

Ricœur's philosophy of technology and its reception

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Although technology is not a major theme in Paul Ricœur's philosophy, there are a number of texts in which he explicitly examines aspects of the relation between human beings and their technical environment. The first aim of this chapter is to provide an overview of the main themes on which Ricœur touches in these texts, as well as a number of less direct contributions to the philosophy of technology. Accordingly, Ricœur's early reflection on technology as part of human culture is examined, underscoring the ambiguity of technology, as Ricœur sees it. This ambiguity is then demonstrated with reference to technology-related issues, notably work and urbanization. Ricœur's understanding of the impact of (new) technology on ethical dilemmas is explored – this time in relation to his later philosophy. Finally, the technical dimension of the human capability to act is presented as a line of enquiry spanning almost his whole work. The second aim of this article is to give an overview of the reception of Ricœur's thought in fields of philosophy related to technology, focusing on the nature of technology, information technology, medical ethics, the environment, the heuristics of technological change, work and city life.

Technology (*Technik* or *technique*) is not a central theme in Paul Ricœur's philosophy; he wrote no monograph in the field of philosophy of technology, and even articles dedicated primarily to

technical themes are rare in his oeuvre.¹ However, his thought on technology is not limited to merely occasional references. A first complex of thought on technology in his work is his reflection on the system of human-made artefacts and associated modes of usage, and often specifically as it developed in modernity. References to technology can be found throughout his work, but as an explicit theme, it interested Ricœur mainly in his early post-World War II philosophy (§1). A second theme is the ethical response to challenges and problems generated by technological progress. He paid attention to this theme throughout his work, but he focused more directly on it in his later philosophy (§2). Finally, technology is more or less directly thematized whenever Ricœur explores different dimensions of human capability. This theme can be traced in basically all of his practical philosophy (§3).

These three identifiable core interests in technology were never developed into a neat system. I propose that the best way to advance a broad synopsis of technology in Ricœur is to consider it from the point of view of philosophizing about *techné* in the most general sense. This allows us to access a more or less »well-ordered polysemy« of *techné* in his work, which I will call his philosophy of »technology«, for the sake of simplicity. This encompassing view on Ricœur's philosophy of technology has most often been neglected by the rapidly expanding reception of Ricœur's philosophy in a range of technology-related fields of enquiry. His own thought on technology serves as one point of access, but not the only one, through which aspects of his work are received in these fields. In the last part of this chapter, I give an overview of various dimensions of this varied reception (§4).

1. Technology, modernity, cultural plurality

Ricœur's views on modernity and his ways of approaching (or side-stepping) it are quite complex. During the early post-World War II years, Ricœur developed his initial perspective based upon a loose

1 His name is absent from compendia such as that by C. Hubig, A. Hünig, G. Ropohl (Hg.), *Nachdenken über Technik. Die Klassiker der Technikphilosophie und neuere Entwicklungen*, Berlin ³2013.

definition of the contemporary era (rather than a neatly defined notion of modernity). This perspective consisted almost exclusively of four themes: modern science and technology, modern forms of work, modern forms of the state and politics, and the plurality of human forms of existence without any means to establish a normative hierarchy between them.² It is within this framework that one has to approach Ricœur's first steps into the philosophy of technology.

1.1 Technology as part of human culture

The question of technology appears in *Christianity and the Meaning of History* (1951),³ as part of a generally constructed reflection on the meaning of history, which Ricœur examines as consisting of three layers: progress, ambiguity and hope. The idea of progress, which Ricœur defines as the »accumulation of acquisitions [*l'accumulation d'un acquis*]« (93/81⁴), refers to the level at which one has to consider the history of »tools« (*outils*).⁵ Since Ricœur demarcates these as »material or cultural tools, tools of knowledge, and even tools of consciousness and of the spirit« (93/81), it implies that he has the whole range of technology in mind, in as far as it can be analytically *abstracted* from human action and thought.

2 Cf. Wolff, *Lire Ricœur depuis la périphérie. Décolonisation, modernité, herméneutique*, Brussels 2021, chapter 4, §4.1b. In the subsequent discussion I draw from this longer discussion. The importance of secularization (which Ricœur added to this picture only in the 1960s) as a motivation for Ricœur's early philosophy is most often exaggerated in scholarship (as I have demonstrated in the same text).

3 P. Ricœur, *Le christianisme et le sens de l'histoire*, in: *Histoire et vérité*, Paris 1964 [=HV], 93–112/*Christianity and the Meaning of History*, in: *History and Truth*, Evanston 1965, 81–97. See also B. Dauenhauer, *Paul Ricœur: The Promise and Risk of Politics*, Lanham 1998, 30–32.

4 Note: where two page numbers are separated by a backslash, the first refers to the French original, the second to the English translation.

5 This understanding of progress can probably be upheld even if one considers the limitations imposed upon it by the destruction of the ecology and climate (a fact which Ricœur does not seem to have in mind at that point). These limitations come into play when the abstraction of technology from politics of values is lifted.

Accumulation allows for progress in tools and in their usage (in other words, labor in the widest sense), but also in knowledge and know-how. Moreover, accumulation allows for a sedimentation of technology which transcends individual human beings' activities and lives. Writing and the printing of texts epitomises this point. But sedimentation has a further temporal dimension: it is irreversible (cf. 95/82). This brings Ricœur to a curious conclusion (apparently derived from Pascal⁶): the consequence of accumulation and irreversible technical progress is that humanity, understood as a single entity, is the ultimate recipient of whatever is thus transmitted.⁷ Ricœur claims that this trend applies also to mental techniques (such as calculation and science) and spiritual techniques. This means that all cultural particularities of technological inventions belong to a specific group or culture only in a provisional way; in principle, cumulatively and in the long run, »tools«, or technology, as a whole, belongs to humanity as a whole. Technological progress is thus »human works without man [*des œuvres de l'homme sans l'homme*]« and in this sense, it is »anonymous« (98, 97/85, 84). But this makes sense only if this accumulation is understood as a form of »capital« (97/84⁸) of humanity, to be used, transmitted and appropriated – or not.

It is only when the abstraction is lifted and the *embeddedness* of technology in human interaction is reconsidered that one again witnesses the drama of decisions and crises, of growth and decay (cf. 94/84). Different people and different groups can be distinguished from one another by the ways in which they face history and the ways in which they let ethical demands and solutions weigh on their appropriation and use of technology. Hence, technology can never be separated from valuation (cf. 101/87–88). Vast historical tendencies in this respect allow us to identify civilisations, each with its own history of values and challenges, its own rise and fall – in any case, we are never looking simply at a history of progress,

6 *Le christianisme*, 95/*Christianity*, 83; and P. Ricœur, *Lectures I: Autour du politique*, Paris 1991, 243 [=L1].

7 Elsewhere, in an exposition on Eric Weil, Ricœur claims: »The human of technology, of calculation, of mechanism is the first human being who lives universally and understands himself/herself by this universal rationality« (*La philosophie politique: d'Eric Weil*, in: LI, 95–114, here: 100 [my translation]).

8 The translation is different – it refers to »liquid assets«.

but have to consider complex processes of emergence, maintenance, invention and decay. On the level of human interaction, technology is inseparable from the human history of power, in other words, of politics. Where value infuses the invention, use and progress of technology, something is at risk: human survival, human flourishing and harm to others. Ricœur identifies this as the risk of guilt (*culpabilité*, cf. 105/91). On the whole, whereas technology in abstraction from action forms a history of progress, its integration in human action and evaluation reveals it as fundamentally ambiguous (cf. 107/92 and see §1.2 below).

