Gregor (Cambridge: Cambridge University Press, 1997), 32; or Sidgwick, *The Methods of Ethics*, 303.

746 For example, see also Hume, *A Treatise of Human Nature*, 568.

747 Spinoza, *Theological-Political Treatise*, 199, in line with his ultimately social contract approach (see, for example, *ibid.*, 200).

748 Nietzsche, *On the Genealogy of Morals*, 41.

## Notes on Chapter 24

### On paragraph 1

24/1/1

The link of property with control has not, of course, been missed in theory. Because control is obviously central to the exercise of property rights, it has been identified as a primary (if not the primary) characteristic of property by practically all of those scholars who have grappled with it. See, for example, Honoré's 'incidents of ownership' (specifically, the 'right to manage'),<sup>749</sup> Underkuffler's 'stringency',<sup>750</sup> and Hart and Moore's 'residual rights of control'.<sup>751</sup>

On the same line of reasoning, Tamanaha notes that '[a]nthropologists define property rights in terms of the right to possess, to use, and to exclude'.<sup>752</sup>

On the right to destroy, see Strahilevitz.<sup>753</sup>

24/1/2

It is expected that 'use' will replace property as a central topic in political philosophy within the digital world (see Chapter 17, par. 11).

### On paragraph 3

24/3/1

On property being natural to humans, see also Plato, who deals with it as a first-level corruption of his ideal state and the result of compromise

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749 Anthony M. Honoré, 'Ownership', in Anthony G. Guest (ed.), *Oxford Essays in Jurisprudence* (1961), 111.

750 Laura S. Underkuffler, *The Idea of Property: Its Meaning and Power* (Oxford: Oxford University Press, 2003), 50.

751 In Oliver Hart and John Moore, 'Property Rights and the Nature of the Firm', *Journal of Political Economy* 98/6 (1990).

752 Tamanaha, *A Realistic Theory of Law*, 85.

753 Lior Jacob Strahilevitz, 'The Right to Destroy', *Yale Law Journal* 114 (2004).

(i.e. agreement).<sup>754</sup> See also Locke (regardless of the fact that he ultimately connected property with human rights, see note 1/16/3): ‘every Man has a Property in his own Person’;<sup>755</sup> and Hegel: ‘everyone must have property’;<sup>756</sup> both thus ultimately consider property a primary mode of freedom.<sup>757</sup>

### 24/3/2 On property justification

Although a justification for property is not necessary under the informational approach of this book, because property is treated, among others, as a natural right, the basic premise of political theories, and even the foundation for state creation and legitimacy, important theoretical analysis has been given over to its justification.<sup>758</sup> Cohen provides a concise summary of the theories on the nature and justification of property (the power theory, the occupation theory, the labour theory, the personality theory and the economic theory) that has basically not been improved upon since it was written.<sup>759</sup>

### 24/3/3 On artificial Beings owning property

Specific artificial Beings (in essence, specific effigies of computer programs) could potentially have property, because they can process information. Although different from other informational Beings (humans, animals and organisations) because they do not need to survive or augment their information processing (see Chapter 2, par. 20), they are able to have property,

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754 Plato, *The Republic*, 279 (547b).

755 Locke, *Two Treatises of Government*, 287; this conflicts with his otherwise basic principle that man belongs to God, a conflict which does not go unnoticed by Laslett (Laslett, ‘Introduction’, 101).

756 Hegel, *Outlines of the Philosophy of Right*, 83.

757 *Ibid.*, 52.

758 See, for example, Gregory S Alexander and Eduardo M Peñalver, *An Introduction to Property Theory* (Cambridge: Cambridge University Press, 2012); or Jeremy Waldron, *The Right to Private Property* (Oxford: Oxford University Press, 1988).

759 See Morris R. Cohen, ‘Property and Sovereignty’, *Cornell Law Review* 13 (1927), 11. On property justification, see specifically Locke’s approach, which famously connected it with human labour (in essence, through humans’ labour things become theirs); this approach was taken to new lengths 200 years later by Marx (see John Dunn, ‘Measuring Locke’s Shadow’, in John Locke, *Two Treatises of Government and a Letter Concerning Toleration*, ed. Ian Shapiro (New Haven: Yale University Press, 2008), 261).

meaning to exercise control over datasets—and even destroy them, which is the critical characteristic of property. After all, organisations have property—admittedly, acting as proxies for their human owners—so the same could easily become the case for artificial Beings (specifically, computer programs), with this matter ultimately being an issue for politics and the government.

See also note 8.1/10/1.

