

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.¹⁴⁴

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.¹⁴⁵ In the analogue world this happens because all Beings can and will process information (Nature being itself a Being¹⁴⁶).

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*¹⁴⁷

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.¹⁴⁸

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.¹⁴⁹

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,¹⁵⁰ is similarly material, meaning external

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 (indirectly¹⁵¹) the digital world.

As information can also be immaterial,¹⁵² 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,¹⁵³ 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.¹⁵⁴
- To be living is to be processing information¹⁵⁵ 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,¹⁵⁶ as well as for Beings themselves (humans constituting a specific case, for whom states are needed and to whom they are thus natural).

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 beginning¹⁵⁷ 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.¹⁵⁸ 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.¹⁵⁹ 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,¹⁶⁰ 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.¹⁶¹

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.

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.

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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 rights¹⁶² 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.¹⁶³ 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 Thing¹⁶⁴—up to the point of the Being or Thing becoming its property¹⁶⁵ (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 Thing¹⁶⁶ 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

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.¹⁶⁷

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

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.¹⁶⁹

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,¹⁷⁰ 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'¹⁷¹ or elsewhere.¹⁷² On the contrary, humans, having no purpose but only needs, simply ceaselessly try to augment their information processing in order to serve these needs¹⁷³. It is as a result of this that conflict emerges in conditions of scarcity.

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 paragraph¹⁷⁴ 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,¹⁷⁵ it is in fact only animals that live (i.e. can and will process information) without a state.¹⁷⁶ Humans, because their basic need is to augment their information processing,¹⁷⁷ process information as individualised Beings. This individualisation is carried out by their states in (closed) processing environments created by the same,¹⁷⁸ and it is this that enables humans to have a meaningful life.¹⁷⁹

The same is also true for both organisations and artificial Beings.¹⁸⁰

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 Beings¹⁸¹) that further enhance it, in an (apparently never-ending) virtuous circle.¹⁸²

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.