Subsequently, Ricœur redeploys and revises this view on technology in *Universal Civilization and National Cultures* (1960/1).⁹ Universal civilization refers precisely to those aspects common to the diversity of human cultures which result from the spread of the »scientific spirit« (322/271), and which are relayed in and incorporated into modern technology. Technological globalization transcends national and cultural boundaries, and in turn contributes to the gradually awakening awareness that people belong to one planetary humanity (cf. 324/275). Other extensions of the scientific spirit – the modern state and its administration, rational economics and aspects of everyday culture, such as housing and clothing – also have a technical dimension (cf. 324–6/275–277). Ricœur spells out the ambiguity of these developments. On the positive side, there is the spread of better material conditions for survival (food, safety, medical treatment), mass education and the means to protect human dignity (which is not to claim that everything has already been realized!). On the negative side, there is the destruction of traditional cultures, the undermining of the normative core of these cultures – aside from all the well-known forms of abusive applications of new means for exploitation and oppression. The threat to inherited cultural traditions is also a threat to the human evaluative ability in matters technological and beyond.

But one could also approach the question of the relation between technology and valuation from the angle of political intervention (already mentioned above). This is what Ricœur does in *The Tasks*

9 Ricœur, *Civilisation universelle et cultures nationales* [1960/1961], in: HV, 322–338/*Universal Civilization and National Cultures*, in: *History and Truth*, 271–284.

of the *Political Educator* (1965),¹⁰ where he identifies three domains of the effectiveness of education, corresponding with three levels of analysis of »civilization«,¹¹ namely industries (*outillages*), institutions and values¹² (242/272). Ricœur understands under »outillages« what he refers to as »a very vast aspect of civilization which goes beyond the level of tools [*outils*], machines, and even of techniques [*la technique*]« (242/272). He attributes similar characteristics to the term as in the 1951 article: accumulation, conservation, innovation and acquisition (in principle) by the whole of humanity. The effect of accumulation ripples out into all forms of knowledge and the sciences, because it is captured in documents, monuments, libraries, etc. Finally, the increasing reach of technological relations have a unifying effect on humanity, and this increasingly results in an awareness among the people of the earth that they belong to a single humanity.

However, as in the earlier discussion, this view on technology remains an abstraction. In reality, people appropriate technology through institutions and are guided by values in doing so (cf. 243–244/274–275). Institutions make humanity plural, and they differentiate historically and geographically limited experiences. These experiences fluctuate between static or stabilizing effects (such as the institutions of the law) and dynamic effects (driven, for instance, by political interaction). The analytical abstraction of technology from institutional life underscores the fact that, as dependent as politics may be on technology, it can never simply be reduced to technology or even to the economy that stimulates technological productivity (cf. 245/276–277¹³). In addition, the real temporality of technology is

10 Ricœur, *Tâches de l'éducateur politique*, in: LI, 241–57/*The Tasks of the Political Educator*, in: *Political and Social Essays*, Athens 1974, 271–293.

11 Here, as elsewhere, Ricœur's use of the term »civilization« is similar to that of Norbert Elias, in the sense that it refers to the most encompassing category of human forms of existence – in this sense, all people are civilized.

12 See in the earlier text, *L'aventure technique et son horizon planétaire* (1958) (discussed below): »Tool, sign and institution imply each other: for the tool, ultimately, proceeds from the power to transform things by speech, and according to a prescribed order. These three notions can be turned around as one wishes, each one referring to the others« – cited from the article's republication in: *Autres Temps. Cahiers d'éthique sociale et politique* 76–77 (2003), 67–78, here: 68 (my translation).

13 This view on the specificity of the political is a core component of Ricœur's political philosophy. See, for example, Ricœur, *Le paradoxe politique* [1957],

not that of progress but of ambiguity. Hence, according to Ricœur, technology experiences no real crisis: new inventions or new technical problems become crises only in so far as they are integrated in the institutional life of people (cf. 246/278).

Of course, this institutional life is in turn informed by values, or rather by common acts of valuation (which is Ricœur's third level of analysis of »civilization«). Values, now firmly defined as forms of practice, represent the most specific detail of people's action in history: Ricœur argues that »it is the industry [*outillage*] which is abstract and value which is concrete« (247/279). Knowing how to use other people's physical power against their will is a technology; abolishing slavery is a historically concrete way of discarding that technology. Hence, this mediation, which started with technology, opens up the whole hermeneutics of symbols and traditions (by which valuation is exercised) on which Ricœur worked in the same period.¹⁴

Finally, Ricœur claims that there is no totalizing vision of the three levels of analysis of civilization. Moreover, he argues that even attempts at such a vision, such as Marxism, which he considers important and helpful, can undermine our understanding by failing to do justice to the irreducibility of each of the levels of analysis (cf. 250/282–283). This implies that there remains a lasting tension between the three levels of analysis, which in turn intensifies the questions about the tasks of political educators. For if in modernity, more than ever before, technical development is subject to planning, this means that the need for collective decision-making about such developments is also increased (cf. 250–251/283–284). Political education in the broadest sense should equip the citizenry to participate responsibly in such collective decision-making. Ricœur is ultimately concerned with the increased democratization of decision-making in the economy, and thereby also with the development and use of technology.¹⁵ Or, to reformulate this negatively, he rejects the idea

in: HV, 294–321/*The Political Paradox*, in: *History and Truth*, 247–270; and *Ethique et politique* [1985], in: *Du texte à l'action. Essais d'herméneutique II*, Paris 1986 [=TA], 433–448/*Ethics and Politics*, in: *From Text to Action. Essays in Hermeneutics II*, London 1991 [=FTA], 325–338.

14 Cf. Wolff, *Lire Ricœur depuis la périphérie*, chapter 5.

15 This echoes Ricœur's earlier insistence on laborers' say in the management of industry and the economy (Ricœur, *Travail et parole* [1953], in: HV, 238–264/

that major decisions can be left to technocrats (or for that matter to philosophers or spiritual leaders). Besides, collective responsibility has to go further, and must assume that there is a tension between two ethics – one dominated by a kind of realism about the means to be used and the uncertainty concerning outcomes, the other dominated by context-independent principles. Understanding responsibility as the prudent arbitration in practice between these two moments is a consistent aspect of Ricœur's view on responsibility (see below, §2) and is derived, amongst others, from Max Weber.¹⁶ For each context the appropriate midway between moralism and cynical realism has to be sought. This is a task of political engagement on the level of institutions and this broadly construed politics depends in turn on a similar engagement on the level of values. Hence reflection on technology and means is integrated into a larger three-tier project on the »struggle for a democratic economy, the proposal of a project both for the whole of humanity and for the single person, and the reinterpretation of the traditional past in the face of the rise of the consumer society« (257/293, translation modified).

To summarize, Ricœur's point is not the theorization of technology itself, but a recognition that it is an indispensable part of affirming the unity of humanity, the irreducibility of politics and the significance of valuation.

1.2 The ambiguity of technology

Let me turn to *True and False Anguish* (1953)¹⁷ to gain a better sense of a key characteristic of technological development that has already been touched on above: its ambiguity (cf. 366/295). As part of a wider exploration of anguish in ambient culture, and ways by which to respond to it, Ricœur examines the ambiguous development of

Work and the Word, in: *History and Truth*, 197–222 – this essay is discussed in §1.3, below), and of the citizenry's limitation of state power (*Le paradoxe politique*, in: HV, 294–321/*The Political Paradox*, in: *History and Truth*, 247–270).

16 Cf. Ricœur, *Ethique et politique*, in: TA, 433–448; and E. Wolff, *Ricœur reading Weber. Power, Ideology, Explanation* (see my other chapter in this volume).

17 Ricœur, *Vraie et fausse angoisse* [1953], in: HV, 357–377/*True and False Anguish*, in: *History and Truth*, 287–304.

all history, largely due to new technologies and corresponding forms of administration, labor and everyday life.¹⁸ On the one hand, an awareness of ambiguity, in the form of an awareness of the harm and risks made possible by modern technology, makes it impossible to be optimistic regarding progress – in fact, it gives rise to a painful awareness of our problematic situation in history (368/297). On the other hand, since ambiguity refers to shifting parameters of ability and constraint, the affirmation of ambiguity amounts to a rejection of determinism or fatality, and hence opens a (limited) door of opportunity, the margin of manoeuvring. Hence neither the promise nor the problems of technology should be attributed to technology itself – instead, Ricœur emphasises the significant role of politics as a source for both legs of this ambiguity (cf. 367, n1/296, n3).