#### On paragraph 4

24/4/1 *Wealth is not an end in itself*

Wealth, however, is not an end in itself. If acquired, it can be put to any use in order to augment the information processing of those who have acquired it: they can destroy it (e.g. have a luxurious meal), use it to acquire new experiences (e.g. travel in space) or use it as a means to augment their information processing in another manner (e.g. by acquiring knowledge through studies or even increasing their spirituality through frugality)<sup>760</sup> In view of the need of humans to constantly augment their information processing, wealth is only an intermediate purpose that is used to serve other purposes, to increase the sum of an individual's life (see Chapter 1, par. 1).<sup>761</sup>

#### On paragraph 5

24/5/1 *On human slavery*

If no property can be had over humans, how is it then that human slavery has only recently been abolished, after thousands of years of practice among humans? Slavery's establishment and abolition are both matters of politics, and therefore of government, not the state. As has been seen, humans need to augment their information processing and they will seize any opportunity that is presented to them to do so. Owning other humans

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760 Gandhi famously epitomising this approach: 'it costs many people a lot of money to keep me living in poverty' (cited by Arne Naes in David Rothenberg (ed.), *Is it Painful to Think? Conversations With Arne Naes* (University of Minnesota Press, 1993), 170).

761 In the same vein, see also Smith's distinction between wealth and money (in Adam Smith, *The Wealth of Nations, Books IV-V* (1776), ed. Andrew S. Skinner (London: Penguin, 1999), 14.

is not outside the scope of this reasoning, because it exponentially increases the information processing of those benefiting from it (in the past, because this was most probably the only substantial way to increase information processing). When governments and political systems abolished slavery, slavery was abolished—but not sooner than that, in spite of the basic platform right that all humans are equal (see Chapter 22, par. 7). A similar discussion is taking place today with regard to artificial Beings (see note 8.1/10/1). Ultimately, platform rights may exist, but they can be ignored, forgotten or ill-managed by the government and the political system (see Chapters 12 and 12.1, respectively).

### On paragraph 6

24/6/1

The idea of states existing in order to protect property<sup>762</sup> ought not to be confused with Locke's concept of property (which can basically be understood as human rights, see note 1/16/3) as the reason for state building within social contract theory. Even when not confusing property with human rights, however, under basic social contract theory, property is dependent on the state, however this is not to enable identification of the subjects of property but simply to protect them. See, for example, Hobbes: 'For where there is no commonwealth, there is (as hath been already shown) a perpetual war of every man against his neighbour; and therefore every thing is his that getteth it, and keepeth it by force; which is neither propriety, nor community; but uncertainty.'<sup>763</sup>

On the finding that property is dependent on the state, see also Kant<sup>764</sup> (in spite of his confusion of the state with its government).

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762 See, for example, Smith: 'The acquisition of valuable and extensive property, therefore, necessarily requires the establishment of civil government' (Adam Smith, *The Wealth of Nations*, 298).

Of course, this approach was famously opposed by Rousseau (who was adamantly against property, considering it the cause of war, which would otherwise not exist in a 'state of nature' where there is no property, as explained in Rousseau, *Discourse on the Origin of Inequality*, 38), within the context of his own approach to social contract theory.

763 Hobbes, *Leviathan*, 164.

764 Kant, *Political Writings*, 147.

24/6/2

On the distinction between state and government, see Chapter 12, par. 1; on states having no purpose whatsoever, see Chapter 11, par. 7.

### On paragraph 7

24/7/1

The connection between sovereignty and property is well-identified in legal theory.<sup>765</sup>

See also Ripstein,<sup>766</sup> who interestingly claims that property and sovereignty overlap because they both involve power, but differ because property governs control over ‘things’ while sovereignty governs authority over people.

### On paragraph 8

24/8/1 *On appropriation/property acquisition*

The issue of property appropriation (how is property acquired) is a well-examined, but as-yet unresolved topic in legal theory (ultimately morally connected with property justification, see note 24/3/2).

### On paragraph 12

24/12/1

The elimination of inequality is, of course, listed highly among the purposes that states should serve, as most famously put forward by Rawls.<sup>767</sup>

Marx (in his ‘Critique of the Gotha Programme’) is well known for maintaining that a Communist society would aspire to distribute resources according to the principle ‘from each according to his ability, to each according to his needs’.

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765 See, for example, Cohen, ‘Property and Sovereignty’ (with further references), as well as Thomas W. Merrill, ‘Property and Sovereignty, Information and Audience’, *Theoretical Inquiries in Law* 18/2 (2017).

766 Merrill, ‘Property and Sovereignty’.

767 Within the context of ‘justice as fairness’; see Rawls, *Justice as Fairness*, 130 and also note 13/2/2.

## *Notes on Chapter 24.1*

### **On paragraph 1**

24.1/1/1

On the creation of the intellectual property system, see, for example, Dreyfuss and Pila<sup>768</sup> or Saunders.<sup>769</sup> (Noting, however, that the distinction between intellectual-copyright and industrial patents and the later additions of trademarks, databases, trade secrets etc. is not important for the purposes of this analysis.)

24.1/1/2

On the author's moral right to exclude deletion of his or her (or its, depending on whether artificial Beings—specifically, computer programs—are accepted as authors in this sense) work, even if the relevant rights have been transferred, see, for example, Syed<sup>770</sup> (the converse also applies: an author cannot ask that his or her work be destroyed after it has been published).