These contradictory possibilities opened up by new technologies are thematized in *The Adventure of Technology and Its Planetary Horizon* (1958),¹⁹ a rare essay exclusively devoted to technology. In the face of nuclear (and other) destructive power, people ask themselves: »What happens to humanity [*qu'advient-il de l'homme*] – and to the meaning of humanity [*l'homme*] – when it acquires such power? To what extent does humanity change itself by changing its power over things?« (67) Instead of siding with military realism or a moralist rejection of modern (military) technology, Ricœur insists on the ambiguity of modern technological development, situating it within the longer human history.

It is only from the industrial revolution that the technical side of a civilization »begins to concern people [*l'homme*] when it becomes a determining factor of their kind of life« (68); no longer a secondary addition to human life, technology became a core aspect of how people define themselves and interpret their destiny. While human beings have always been technological beings, it is only since the industrial revolution that technology has touched on »the ›sacred‹ of the human – its essential, its necessary, its primordial«²⁰ and that there emerges a »technological civilization«. The essay explores

18 This ambiguity is also evoked in the *Conclusion* to P. Ricœur, *Philosophie de la volonté. Tome II: Finitude et Culpabilité II: La symbolique du mal*, Paris 2009, 568/*The Symbolism of Evil*, Boston, 1969, 349.

19 Ricœur, *L'aventure technique et son horizon planétaire* (my translation).

20 »Le ›sacré‹ de l'homme – son essentiel, son nécessaire, son primordial«, in: Ricœur, *L'aventure technique*, 68 (my translation).

three dimensions of this turn: work, consumption and self-understanding.

First, the domain of work has seen numerous changes: generally, technology has brought gradual relief regarding the arduousness and danger of work, the fragmentation of traditional arts into small, repetitive jobs with a negative impact on the experience of work as meaningful and the laborer's self-image. Broader exposure to tasks and more responsibilities for labourers remain pressing objectives. But changing technologies also led to the emergence of new forms of work, ranging from the maintenance of machines to administrative services. Whereas the steadily increasing technological capabilities change people's general view of their place in the universe, their working conditions are determined by very mundane interactions.

Second, Ricœur considers the general improvement in people's living conditions, as far as nutrition and medical treatment, housing and basic education, etc. are concerned. In general, this level of well-being is beyond anything that individual initiative or social planning in previous eras could hope to achieve, except perhaps for a small minority of privileged elites. At the same time, this improvement of living conditions is the flip side of increasing dependency on »machines«, i.e. on industrial productivity, which henceforth reshapes people's means of transportation and housing, infiltrates into household chores, modifies the transmission of culture, etc. (cf. 71). And at this point, the ambiguity of technology has an impact on people as consumers (in the largest sense of the word): widespread accessibility, coupled with a lowering of standards which Ricœur discerns in mass culture. Still, it is quite important to note that Ricœur absolutely rejects the idea of undoing these developments or turning one's back on it – the question for him is to find the new opportunities that are made possible by the mass media.

Third, before the industrial revolution work was often considered unfree in contrast to speech, whether in the service of contemplation or of political praxis. Now, thanks to new means of action, work, and more specifically the struggle with nature, has become part of human nature, a means to pursue freedom, a conquest. This change in human self-perception is linked to a changed view of the ambient world. Human beings have become the source of productivity; nature has been degraded to material and resource.

Although technology has given an unparalleled impetus to globalization and the unification of humanity, this process is far from complete – it will be completed only when (and if ever) there will be one humanity with one politics and even one culture (cf. 74). Even the view, or rather the significance, of the heavens has changed: »... until the threshold of the interplanetary era, Heaven is not touched or manipulated; one does not ›act on it‹, one looks at it. The thin line that separates Theoria and Praxis, Contemplation and Industry, passes between Heaven and Earth. The entry into the interplanetary era is, above all, the displacement of this frontier of Praxis, the encroachment of Praxis on the domain of Heaven, object of Contemplation and symbol of transcendence. Heaven is becoming a domain of action, an object of covetousness, domination, possession« (75).

Nevertheless, something of this change of view was already pre-empted in ancient Judaism when the whole cosmos was desacralized, and human existence was accorded a central place in this cosmos (cf. 76–77). But even here ambiguity is inscribed, because this distant condition for the advancement of technology came at the cost of a desymbolisation of nature and the corresponding loss of orientation given by nature, the seed of a life experienced as meaningless. In short, »the more humans increase their power, the more acute becomes the problem of ends, the more acute also becomes the problem of the salvation of this conquering human being« (77). And thus, once again, one sees how Ricœur's meditation on technology opens up the question of meaning and nihilism which informed his early hermeneutics. But this meditation on the new powers of technology also has a geopolitical dimension: Ricœur denounces the fact that space technology had little to do with service to people and much more with propaganda and the strategies of the two big geopolitical blocs of the world at that time. Indeed, the budget spent on the fantastic projects each time deprives the destitute of the earth of an equal amount of support.

1.3 Technology, work and the politics of a labor society

When, in *The Adventure of Technology ...*, Ricœur invoked »the idea of work, so long despised and so disproportionately praised today« (73), he took up a recurrent theme which he reflected upon

in his early post-World War II practical philosophy and political thought. Since this theme is closely related to that of technology, as can be seen in the previous paragraph, I give a review of *Work and Language* or *Work and the Word* (1953),²¹ a representative text in this respect that responds to a variety of interpretations of what was then called the »civilization of work«.²²

Ricœur fears that the social specificities of work will get lost in an overly general use of the term »work« and that the centrality of work would lead to a neglect of that which cannot be reduced to work itself. Consequently, he attempts to undermine an understanding of work that excludes the spheres of activity of speech and prefers to integrate them into a dialectic of work and word (cf. 238–239/197–198). The conclusion of his article reads as follows: »Hence, every human civilization will be both a civilization of work *and* a civilization of the word« (263/219). The way in which Ricœur demonstrates the incessant to-and-fro between work and different language acts (imperative, doubting, questioning, negating, affirmation, critique, reflection, signifying, invocation) need not detain us here;²³ I would rather like to focus on the context-specific socio-political diagnosis that Ricœur makes on the basis of this demonstration, which is of a more general anthropological nature.

He notes a number of contemporary tendencies in the relations between work and the word. A first tendency is the worker's alienation²⁴ from his/her wage-paying labor. Moreover, the higher income received for occupations based on culture (that is, the institutional

21 Ricœur, *Travail et parole*, in: HV, 238–264/*Work and the Word*, in: *History and Truth*, 197–222. It is difficult to translate »speech« in the article's title. The existing English translation uses »word«, which is acceptable, provided that one understands the term to refer to the whole range of linguistic practices.

22 More specifically, Ricœur responds to economist Henri Bartoli's Lyon 1952 paper *Vers une civilisation du travail*, which »is largely inspired by a Marxist critique of alienation and Father Chenu's theological theses according to which it is through work that humans pursue the divine work of recreating the world. The theme of the civilization of work is therefore launched as a central issue by these progressive Christians of the South-East [of France]«, according to F. Dosse, *Paul Ricœur. Les sens d'une vie (1913–2005)*, Paris 2008, 171.

23 I examined this issue in detail in *Lire Ricœur depuis la périphérie*, chapter 5, §2.

24 Elsewhere Ricœur develops his view on alienation and objectification, cf. P. Ricœur, *Aliénation*, in: *Encyclopaedia Universalis I*, Paris 1968, 660–664 and P. Ricœur, *Objectivation et aliénation dans l'expérience historique*, in: *Archivio di filosofia* 45, no. 2–3 (1975), 27–38.

world of the »word«) adds to the humiliation and under-evaluation of manual labor and consolidates a form of social domination over those whose work is a condition for the possibility of such professions (cf. 253–254/210–211). A second tendency is introduced by the technological form of work: there has been a fragmentation of the arts, but also of office work and science (hence Ricoeur's reluctance to celebrate the self-realizing potential of work, cf. 255–256/212–213) and consequently attempts have been made to compensate for the loss of meaning in work through leisure and consumption. Thus culture (in the broadest sense) and work both experience difficulty in adapting to technological modernity. At the same time, culture contains the potential of resistance or non-adaptation to dehumanization, openness to the future and the quest for a realistic trade-off between the new conditions and the aspiration for more humane alternatives, a quest which is firmly rooted in the task of education (cf. 257/213–214).