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768 Rochelle Cooper Dreyfuss and Justine Pila, *The Oxford Handbook of Intellectual Property Law* (Oxford: Oxford University Press, 2018).

769 Kurt Saunders, *Intellectual Property and the Law of Ideas* (London: Routledge, 2021).

770 Sofie G. Syed, 'The Right to Destroy Under Droit d'Auteur: A Theoretical Moral Right or a Tool of Art Speech', *Chicago-Kent Journal of Intellectual Property* 15 (2016).

## Notes on Chapter 25

### On paragraph 1

#### 25/1/1 *Freedom and imagination*

The connection of freedom with imagination is, of course, not ignored in theory. Humboldt and Mill, for example, both connected freedom with a ‘variety of situations’ (‘Even the most free and self-reliant of men is hindered in his development, when set in a monotonous situation’<sup>771</sup>), thus emphasising the importance of imagination.

#### 25/1/2 *Freedom and individuality*

On the connection of freedom with individuality, see Humboldt:

*[T]hat reason cannot desire for man any other condition than that in which each individual not only enjoys the most absolute freedom of developing himself by his own energies, in his perfect individuality, but in which external nature itself is left unfashioned by any human agency, but only receives the impress given to it by each individual by himself and of his own free will, according to the measure of his wants and instincts, and restricted only by the limits of his powers and his rights.*<sup>772</sup>

See also note 25/8/3.

#### 25/1/3 *Freedom and specificity*

On the connection of freedom with specificity (justifying the claim made here that freedom is not material, only liberty is), see Hobbes: ‘For how can

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771 Wilhelm von Humboldt, *The Limits of State Action* (1854), ed. John W. Burrow (Cambridge: Cambridge University Press, 1969), 16; see also John Kekes, ‘Moral Imagination, Freedom, and the Humanities’, *American Philosophical Quarterly* 28/2 (1991).

772 Humboldt, *The Limits of State Action*, 19.

a man conceive he has liberty to do anything that has not liberty to do this or that or somewhat in particular?<sup>773</sup>

### On paragraph 3

25/3/1

On the relativity of freedom, as crucially quoted by Berlin, 'Freedom for an Oxford don... is a very different thing from freedom for an Egyptian peasant.'<sup>774</sup>

### On paragraph 4

25/4/1 *On the, complex, relationship between need and freedom*

There is a noted tension between need and freedom, in fiction, moral philosophy and religion. Basically, need is perceived as an impediment to freedom, an obstacle on humans' path to being free—as humans' struggle to become free from need. This is, of course, incorrect: in essence, need feeds freedom. It is need that creates human will, and it is human will that results in freedom. If there were no needs, humans would not process information—they would become Things. (That being said, the unsatisfiability of needs (see Chapter 5.1, par. 5) perfectly suits the basic unattainability requirement of both moral philosophy and religion.)

### On paragraph 5

25/5/1

On the connection of imagination with creativity, see, for example, Gotlieb et al.<sup>775</sup>

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773 Quoted in Thomas Hobbes and John Bramhall, *Hobbes and Bramhall on Liberty and Necessity*, ed. Vere Chappell (Cambridge University Press, 1999), 31.

774 Berlin, *Liberty*, 171.

775 Rebecca J. M. Gotlieb et al., 'Imagination Is the Seed of Creativity', in James C. Kaufman and Robert J. Sternberg (eds.), *The Cambridge Handbook of Creativity* (2019).

25/5/2 On the (legal) rights of Things

On the (legal) rights (always protective) of animals, rivers or trees, see, for example, Stone<sup>776</sup> or Darpö.<sup>777</sup>

See also note 8.1/10/1.

**On paragraph 6**

25/6/1

On the state as the source of human freedom, see also Hegel, who supports ‘the state as freedom, freedom universal and objective even in the free self-subsistence of the particular will.’<sup>778</sup>

Notwithstanding the Hegelian approach to the state, to paraphrase Hayek (not unjustifiably, considering his views on the law, legislation and the government), it could be claimed that the greatest contrast among political philosophers throughout history is between those to whom law and freedom are inseparable and those to whom the two are irreconcilable.

**On paragraph 8**

25/8/1

On the distinction between freedom and liberty, see also Locke: ‘though this [the state of nature] be a State of Liberty, yet it is not a State of Licence’.<sup>779</sup>

On the definition of liberty, also consider Hobbes: ‘Liberty (to define it) is simply the absence of obstacles to motion’;<sup>780</sup> as well as Montesquieu: ‘liberty can consist only in having the power to do what one should want to do and in no way being constrained to do what one should not want to do.’<sup>781</sup>

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776 Christopher D. Stone, ‘Should Trees Have Standing?—Toward Legal Rights for Natural Objects’, *Southern California Law Review* 45/2 (1972).

777 Jan Darpö, *Can Nature Get It Right? A Study on Rights of Nature in the European Context*, European Parliament, JURI Committee (Brussels, 2021).

778 Hegel, *Outlines of the Philosophy of Right*, 51.

779 Locke, *Two Treatises of Government*, 270.

780 Hobbes, *On the Citizen*, 111.

781 Montesquieu, *The Spirit of the Laws*, 155.

25/8/2 *On the interchangeable use of 'freedom' and 'liberty'*

Although basically different (even from the point of view of the same person, i.e. an individual), the two terms are frequently used interchangeably (after the confusion between state and government (see Chapter 12, par. 1), this is the second basic conundrum in political philosophy).

In his 1859 work, *On Liberty*, Mill was the first to recognise the difference between liberty as the freedom to act ('Liberty of the Will') and liberty as the absence of coercion ('Civil or Social Liberty').<sup>782</sup>

25/8/3 *On negative and positive liberty*

If liberty is permission from the state (thus, the ability for its citizens, see Chapter 21) to process information, negative and positive liberty (lack of interference and ability to act) are attributes of different datasets: negative liberty grants control over specific datasets to individuals (to allow or prohibit the processing of other Beings) and positive liberty means the access and permission to process information on specific datasets (thus limiting the control of other Beings). Which dataset falls under which category on each occasion is a matter of politics and has been bitterly debated since the beginning of time. Nothing can hide the fact, however, that all of this is afforded by the state on its information platform, meaning that negative liberty (practically, self-restraint by the state) is artificial and illusory.

## On paragraph 11

25/11/1

Evidently, without exception, liberty is a worthy aim for human societies when recommending a new (or justifying an already existing) political system or from a moral philosophy point of view. After all, how could it be otherwise? How could anyone seriously recommend or justify a political system or a way of living that is explicitly 'against liberty'?

What is crucial, therefore, is to define what anyone means by such 'liberty' (or 'freedom' in their own words). For example, in politics, Hegel's *Philosophy of Right*, which has been used to justify various specific political regimes, it is claimed to be 'the discipline that reveals what it is to be free,

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<sup>782</sup> Mill, *On Liberty, Utilitarianism, and Other Essays*, 5. See also Berlin's distinction between positive and negative liberty (Berlin, *Liberty*).

and, more particularly, what objective structures and institutions (such as civil society and the state) are made necessary by the nature of freedom.<sup>783</sup> From a completely different point of view, justifying entirely different political regimes, Hayek gives value to freedom: ‘the value of freedom rests on the opportunities it provides for unforeseen and unpredictable actions.’<sup>784</sup>

Each thinker values, and readily promotes, freedom—each, however, meaning and understanding it in a completely different manner. Ultimately, if each and every political system that has ever existed has supported and promoted freedom, then freedom simply does not exist.

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783 Stephen Houlgate, ‘Introduction’, in Georg W. F. Hegel, *Outlines of the Philosophy of Right*, trans. T. M. Knox, ed. Stephen Houlgate (Oxford UK: Oxford University Press, 2008), xvi.

784 Hayek, *Law, Legislation and Liberty*, 55.

## Notes on Chapter 26

### On paragraph 1

26/1/1

On the need of humans to process information individually and not as members of a hive, see Chapter 5.1, par. 7.

### On paragraph 3

26/3/1

It is almost impossible to define political theories and their exact content. On individualism, see, for example, De Tocqueville,<sup>785</sup> Durkheim<sup>786</sup> or Dumont.<sup>787</sup>

On liberalism, other than its foundational texts,<sup>788</sup> see also Freedden.<sup>789</sup>

### On paragraph 4

26/4/1 *On the distinction between the public and the private sphere in individuals*

Modern political philosophy is largely based on the distinction of an individual between the private and the public self (which is not to be confused with the distinction between the body and the soul): a ‘dualism between the “public” political citizen... and the private, “legal” citizen’.<sup>790</sup> That is, of

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785 Alexis de Tocqueville, *Democracy in America* (1835), trans. Harvey C. Mansfield and Delba Winthrop (Chicago: University of Chicago Press, 2000), 477, on individualism in democratic societies.

786 Émile Durkheim, *The Division of Labor in Society* (1893), trans. W. D. Halls, ed. Steven Lukes (Hampshire: Palgrave Macmillan, 2013), 317.

787 Louis Dumont, *Essays on Individualism: Modern Ideology in Anthropological Perspective* (Chicago: University of Chicago Press, 1986).

788 Locke, *Two Treatises of Government*; Mill, *On Liberty, Utilitarianism, and Other Essays*.

789 Michael Freedden, *Liberalism: A Very Short Introduction* (Oxford: Oxford University Press, 2015).

790 Bellamy, *Citizenship*, 43.

the very same human who is sometimes acting or acted upon as a private person and sometimes acting or acted upon as a member of society.<sup>791</sup>

In Ancient Greece this was not the case; individuals merged with the city—their life was embedded in it. They may have served private, as opposed to public, duties, but this is as far as the separation between the private and the public self went; individuals and the city were one.<sup>792</sup> Put another way, ‘While modern thought starts from the rights of the individual, and conceives the State as existing to secure the conditions of his development, Greek thought starts from the right of the State.’<sup>793</sup> In the same vein, according to Strauss, ‘Modern and classical political philosophy are fundamentally distinguished in that modern political philosophy takes “right” as its starting-point, whereas classical political philosophy has “law”.’<sup>794</sup> The matter

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On the ingrained distinction between fundamental political philosophers see, for example, Gourevitch on Rousseau’s man/citizen ‘organizing principle’ (Gourevitch, ‘Introduction’, x), or Habermas’s ‘public sphere’ (Jürgen Habermas, *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, trans. Thomas Burger (Cambridge, MA: MIT Press, 1989), 27).