Next, in line with Ricoeur's other texts on technology of the same period, he insists on the political participation by which people can and should be allowed to help steer the technical environment in which they work. At the core of such political participation suitable to a civilization of work (and of the word) is a »democracy of work«: this would allow for the participation of workers²⁵ in significant political decision-making. However, he advocates a decentralized model of participation (instead of a socialist centralist model). But the democracy of work would have to expand and have an impact on the management of the working environment and industries – here one notices again Ricoeur's confidence in collective decision-making rather than exclusive reliance on technocrats (as we already saw in *The Adventure of Technology*...). Furthermore, a civilization of work has to be an economy of work, which implies that a fair redistribution of wealth and a policy of full employment should be pursued. Finally, Ricoeur's wide vision of the requirements for a fair labor society also has implications for culture – not ideological management of culture in the form of a naive celebration of industrial work, but a creative critique of labor practices and poetic reflection on solidarity between people (cf. 259–260/215–216).

25 I suppose, in principle, this also includes unemployed and retired people.

Finally, language has a set of roles to play in the context of work: »This service of the word will outlive the ›social‹ alienations of work among wage-earners. For this service responds to the more enduring problems posed by the ›objectification‹ of people in a finite job which is increasingly fragmented and monotonous« (260/216, translation modified). First, the range of linguistic functions can act as a corrective to the division and fragmentation of work. It can express frustration, open this division to a plurality of views, give access to a total view on an industry's activity and even serve as distraction. Articulation is the first step towards political mobilization. Second, with some hesitation, Ricœur thinks that forms of speech can serve as a compensation for difficult experiences at work through leisure. Third, all innovation in technology, and thus the invention of new forms of work, passes through the practice of theory, specifically in the form of the sciences. Finally, Ricœur counts on the creative function of language to contribute to the discovery and invention of meaning, which will always be needed in all forms of work.

Hence, one gets an impression of the interrelation of two major families of human ability – work and the word, neither of which suffices on its own as a form of the pursuit of human well-being.

1.4 Urbanisation

Finally, two further traits of the modern world are dealt with, in combination, in an aptly titled article *Urbanisation and Secularization*.²⁶ I consider it here only in as far as it completes Ricœur's view on modern technology.²⁷

The four main traits of city life that drew Ricœur's attention can be understood only if one considers the city as a technical

26 P. Ricœur, *Urbanisation et sécularisation* [1967], republished in: *Autres Temps. Cahiers d'éthique sociale et politique* 76–7 (2003), 113–126/*Urbanisation and secularisation*, in: *Political and Social Essays*, Athens 1974, 176–197. See also F. Riva, *L'angoscia dell'abitare. Ricœur, Lyotard e la città postmoderna*, in: *Leggere la città. Quattro testi di Paul Ricœur*, Roma 2013, 7–49.

27 I will not discuss the theological implications discerned by Ricœur, nor the way he borrows (extensively) from H. Cox, *The Secular City: Secularization and Urbanization in Theological Perspective* [1965], Princeton 2013, chapter 2.

construct. First, a city has to be understood as a colossal instrument for connecting people and enabling communication between them – not necessarily only in the form of interpersonal contact, but also in the dissemination of information. The city multiplies the number of such links between people and augments the possibilities of exchange over longer distances and with greater frequency. Consequently, many exchanges are more abstract or anonymous, requiring a renegotiation of the public-private relation. Also, the sheer mass of information implies intensification of the decisions to be made.

Second, the city is a place of multiple and accelerated forms of mobility²⁸ and »internal migration«, which can be seen in the act of commuting. The movement between a person's home and workplace corresponds with a more marked differentiation of people's social roles and, in turn, with the impact of psychological stress or opportunities. This requires tolerance and adaptability. But these points serve as generalizations, applying in different ways to different people, as can be seen by comparing local inhabitants' vacation behaviour with migrants' travel behaviour.

Third, the city is a place of concentrated technology and organization, a technopolis, as Cox called it. It concentrates health systems, bureaucracies, commerce, etc.²⁹

Fourth, the city is also an image to people of what a »city« really is. Such images range from the religious construct of the »City of God« to the political »polis«. In recent history, the changing material city has changed people's view of themselves as urbanites (somewhat like what we saw in *The Adventure of Technology...*: the changing view of the cosmos changes the view that people have of themselves as inhabitants of this cosmos). Now the city becomes an image of modernity, of energy and initiative.

28 See more recently H. Rosa, *Beschleunigung. Die Veränderung der Zeitstrukturen in der Moderne*, Frankfurt/M. 2005/*Social Acceleration: A New Theory of Modernity*, New York 2013.

29 This point is taken up, albeit only briefly, as late as *Le Juste*, Paris 1995, 36 [=L]/*The Just*, Chicago 2000, 6–7; and *Parcours de la reconnaissance. Trois Études*, Paris 2004, 318/*The Course of Recognition*, Cambridge/MA 2005, 204; both times with reference to J.-M. Ferry's *Les puissances de l'expérience. Essai sur l'identité contemporaine*, Paris 1991.

Whereas the city opens many opportunities and freedoms, it is also a space of specific suffering: »Urban planning is the response to urban pathology. Urban planning means: the city cannot continue to grow according to its natural movement; this movement must be controlled, regulated and oriented. Not only is there a pathology of the city, but this pathology is the monstrous expression of the pathology of the global society; it acts as an abscess of fixation and as a drain for all diffuse pathology« (116). Each of the four points of urbanization corresponds to a number of urban pathologies. Anonymity, traffic congestion and information saturation all figure among the pathologies corresponding to the first point above. Uprootedness, a multiplication of conflict and the degeneration of inner cities correspond to the feature of mobility. Between under-administration and over-bureaucratisation, the concentration or organization is also subject to pathologies. Even the view of the city can succumb to pathologies: directedness at a vague, distant future, which may lead it to be experienced as a locality dominated by a senseless technological logic. Thus the city too reflects that essential characteristic of all modern technological developments: their two-sidedness, their ambiguity.

Similar to how Ricœur follows Cox in his presentation of the modern city, so does he consult the work of other authors in different discussion in his work. One might mention Max Weber on the nexus between rule and technology,³⁰ Jürgen Habermas on technology as ideology,³¹ or perhaps Charles Taylor on the role of technology in the malaise of modernity.³²

2. Ethics with and among changing technological means

In Ricœur's work, philosophical reflection on the ethics of technology is concentrated in his later texts and is focused mostly on dilemmas faced in the bio-medical professions. Yet the link between

30 P. Ricœur, *Lectures on Ideology and Utopia*, New York, London 1986 [=LIU], lecture 12.

31 LIU, chapter 13.

32 P. Ricœur, *La mémoire, l'histoire, l'oubli*, Paris 2000, 410–411 [=MHO]/*Memory, History, Forgetting*, Chicago 2004, 312–313.

ethics and technology in Ricœur's work is quite old, as I will now first demonstrate.

2.1 Responsibility requires efficacy

Initially, this link emerges in Ricœur's political thought in relation to the question of the *efficacy* of one's ethical stance. An early example is Ricœur's reflection on Gandhi's anti-colonial politics in the 1947 article *Non-violent Man and his Presence in History*. Ricœur attributes the efficacy of Gandhi's movement to the fact that it is a good combination of a »technology [*technique*]« and a »spirituality«,³³ in other words, of operative strategy and a legitimate normative stance. A second example is found a decade later in the first formulation Ricœur gave of the political paradox. People aspire to political self-realization but can ultimately only achieve this through a state. But the state, understood as the ultimate instrument of power (following Weber), features the potential to turn against people, instead of realizing their will. Whence the need »to devise institutional *techniques* [*techniques*] especially designed to render possible the exercise of power and render its abuse impossible.«³⁴ Thus, Ricœur refers to technology in many of his political essays. On a more profound level, the question of technologies of action emerges from reflection on ethico-political efficacy.