791 On what falls within the private or the public self respectively, see, for example, Locke (on truth and the keeping of faith in the private one; Locke, *Two Treatises of Government and a Letter Concerning Toleration*, ed. Ian Shapiro (New Haven: Yale University Press, 2003), 106) or the Hobbesian distinction between the *foro interno* and *externo* (Hobbes, *On the Citizen*, 96).

792 See, for example, Aristotle: ‘And it is not right either that any of the citizens should think that he belongs just to himself; he must regard all citizens as belonging to the state, for each is a part of the state; and the responsibility for each part naturally has regard to the responsibility for the whole’ (Aristotle, *The Politics*, 452 (1337a11)).

This is why Huxley claimed that ‘It never occurred to a Greek to claim the modern individualist’s anarchic licences’ (Aldous Huxley, *Do What You Will: Essays* (1929) (London: Chatto & Windus, 1956), 81); see also Watkins, *The State as a Concept of Political Science*, 9. Friedrich connects the state in ancient Greece and Rome, and up until the Middle Ages, with the church and religion: ‘both [Aristotle and Cicero] are thinking of a religious as well as a political community and its organization, and hence of a church as much as a state. Endless confusion has been the consequence of applying the Aristotelian concept to the modern state, culminating in the “deification” of the state by Hegel and the Hegelians and eventually in its “diabolization” in Fascist and National Socialist thought’ (Friedrich, *Man and His Government*, 549). The same is true of Passerin: ‘In modern language the polis can only be described as both a “State” and a “Church”’ (Passerin d’Entrèves, *The Notion of the State*, 28).

793 Barker, quoted in Strauss, *The Political Philosophy of Hobbes*, 155. Compare also Sørensen: ‘The transformation from subjects, who primarily have obligations, to citizens who also have rights happened only gradually’ (Sørensen, ‘The Transformation of the State’, 11).

794 Strauss, *The Political Philosophy of Hobbes*, 156.

is, in practice, also connected with the notions of negative (and positive) liberty.<sup>795</sup>

Why the theory that an individual can be broken down into two spheres was developed is anybody's guess. Most likely it was born out of (internal) conflict, the reaction of Aristotle,<sup>796</sup> who had been trained in the democratic city-state tradition, when he was confronted with the first monarch that Ancient Greece had ever submitted to. Before Aristotle, (small) city-state life meant that participation was not only possible but mandatory and therefore control of one's fate was in the citizens' own hands—and co-decisions. This model ceased to exist with the advent of the Macedonian kingdoms and the breakdown of democracy: individuals no longer controlled their own fate.

The succession of Philip (Aristotle's employer) by one of the most formidable conquerors the world has ever seen (Alexander the Great) and, ultimately, his succession by Imperial Rome, did little to abolish the distinction: in essence, every one of the political theories developed subsequently has taken this distinction for granted.<sup>797</sup> Nor was this assumption removed after one of Christianity's cornerstones distinguished between what was Caesar's and what not. In fact, the distinction was only accentuated during the centuries that followed,<sup>798</sup> both within Christianity and its various dogmas and outside it—when the various forms of government, and their supporting political theories succeeded, effectively, Caesar.

## On paragraph 5

26/5/1

Of course, this inherent conundrum did not go unnoticed in theory: on the 'paradox of political freedom', see, for example, Kant's approach.<sup>799</sup>

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795 See, for example, Passerin d'Entrèves, *The Notion of the State*, 204.

796 On the connection of Aristotle with the notion of positive liberty see, for example, *ibid.*, 212.

797 In essence, they built on it; see, for example, the Stoics' *ataraxia* (while at the same time insisting on public service), or the Epicureans' *Garden*, to keep away (and safe) from things outside one's control.

798 To the extent that a similar breakdown of the self was developed as a theory to support monarchy; see Kantorowicz, *The King's Two Bodies*.

799 In Kant, *Political Writings*, 26.

## On paragraph 7

### 26/7/1 *On the meeting of extremes*

On the finding that (political) extremes meet, for example, on the topic of (analogue-world) borders, see the relevant analysis in Diener and Hagen,<sup>800</sup> or, graphically, Borges' drawing of the political Lernaean Hydra.<sup>801</sup>

Political extremes also meet in their enmity against the state, in the sense that they intuitively feel that whatever is traditional needs to be overturned for their radical new political programme to be established (the necessary U-turn of themselves forming a state after they have disastrously succeeded in their attacks on the pre-existing political system, as in the cases of Nazism and Communism, simply proving that states are natural to humans).

## On paragraph 9

### 26/9/1

On personal information, see note 1/8/1.

### 26/9/2 *On the right to informational self-determination*

The German Census Judgement<sup>802</sup> was the decisive move for individualism from the analogue to the digital world.

### 26/9/3 *On data privacy*

The artificiality of the digital world also explains why data privacy is considered an 'interface right', a gateway for the exercise of all other rights.<sup>803</sup>

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800 Diener and Hagen, *Borders*, 13.

801 Originally accompanying his essay 'Our Poor Individualism' (the essay itself, but not the drawing, can be found in Borges, *Selected Non-Fictions*, 309).

802 Germany, Federal Constitutional Court, *Judgment of 15 December 1983*, 1 BvR 209, 269, 362, 420, 440, 484/83.

803 See Dara Hallinan, 'A Theory of EU Data Protection Law', *European Data Protection Law Review (EDPL)* 9/3 (2023).



## List of Epigraphs

### 0. Prologue

*'To understand an author's meaning all contradictory passages must be reconciled. [...] Every author has a meaning which reconciles all contradictory passages, or else he has no meaning at all.'*<sup>1</sup>

### 1. Information

*'Let me be quite clear about what I mean here by matter. I mean an item that is not in itself a something and is also not a quantity nor said to be any of the other things by which that which is is defined.'*<sup>2</sup>

#### 1.1. Material and immaterial information

*'Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be.'*<sup>3</sup>

### 2. Beings

*'Any organism is held together in this action by the possession of means for the acquisition, use, retention, and transmission of information.'*<sup>4</sup>

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- 1 Blaise Pascal, *Pensees* (1670), trans. A. Krailsheimer (London: Penguin, 1995) 77. A plea is also made here to, same as Rawls, 'take to heart Mill's remark in his review of [Alfred] Sedgwick: "A doctrine is not judged at all until it is judged in its best form"' (John Rawls, *Lectures on the history of political philosophy*, ed. S. Freeman (Cambridge, Massachusetts: Harvard University Press, 2007) xii).
  - 2 Aristotle, *The Metaphysics*, trans. Hugh Lawson-Tancred (London: Penguin, 2004) 175 (1029a).
  - 3 Walter Benjamin, "The work of art in the age of mechanical reproduction," in *Illuminations: Essays and Reflections*, ed. Hannah Arendt, trans. Harry Zohn (New York: Schocken Books, 1969), 220.
  - 4 Norbert Wiener, *Cybernetics: or control and communication in the animal and the machine* (1961), (Cambridge, Massachusetts: MIT Press, 2019), 161.

### 2.1. Humans

*'All persons exist to society by some shining trait of beauty or utility which they have.'*<sup>5</sup>

### 3. Things

*'Whatever exists, will either do  
Something, or it is itself, by other things, done to'*<sup>6</sup>

### 4. Processing

*'For anything that is must be,  
By definition, something.'*<sup>7</sup>

#### 4.1. Reason

*'We have to make an exception of Descartes, the father of rationalism (and therefore the grandfather of the revolution), who granted authority to reason alone: but reason is only a tool, and Descartes was superficial.'*<sup>8</sup>

### 5. Need and opportunity

**'On a Statue of Time by Lysippus**

A. *Who and whence was the sculptor?*

B. *From Sicyon.*

A. *And his name?*

B. *Lysippus.*

A. *And who art thou?*

B. *Time!\* who subdueth all things.*

A. *Why dost thou stand on tip-toe?*

B. *I am ever running.*

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5 Ralph Waldo Emerson, "Nominalist and Realist," in *Essays: Second Series* (Boston: James Munroe and Company, 1844), 239.

6 Lucretius, *The Nature of Things*, trans. A. E. Stallings (London: Penguin Classics, 2007), 13 (Book 1, lines 428–429).

7 Lucretius, *The Nature of Things*, trans. A. E. Stallings (London: Penguin Classics, 2007), 13 (Book 1, lines 430–431).

8 Friedrich Nietzsche, *Beyond Good and Evil: Prelude to a Philosophy of the Future*, trans. Marion Faber (Oxford: Oxford University Press, 2008), aph. 191.