Furthermore, these two briefly presented cases³⁵ contain, in outline, the structure of Ricœur's later understanding of responsibility as a practical choice between two opposing ethical claims. This is best seen in the way Ricœur explains responsibility in the ethical chapters of *Oneself as Another*. Any responsible or practically wise action is here presented as the outcome of a difficult, *prudent* trade-off between two equally valid, but contradictory claims: the *ethical* claim of pursuing the good life with and for others in just institutions, and the *moral* claim which seeks to filter out all non-universalizable principles of action. Hence Ricœur's view of responsibility

33 HV, 273/*History and Truth*, 230.

34 HV, 311, similarly 314–315/*History and Truth*, 261–262, similarly 264–265.

35 I have studied them in more detail elsewhere – see Wolff, *Between Daily Routine and Violent Protest. Interpreting the Technicity of Action*, Berlin 2021, 9–17.

is also constructed upon the tension between conflicting points of view that may be held simultaneously while considering them *theoretically* but call for final arbitration *in practice*.³⁶

2.2 New technological conditions, new ethics?

From the perspective of this broad understanding of ethics, changes in the technological environment do not alter the essential structure of responsibility but rather change the specific ways in which people may want to strive for the good life, the series of new practical possibilities which they may want to prohibit from the point of view of a moral principle, and the kinds of trade-off that may be relevant in practice. All of these changes are represented in the Preface Ricœur wrote for Frédéric Lenoir's volume *Le temps de la responsabilité*.³⁷ As one might expect, technological changes are seen as inducing a shift in what it means for people to act. These changes are played out in six domains: the life sciences, the environment, economics, industry and development, the media and communication, and politics – for all of which Ricœur catalogues salient aspects and concomitant dilemmas as they appear in this book.³⁸ Moreover, in this book Ricœur observes that the catalogued dilemmas can be approached either through an appeal to stable, commonly held convictions from the normative tradition (which have to be applied to new problems), or through new forms of ethics, of which responsibility would be an example (cf. 282).

Since Ricœur sometimes uses the term »responsibility« to refer to his own ethics,³⁹ this concept attracts more of his attention. One author whom Ricœur engages with in this Preface, but also in a

36 For a discussion of the conflictual constitution of responsibility in Ricœur, see Wolff, *Between Daily Routine and Violent Protest*, chapter 8, §1. See also B. C. Tasso, *The Vicissitudes of Justice in the Ethical Triad of Desire, Norm and Prudential Judgment, According to Paul Ricœur*, in: *The Ambiguity of Justice: New Perspectives on Paul Ricœur's Approach to Justice*, Leiden 2020, 13–34.

37 Reprinted as Ricœur, *Postface au Temps de la responsabilité* [1991], in: LI, 271–294.

38 The discussion derives from Lenoir's systematization and spans LI, 272–278.

39 Consider, for instance, the fact that the »little ethics« of P. Ricœur, *Soi-même comme un autre*, Paris 1990 [=Sca]/*Oneself as Another*, Chicago 1992, studies

number of other texts,⁴⁰ is Hans Jonas, in particular as the author of *The Imperative of Responsibility: In Search of an Ethics for the Technological Age*.⁴¹ Jonas makes a strong case for the very structure of ethics' being changed by contemporary technology. According to him, new technology threatens not only individuals or large numbers of people, but humanity itself. From this threatening state of affairs emerges the urgent need to take responsibility for this new fragility and to be alert to the probability of failure (Jonas's »heuristics of fear«⁴²). However, Ricœur argues that Jonas's view of ethics implies a temporal extension of (prospective) responsibility even for the furthest future consequences of one's actions, an extension which is not matched by the enduring limits of our human ability to attribute consequences to agents.⁴³ In other words, the technical augmentation of the ability to act leaves the possibility of ascription of real accountability far behind. In Ricœur's reading, Jonas inadvertently shows us a nasty dilemma: either one refrains from considering the side effects of action, which would make ethical conduct hypocritical or dishonest, or one places the whole weight of all the consequences of actions on the agent's shoulders, which would make action impossible.⁴⁴ There is no solution to this dilemma;⁴⁵ it can only be confronted in practice with an attitude of prudence (in the sense of phronetic compromise-seeking in practice, as explained above).

7–9, is offered as a response to the question »who is the subject of imputation?«, but that this question is sometimes reformulated as »who is responsible?«.

40 Ricœur's essay *Éthique et philosophie de la biologie chez Hans Jonas* [1991], in: *Lectures 2. La contrée des philosophes*, Paris 1992/1999 [=L2], 304–319 names, but does not examine, the role played by modern technology in Jonas's philosophy of responsibility.

41 Cf. H. Jonas, *The Imperative of Responsibility: In Search of an Ethics for the Technological Age* [1979], Chicago 1984.

42 Cf. LJ, 283–284 and L2, 304–305.

43 Cf. LJ, 63–64/*The Just*, 29–30.

44 Cf. LJ, 68/*The Just*, 33.

45 Instead, Ricœur maintains that responsibility itself is inscribed in a conflictual relation with conviction (borrowing Max Weber's distinction – cf. Wolff, *Ricœur reading Weber* [see my other chapter in this volume]) in an age-old »tragedy of action« from Sophocles' *Antigone*, through Hegel to *Oneself as Another* (cf. L1, 287 and Sca, 281–290/*Oneself as Another*, 241–249) – at all levels of action: individual, or by collectives, states and global interactions.

Prudent decision-making in practice is, as I have already stated, the culminating point of Ricœur's later ethics. In *Oneself as Another*, Ricœur clarifies his understanding of responsibility with reference to a set of exemplary ethical dilemmas in bio-medical ethics (cf. 313–318/269–273). The increasing expansion of technological capabilities in the domain of biomedicine makes it an ideal object for reflecting on the nature of ethical problems. Ricœur's aim is, however, rather to suggest a general approach to such dilemmas than to make a contribution to specific points of debate.

Let us summarize the main points of this approach. First, one should have a sound understanding of the dilemma *as* a dilemma (that is, one needs to admit that there is no solution that can make its problematic character disappear). One's most intimate convictions and professional ethics may inform one's interpretation of these dilemmas. Second, a good technical and scientific grasp of the problem at hand is required. The specifics in each case depend on the problem itself – end of life, pre-natal life, etc. In both cases, the contradictions (between different ethical claims and between different expert opinions) are an integral part of ethical decision-making. Finally, it is more prudent to come to a collective decision than to rely on the judgement of a single individual.⁴⁶

This interest in bio-medical issues is taken up again in the »exercises« in practical philosophy, indeed, in practical wisdom in *Reflections on the Just*.⁴⁷ The three levels of ethical judgement – prudence, deontology and ethics, as I have explained above – are reaffirmed (cf. 227–243/198–212). Underlying the whole endeavour is Ricœur's understanding of medical practice as a *techné* (in the Aristotelian sense), in other words, it may be informed by science, but its decision-making cannot be reduced to law-based principles (cf. 228/199). These essays take the dilemmas created by new technology as background knowledge, but Ricœur's own focus is clearly on the ethical dimension of the problems (which would take us too far from our theme of technology).

46 Sca, 318/*Oneself as Another*, 273; and P. Ricœur, *Le juste* 2, Paris 2001, 252–253 [=LJ2]/*Reflections on the just*, Chicago 2007, 219–220.

47 Ricœur, LJ2, 40–46, 215–256 and 289–297/*Reflections on the just*, 31–36, 187–197 and 249–256, but also Ricœur, *Préface à Médecins tortionnaires, Médecins résistants*, in: LI, 399–404.

A last point to observe is that the general way in which Ricœur approaches dilemmas in bio-medical ethics could be redeployed in any other field of human action, in any technological context.

3. Capabilities

In the first two sections of this exposition, I have mostly dealt with technology in the way it is most often used in everyday parlance, namely as the evolving set of artefacts and procedures. A third point of this exploration of technology in Ricœur needs to take us to a much older and wider use of the idea of »technology«, namely as an aspect of human abilities to act. As soon as one speaks about stable abilities, or »capabilities« in the sense of Ricœur's later work, one is in the domain of the technical aspect of action. This train of thought is present throughout Ricœur's work, from the phenomenology of the will to the hermeneutics of the »capable human«. I highlight only a few important moments from this development which stretches over decades.

Let us go to the heart of Ricœur's understanding of action, as he elaborates it in the first volume of his *Philosophy of the Will*.⁴⁸ Every action has to be understood by means of a complement (the *pragma*) (263–264/209–210). Different *pragmata* can be identified: to be distinguished, to be used, to be manipulated, each time directing the inceptive action to that which is to be done. In fact, there is a plethora of such forms of actional directedness:

But there are undoubtedly many other articulations, if we wanted to take into account the multitude of possible technical changes, considered from the point of view of the *object* produced, the *end* to be attained (spatial, social, etc.), of chief *means* used, of *resistance* to be overcome, of *material* to be used, and finally of the style of *bodily motion* (we shall return presently to this last point). Our civilizational milieu is particularly complex: it is peopled with the products of human action. Fields, poles, tables, books, etc., are at the same time works (*œuvres*) and utensils involved in new actions. Since the mi-

48 P. Ricœur, *Philosophie de la volonté. Tome I: Le volontaire et l'involontaire* [1950], Paris 2009 [=VI]/*Freedom and Nature: The Voluntary and the Involuntary* [1966], Evanston 1979.

lieu of human behavior has itself been produced by behavior, human beings react to their own works. This eminently technical character of the human milieu and of human action depends, as we know, on the fact that humans *work* with tools to produce the »artificial« objects of their civilizational needs and even of their vital needs. This is why humans' action is typically »artificial«: it is *techné*, mother of arts and techniques (266/211–212, translation modified).

This means that the whole of human action directedness at fields of practice is shaped by the technical environment and the corresponding technical formation of the agent. The world as a world of action, and the agent itself, are inseparable from the technical milieu.

Once one has granted this basic point, a number of consequences can be derived from it. First, the body of the agent is a shaped »organ« through which action is realized. Through the body, the use of tools and instruments is mediated; indeed, the body and the tool may even become a single practical unit. But Ricœur insists rather on the ambiguity in the chain of action: will-organ-tool-work – an ambiguity which consists in the fact that the chain lends itself to a phenomenology of the will (seen from the start) or a study in physics (seen from the end) (cf. 268/213).

However, in order to act, the body must *act* to maintain its ability to *act* – it must be fed. Feeding inserts the human organism into a natural environment of water, carbon and nitrogen – a milieu whence technological processes also draw their energy (cf. 119/87). The same body also has inborn instincts to defend or attack but, since these are not reflexes in the strict sense in that they can be improved (as is evidenced, for instance, in sport) (cf. 299/237–238), they lend themselves to increasing »artificialization« (in the terms cited above), which is part of the wider acquisition of bodily techniques (*techniques du corps*). Thus emerge the automatisms of action (cf. 380/302), which are clearly instantiated in some actions performed by a good sportsperson, artisan or worker. Rather than a relaxation of the hold of that the will has over action, Ricœur sees in the exercise of automatisms an achievement of the will, which, according to him, never ceases to survey such actions. A derivative of automatisms is machine-like actions which, formerly acquired and mastered, are somewhat of a misfit with a new context of action (cf. 383/304). What has been said thus far holds for bodily actions but also for thought. Thought technologies cover knowledge learned by

heart, forms of grammar and syntax, association of ideas, etc. (cf. 368/292).

Ricœur deepened this understanding of the technical dimension of action when he passed from a pure phenomenology of the will to an exploration of human fallibility in the second volume of his *Philosophy of the Will* (1960)⁴⁹. Nothing is as revealing of the conflictual nature of human fallibility than feelings («sentiment», *thumos*, 153/106). Three kinds of feeling involved in inter-human relations have to be explored to clarify this point: the desire for possession, for domination and for worth (cf. 158/111). Each of these leads to a positive quest, but risks being distorted into an obstinate, perverted pursuit. Each of these quests and pursuits is in turn realized in a different part of social life: economics, politics and culture, by which relations between people are mediated by object systems (160–161/113). Strictly speaking, possession, domination and worth all apply to human technical ability and to the human relation to technology. However, I single out domination for closer investigation, since Ricœur touches directly on technology here (cf. 164–169/116–120).

The quest for domination is rooted in the human desire to exercise power, which is ingrained in action as such. Working is a first way by which people exercise their power over things, and labor relations is a form of the exercise of power over other human beings. This simple observation already opens up a wide view on technological realities: from the energy of human labor and the natural resources on and with which people work, to the organization of labor and the pursuit of efficiency. The latter point also indicates the intersection of the economic sphere with that of labor, in the form of management.⁵⁰ Labor relations are maintainable as power relations, because they are instituted, which makes them dependent on another kind of power relation, namely that of politics (cf. 166/118). Ultimately, political power cannot be reduced to the availability of the powerful instruments of the state, but it does require the use of the

49 P. Ricœur, *Philosophie de la volonté. Tome II: Finitude et culpabilité* 1. *L'homme faillible* [1960], Paris 2009/*Fallible Man*, New York 1986.

50 I have already touched on this point above in relation to Ricœur's *Travail et parole/Work and the Word*.

mechanisms of the state.⁵¹ What needs to be highlighted here is how Ricœur integrates, in principle, the whole breadth of technological artefacts and systems in an encompassing view of human action, from the most intimate affects through mediated interaction to the largest political scale.

As one may expect, technology recedes as a theme in Ricœur's hermeneutic writings from the 1960s onward. However, it would be an error to think that it is absent from that point onwards. One way to highlight its presence would be to insist on the Diltheyan aspect of Ricœur's hermeneutics, with its emphasis on the (material) object as the starting point of hermeneutic work. Another would be to recall that Ricœur understood his hermeneutics as a generalization of the age-old capability of interpretation, also called *techné hermeneutiké*.⁵² Once we realize this, it is worthwhile to point out numerous variations of »technique« spread throughout Ricœur's work. There is a rhetorical technique,⁵³ just as there is a narrative technique.⁵⁴ Somewhat different is the psychoanalytic technique⁵⁵ and the *ars memoriae*.⁵⁶ In the case of narration, its technical counterpart is the narrative; for writing in general, there is the text (which is utterances transmitted in autonomous form)⁵⁷; and the work of historians is supported by archives. In all three of these cases, the technologies which constitute the objects are indispensable for understanding

51 Just as Ricœur argued in: *The Political Paradox* – see §2.1, above.

52 P. Ricœur, *Le conflit des interprétations. Essais d'herméneutique I* [1969], Paris 2013, 24 [=CI]/*Technique and Non-Technique in Interpretation*, in: *The Conflict of Interpretations. Essays in Hermeneutics*, Evanston, 1974, 4.

53 P. Ricœur, *La métaphore vive*, Paris 1975, 14–17, 41–44/*The Rule of Metaphor: Multi-disciplinary Studies of the Creation of Meaning in Language*, London 1994, 9–12, 31–33; and P. Ricœur, *Temps et récit III. Le temps raconté*, Paris 1985, 289–290/*Time and Narrative. Vol. 3*, Chicago, London 1988, 160–161.

54 Throughout P. Ricœur, *Temps et récit II. La configuration du temps dans le récit de fiction*, Paris 1984/*Time and Narrative. Vol. 2*, Chicago, London 1988.

55 See already LV, 498/*Freedom and Nature*, 398. This theme is then taken up again in *Technique et non-technique dans l'interprétation* [1964], in: CI, 242–270/*Technique and Non-Technique in Interpretation*, in: *The Conflict of Interpretations*, 177–195; and in: *De l'interprétation. Essai sur Freud*, Paris 1965, 178–180, 410–416 and 426–439/*Freud and Philosophy. An Essay on Interpretation*, New Haven 1970, 166–168, 390–396 and 406–418 (see especially the definition 427–428/407).