- A. *And why hast thou a pair of wings on thy feet?*  
B. *I fly with the wind.*  
A. *And why dost thou hold a razor in thy right hand?*  
B. *As a sign to men that I am sharper than any sharp edge.*  
A. *And why does thy hair hang over thy face?*  
B. *For him who meets me to take me by the forelock.*  
A. *And why, in Heaven's name, is the back of thy head bald?*  
B. *Because none whom I have once raced by on my winged feet will now, though he wishes it sore, take hold of me from behind.*  
A. *Why did the artist fashion thee?*  
B. *For your sake, stranger, and he set me up in the porch as a lesson.*  
\* *Time, that is, in his character of Opportunity, not of Length of Years*<sup>9</sup>

### 5.1. *A need specific to humans*

*'Man has been given a restless soul, always responding to novelties.'*<sup>10</sup>

### 6. *Control*

*'ATHENIAN: Now then, this shows that there is one specific desire common to all mankind. Isn't this the upshot of our discussion?*  
*MEGILLUS: What desire?*  
*ATHENIAN: That events should obey whatever orders one feels like giving – invariably, if possible, but failing that, at least where human affairs are concerned.*  
*MEGILLUS: Very true.'*<sup>11</sup>

### 7. *State definition: States are information platforms for their citizens*

*'If you leave this problem unsolved it will hardly be possible to solve the ones which come next.'*<sup>12</sup>

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9 Posidippus, "On a Statue of Time by Lysippus" (poem 16.275), in *The Greek Anthology*, trans. W. R. Paton, vol. 5 (London: William Heinemann Ltd., 1927), 388–89.  
10 *Ecclus.* 40:1–8 (NRSV).  
11 Plato, *The Laws*, trans. Trevor J. Saunders (London: Penguin Classics, 1970), 162 (4.709e–710a).  
12 Cicero, "On Divination," in *Roman Readings*, trans. Michael Grant (Middlesex: Penguin Books, 1956) 45.

### 7.1. Information platforms

*'On ne pense que par image.'*<sup>13</sup>

### 8. States are natural to humans

*'There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says "Morning, boys. How's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes "What the hell is water?"'*<sup>14</sup>

#### 8.1. Names

*'ODYSSEUS: What shall I call him, Circe? Who was he when he was human?*

*CIRCE: What relevance does that have? Call him Gryllus, if you like.'*<sup>15</sup>

### 9. State formation: from word of mouth to the modern state

*'For though the society we have described seems to me to be the true one, like a man in health, there's nothing to prevent us, if you wish, studying one in a fever.'*<sup>16</sup>

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13 (*We think only in images*), Albert Camus, *Carnets, I: mai 1935–février 1942* (Paris: Éditions Gallimard, 1962), entry for May 1936.

14 David Foster Wallace, *This Is Water: Some Thoughts, Delivered on a Significant Occasion, about Living a Compassionate Life* (New York: Little, Brown and Company, 2009), 3.

15 Plutarch, *Gryllus* (That Brute Animals Use Reason), in *Moralia*, vol. 12, trans. Harold Cherniss and William C. Helmbold (Cambridge, MA: Harvard University Press, 1957), 985d–e.

16 Plato, *Republic*, trans. G. M. A. Grube, rev. C. D. C. Reeve (Indianapolis: Hackett, 1992), 48 (2.372e).

10. *What states need*

*'The grand, leading principle, towards which every argument unfolded in these pages directly converges, is the absolute and essential importance of human development in its richest diversity.'*<sup>17</sup>

11. *The nature of the state*

*'Philosophy cannot give us a satisfactory theory of man until it has developed a theory of the state. The nature of man is written in capital letters in the nature of the state.'*<sup>18</sup>

12. *The government*

*'Sir Humphrey: "Bernard, if the right people don't have power, do you know what happens? The wrong people get it!"'*<sup>19</sup>

12.1. *The political system*

*'For the constitution of a state is in a sense the way it lives.'*<sup>20</sup>

13. *State justification*

*'This part of Philosophy is in the same situation as the public roads, on which all men travel, and go to and fro, and some are enjoying a pleasant stroll and others are quarrelling, but they make no progress. The single reason for this situation seems to be that none of those who have dealt with*

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17 Wilhelm von Humboldt, *The Limits of State Action*, ed. J. W. Burrow (Cambridge: Cambridge University Press, 1969), 51.

18 Ernst Cassirer, *The Myth of the State* (New Haven: Yale University Press, 1946), 73. Cassirer directly invokes Plato's analogy from the *Republic*, where the nature of justice (and thus man) is 'written in capital letters in the nature of the state.' However, the underlying principle—that a theory of man is inseparable from a theory of the state—resonates perhaps even more strongly with Aristotle's foundational concept of man as a 'political animal' (*zoon politikon*), whose nature is fully realized only within the *polis* (see Aristotle, *Politics*, trans. Ernest Barker (Oxford: Oxford University Press, 1946), Introduction, xi; cf. *Politics* 1.1253a).

19 "Yes Prime Minister, Series 2, episode 5" aired 7 January 1988, BBC.

20 Aristotle, *The Politics*, trans. Ernest Barker (Oxford: Oxford University Press, 1946), 181 (4.1295a40–b1).

*this subject have employed a suitable starting point from which to teach it.*<sup>21</sup>

14. State legitimacy

15. State succession

*'The history of art is sometimes described as the story of a succession of various styles.'*<sup>22</sup>

16. Sovereignty

*'But it does not require much effort to see that a virtual and always present entity is exactly the opposite of what is needed for the collective to be assembled: if it's already there, the practical means to compose it are no longer traceable; if it's total, the practical means to totalize it are no longer visible; if it's virtual, the practical means to realize, visualize, and collect it have disappeared from view.'*<sup>23</sup>

17. Territory and borders

*'Whether you can observe a thing or not depends on the theory which you use. It is the theory which decides what can be observed.'*<sup>24</sup>

18. Nation

*'He was a simple man – a Swiss (a people little given to vanity and lying).'*<sup>25</sup>

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21 Thomas Hobbes, *On the Citizen*, ed. and trans. Richard Tuck and Michael Silverthorne (Cambridge: Cambridge University Press, 1998), 6.