56 MHO, 73–82/*Memory, History, Forgetting*, 61–68.

57 Cf. Wolff, *Between Daily Routine and Violent Protest*, chapter 1.

Ricœur's argument (however, one notes with frustration that in general he does not examine these objects as technological).

This does not mean that one cannot develop this theme – Ricœur himself gives an example when in »Architecture and Narrativity«⁵⁸ he takes up central tenets of his *Time and Narrative* 3 and argues for a strong parallel between architecture and narration. Construction does for space what narration does for time (cf. 20). It allows human beings, who, in whichever way, already inhabit the world, to reconfigure their relation to the environment (or come to a new grasp of their situatedness in the world) in interaction with constructed initiatives of special arrangement. Here, »construction« is evidently to be understood in the widest sense, relating to all formal and informal dimensions of urbanization, while also including destruction. Each reconfiguration has a range of social, economic and political dimensions.

In *Oneself as Another* (1990), technology does not feature as a major theme. However, it is worthwhile to consider the ways in which this hermeneutics of human capabilities – and hence most of Ricœur's philosophy through the 1990s up to *The Course of Recognition* (2004) – constantly presupposes the technical constitution of action and the exercise of action in a technical milieu. Thus, each of the four key categories of action have a technical dimension. Speaking involves all communication technologies. Doing involves all the mediations of action by technical artefacts and the steering of sources of energy. Narrating is integrally linked with one's grasp of the unity of one's life which, in turn, includes practices and professions which are unthinkable without their relevant instruments and know-how. Finally, normative imputation (or responsibility) applies to all action, but one may consider the fact that all action is mediated by institutions, which in turn depend on technical support. The hermeneutics of human capabilities could be understood as the

58 P. Ricœur, *Architecture et narrativité*, in: *Études Ricœuriennes* 7, no. 2 (2016), 20–30/*Architecture and Narrativity*, in: *Ricœur Studies* 7, no. 2 (2016), 31–42. Cf. J. Porée, *Le philosophe, l'architecte et la cite*, in: *L'existence vive. Douze études sur la philosophie de Paul Ricœur*, Strasbourg 2017, 147–163; and F. Riva, *L'angoscia dell'abitare. Ricœur, Lyotard e la città postmoderna*, in: *Leggere la città. Quattro Testi di Paul Ricœur*, ed. F. Riva, Roma 2018, 5–72.

groundwork for further reflection on human-technology relations, but Ricœur does not elaborate on this further.⁵⁹

If the technical constitution of human capabilities and action is basic to both Ricœur's explicit discussions of technology and to his understanding of responsibility in the face of technologically generated dilemmas, one might well ask why I did not start the discussion with this point. Logically, this would have been a sound approach, but doing so may have created the impression of a greater coherence and systematicity in the theme of technology than what Ricœur's work actually features.

4. Reception in philosophy and ethics of technology

I have now given an overview of the theme of technology in Ricœur's work and have pointed out areas which call for some development from the point of view of a philosophy of technology or of a cultural philosophy of human-technology relations. This has never been a central theme in Ricœur scholarship, but there has been a steady increase of interest in the potential of Ricœur's work for thinking through technology-related problems. Part of this literature consists of commentaries on and explicit elaborations of Ricœur's own views on technology. Other authors use other parts of his work – often his hermeneutics and ethics – as a starting point and stimulus for further research on questions regarding technology. I would like to give a short overview of this expanding body of research to conclude my discussion. While I cannot claim to present an exhaustive survey of this body of texts, what follows should prove representative for the field.

The first explorations of Ricœur and technology approached this relation from a very broad perspective. David Kaplan⁶⁰ offers an overview of technology in Ricœur's oeuvre which he embeds in his own reconstruction of Ricœur's »critical theory« to offer a view

59 This claim is developed in Wolff, *Between Daily Routine and Violent Protest*, chapters 3 and 4.

60 D. Kaplan, *Ricœur's Critical Theory*, New York 2003, 164–173; Paul Ricœur and the Philosophy of Technology, in: *Journal of French Philosophy* 16, no. 1/2 (2006), 42–56.

on the contributions that Ricœur's work and the philosophy of technology can have for each other. From a more interdisciplinary perspective, Ernst Wolff⁶¹ examines the possibility of using Ricœur's textual and narrative hermeneutics to clarify the relation between human agents and technology in general. Quite different is David Lewin's⁶² attempt to demonstrate that Ricœur contributes to the question of the nexus of technology and being (in the sense of Heidegger's later philosophy).

More recent studies tend to focus more on specific areas of technology or specific questions. They do so by opening up the range of uses made of, and deepening the engagement with, Ricœur's work in technology-related domains.

A new line of enquiry is the application of Ricœur's hermeneutics in the domain of information technology. Jos de Mul⁶³ has already argued for an extension of Ricœur's understanding of narrative identity in the face of the massive social changes in the use of new media. A great impetus to this new enquiry has subsequently been given by Alberto Romele.⁶⁴ He explores the interpretive value of Ricœur's narrative hermeneutics for processes of identity formation in the use of social networking sites and investigates the implications of the use of such media for a Ricœurian narrative hermeneutics of identity. Taking Ricœur's interest in traces and externalizations

61 E. Wolff, *Transmettre et interpréter*, in: *Médium* 6 (2006), 30–47; expanded in *Mediologie en hermeneutiek*, in: *Tydskrif vir Geesteswetenskappe* 47, no. 1 (2007), 81–94; *Habitus – Means – Worldliness. Technics and the Formation of ›Civilisations‹*, in: O. Kozlarek, J. Rüsen & E. Wolff (eds.), *Shaping a Humane World – Civilizations, Axial Times, Modernities, Humanisms*, Bielefeld 2012, 25–53; *Compétences et moyens de l'homme capable à la lumière de l'incapacité*, in: *Études Ricœuriennes/Ricœur Studies* 4, no. 2 (2013), 50–63.

62 D. Lewin, *Ricœur and the Capability of Modern Technology*, in: T. S. Mei, D. Lewin (eds.), *From Ricœur to Action. The Socio-political Significance of Ricœur's Thinking*, London, New York 2012, 54–71.

63 J. d. Mul, *Von der narrativen zur hypermedialen Identität. Dilthey und Ricœur gelesen im hypermedialen Zeitalter*, in: F. Rodi, G. Kühne-Bertram (eds.), *Dilthey und die hermeneutische Wende in der Philosophie. Wirkungsgeschichtliche Aspekte seines Werkes*, Göttingen 2008, 313–331.

64 A. Romele, *Narrative Identity and Social Networking Sites*, in: *Études Ricœuriennes/Ricœur Studies* 4, no. 2 (2013), 108–122; *Digital Traceability and the Right to be Forgotten: Ricœurian Perspectives*, in: *Tropos. Journal of Hermeneutics and Philosophical Criticism* 8, no. 2 (2015), 105–118; and *Imaginative Machines*, in: *Techné: Research in Philosophy and Technology* 22, no. 1 (2018), 98–125.

of meaning in general further, Romele also examines the ethical and juridical implications of digital traceability and the right to be forgotten.⁶⁵ Elsewhere, Romele argues that emerging media technologies are characterized by new forms of imagination, drawing on Ricœur's understanding of productive imagination through narrative mimesis.⁶⁶ Mark Coeckelberg and Wessel Reijers⁶⁷ argue for the »narrative capacity« of technology in general, and specifically how technology mediates between language and people's self-understanding. Ricœur's narrative hermeneutics plays a key role in this study. From the same philosophical background the same authors also advanced an interpretation of block chain technologies, in particular of cryptocurrencies. Johan Fornäs⁶⁸ also draws insights from *Time and Narrative* but develops insights on »third-time« technologies which mediate the lived experience of time and objective time in historically and culturally specific ways. Finally, against the backdrop of the ethical problems raised by our new digital-technological environment and which potentially permeate all spheres of life, Fernando Nascimento⁶⁹ argues for a strategy that combines two major aspects of Ricœur's thought. Narrative can serve to gain a (provisional) grasp on such developments. This can in turn assist the processes of deliberation in view of critical, phronetic responses to them. In an entirely different register, Nascimento has taken the leading role in constructing the »Digital Ricœur« platform, a power-

65 See also A. Romele and M. Severo's study as applied to the reception of Ricœur: *From Philosopher to Network. Using Digital Traces for Understanding Paul Ricœur's Legacy*, in: *Azimuth* 4, no. 7 (2016), 113–128.