22 E. H. Gombrich, *The Story of Art*, 16th ed. (London: Phaidon Press, 1995), 15.

23 Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005), 5.

24 Albert Einstein, comment during Werner Heisenberg's 1926 lecture in Berlin, recounted by Heisenberg and quoted in Abdus Salam, *Unification of Fundamental Forces* (Cambridge: Cambridge University Press, 1990), 52.

25 Michel de Montaigne, "Of Cannibals," in *The Complete Essays of Montaigne*, trans. Donald M. Frame (Stanford: Stanford University Press, 1958), 152 (Book 1, Chapter 31).

19. Archipelago: where do the information platforms that are states live? The EU

*'I would first of all like to say something about archipelagos. I think the idea of the archipelago – as a place where we can begin to understand and resolve the contradictions of the world – should be propagated. The archipelagos of the Mediterranean must encounter the archipelagos of Asia, and the archipelago of the Antilles. These archipelagos must encounter each other because, across their many islands, interdependence and difference coexist – and, in this way, they carry the energy that is necessary for our whole globe, our whole world.'*<sup>26</sup>

20. Law

*'The word law (lex) in an absolute sense signifies that, in accordance with which, each individual thing, or all things, or all things of the same kind, behave in one and the same fixed and determined way, depending upon either natural necessity or a human decision.'*<sup>27</sup>

21. Rights

*'The light dove, in free flight cutting through the air the resistance of which it feels, could get the idea that it could do even better in airless space.'*<sup>28</sup>

22. Human rights

*'The fortunes of ideas, like those of men, depend as much on accident as on their own worth and character.'*<sup>29</sup>

23. Morality

*'Who are you?'*

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26 Édouard Glissant, quoted in Hans Ulrich Obrist, *Archipelago* (n.p.: Common Ear Inc., 2021), 19.

27 Baruch Spinoza, *Theological-Political Treatise*, trans. Samuel Shirley, 2nd ed. (Indianapolis: Hackett, 2001), 49 (Chapter 4).

28 Immanuel Kant, *Critique of Pure Reason*, trans. and ed. Paul Guyer and Allen W. Wood (Cambridge: Cambridge University Press, 1998), 129 (A5 / B9).

29 Elie Kedourie, *Nationalism*, 4th ed. (Oxford: Blackwell, 1993), 9.

*The new number two.  
Who is number one?  
You are number six.  
I am not a number! I am a free man!*<sup>30</sup>

## 24. Property

*'Possession, ownership, are tactical matters.'*<sup>31</sup>

### 24.1. Intellectual property

*'Something that doesn't actually exist can still be useful'*<sup>32</sup>

## 25. Freedom and liberty

*'Since we are not, in fact, free, but could not live without the conviction that we are, what are we to do?'*<sup>33</sup>

## 26. Liberalism

*'As for me, I only exist 'at home' (in myself); and as for that other life of mine which lies in what those who love me know of me, [C] considered naked and simply in itself, [A] I am well aware that I feel no fruit or joy from it, other than from the vanity of an imagined opinion.'*<sup>34</sup>

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30 *The Prisoner*, season 1, episode 1, "Arrival," directed by Don Chaffey, written by George Markstein and David Tomblin, aired September 29, 1967 (UK), on ATV (ITC Entertainment).

31 Walter Benjamin, "Unpacking My Library: A Talk about Book Collecting," in *Illuminations: Essays and Reflections*, ed. Hannah Arendt, trans. Harry Zohn (New York: Schocken Books, 1968), 67.

32 Ian Stewart, *Infinity: A Very Short Introduction* (Oxford: Oxford University Press, 2017), 90.

33 Isaiah Berlin, "Historical Inevitability," in *Four Essays on Liberty* (Oxford: Oxford University Press, 1969), 80.

34 Michel de Montaigne, "Of Vanity," in *The Complete Essays of Montaigne*, trans. Donald M. Frame (Stanford: Stanford University Press, 1958), 758 (Book 3, Chapter 9).

Notes

*'As long as we live, we are devoted to self-improvement, and we shall not cease to make our writings more polished and more complete until we cease to breathe. No one is so good a man that he could not be made better; and no book has had so much work put into it that it cannot be made more perfect.'*<sup>35</sup>

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35 Erasmus, *Ep.* 1341A:1465–86, quoted in Erasmus, *The Adages of Erasmus*, ed. William Barker (Toronto: University of Toronto Press, 2001), xxi.



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