66 A. Romele, *From Registration to Emagination*, in: *Towards a Philosophy of Digital Media*, London 2018, 257–273. Since Romele's essay publications were followed by a recent monograph (see below), I will not cite all of them here.

67 M. Coeckelberg, W. Reijers, *Narrative Technologies. A Philosophical Investigation of the Narrative Capacities of Technologies by Using Ricœur's Narrative Theory*, in: *Human Studies* 39, no. 3 (2016), 325–46; W. Reijers, M. Coeckelbergh, *The Blockchain as a Narrative Technology: Investigating the Social Ontology and Normative Configurations of Cryptocurrency*, in: *Philosophy & Technology* 31, no. 1 (2016), 103–30.

68 J. Fornäs, *The Mediatization of Third-Time Tools: Culturalizing and Historicizing Temporality*, in: *International Journal of Communication* 10 (2016), 5213–5232.

69 F. Nascimento, *Technologies, Narratives, and Practical Wisdom*, in: *Études Ricœuriennes/Ricœur Studies* 10, no. 2 (2019), 21–35.

ful research tool; working on this project has opened a secondary reflection on Ricoeur's published corpus, as Nascimento and Taylor have argued.⁷⁰

Again, drawing on Ricoeur's philosophy or narrative, a couple of authors have worked on the heuristics and simulation of the possible future impact of technological inventions and interventions. This is the case for Murray and Wolff's study⁷¹ on the introduction of mobile communication for managed health care in low-income sections of society. Bruno Gransche⁷² gives a more developed theoretical view on narrative hermeneutics of future technological changes, and explores a specific application in computer simulations.

A whole series of studies follow directly from Ricoeur's own writings on bio-medical ethics.⁷³ Some examples are the studies by Byung-Hye Kong, Jérôme Porée, Gaëlle Fiasse, Theo Hetteema, Eoin Carney, Corine Mouton Dorey and Philippe Svandra. While they demonstrate the value of Ricoeur's understanding of ethics and

70 G. H. Taylor and Fernando Nascimento, *Digital Ricoeur*, in: *Études Ricœuriniennes/Ricoeur Studies* 7, no. 2 (2016), 124–145.

71 M. Murray and E. Wolff, *A Hermeneutic Framework for Responsible Technical Interventions in Low-income Households – Mobile Phones for Improved Managed Health Care as Test Case*, in: *Journal for Transdisciplinary Research in Southern Africa* 11, no. 3 (2015), 171–185.

72 B. Gransche, *Narrative Hermeneutik*, in: *Vorausschauendes Denken. Philosophie und Zukunftsforschung jenseits von Statistik und Kalkül*, Bielefeld 2015, 241–311; *The Art of Staging Simulations: Mise-en-scène, Social Impact, and Simulation Literacy*, in: M. Resch, et al. (eds.), *The Science and Art of Simulation I*, Cham 2017, 33–50.

73 B. Kong, *A Philosophical Inquiry into Caring in Nursing Based on Ricoeur's Narrative Ethics*, in: *Taehan Kanho Hakhoe Chi* 35, no. 7 (2005), 1333–1342 (my reference is based on the English abstract); J. Porée, *Expliquer, comprendre et vivre la maladie*, in: *Revue d'Histoire et de Philosophie Religieuses* 92, no. 1 (2012), 5–20; G. Fiasse, *Ricoeur's Medical Ethics: The Encounter between the Physician and the Patient*, in: C. Cowley (ed.), *Reconceiving Medical Ethics*, New York 2013, 30–42; T. Hetteema, *Autonomy and Its Vulnerability: Ricoeur's View on Justice as a Contribution to Care Ethics*, in: *Medical Health Care Philosophy* 17, no. 4 (2014), 493–498; E. Carney, *Depending on Practice: Paul Ricoeur and the Ethics of Care*, in: *Les ateliers de l'éthique/The Ethics Forum* 10, no. 3 (2015), 29–48; C. M. Dorey, *Rethinking the Ethical Approach to Health Information Management Through Narration: Pertinence of Ricoeur's ›Little Ethics‹*, in: *Medicine, Healthcare & Philosophy* 19, no. 4 (2016), 531–543; and P. Svandra, *Rethinking Ethics with Paul Ricoeur. Nursing: Between Responsibility, Care and Justice*, in: *Recherche en soins infirmiers* 124 (2016), 19–27.

responsibility in a sensitive and changing technological milieu, these essays rarely deal with the technological dimension of the ethical dilemma and therefore mainly contribute more directly to Ricœur's ethics.

A more surprising development is an ethics and hermeneutics of the environment by means of Ricœurian resources. By looking at technologically advanced ways to destroy the natural environment, these studies are directly or indirectly relevant to the field of technology studies. The texts of David Utsler, Nathan Bell, Jean-Philippe Pierron and Thiago Souza Silva, Nádia Sampaio and Monique de Jesus Bezerra Dos Santos exemplify this direction in research.⁷⁴

Focusing more directly on the human-made and built environment, in particular city life and dwelling there are several studies that explore and elaborate on Ricœur's texts on the city, such as the studies by Franco Riva, Anna Borisenkova, Jérôme Porée and Jean-Philippe Pierron.⁷⁵ Another side of this line of exploration can be found in the studies of Breviglieri and Wolff, who engage with Ricœur's understanding of capabilities in relation to dwelling.⁷⁶

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- 74 D. Utsler, *Paul Ricœur's Hermeneutics as a Model for Environmental Philosophy*, in: *Philosophy Today* 53, no. 2 (2009), 173–178; N. M. Bell, *Environmental Hermeneutics with and for Others. Ricœur's Ethics and the Ecological Self*, in: F. Clingerman, et al. (eds.), *Interpreting Nature: The Emerging Field of Environmental Hermeneutics*, New York 2014, 141–159; J.-P. Pierron, *Ecologie et herméneutique. Le franciscanisme de Paul Ricœur*, in: *Ricœur: Philosophe à son école*, Paris 2016, 187–208; and T. S. Silva, N. Sampaio, & M. d. J. B. Dos Santos, *Environmental Ethics and Theory of Responsibility in Paul Ricœur and Hans Jonas: An Approach on Sustainability in Postmodernity*, in: *International Journal of Development Research* 9, no. 12 (2019), 32396–32400.
- 75 F. Riva, *L'angoscia dell'abitare*, 7–49; A. Borisenkova, *Reading the City: From the Inhabitant to the Flâneur*, in: R. Savage (ed.), *Poetics, Praxis, and Critique: Paul Ricœur in the Age of Hermeneutical Reason*, Lanham 2015, 86–98; J.-P. Pierron, *Entre habiter et politiser: urbaniser*, in: *Ricœur: Philosophe à son école*, Paris 2016, 171–186; and J. Porée, *Paul Ricœur: Le philosophe, l'architecte et la cité*, in: *Revue juridique de l'Ouest* 21, no. 3 (2008), 301–320.
- 76 M. Breviglieri, *L'espace habité que réclame l'assurance intime de pouvoir. Un essai d'approfondissement sociologique de l'anthropologie capacitaire de Paul Ricœur*, in: *Études Ricœuriennes/Ricœur Studies* 3, no. 1 (2012), 34–52; and E. Wolff, *Hermeneutics and the Capabilities Approach: A Thick Heuristic Tool for a Thin Normative Standard of Well-being*, in: *South African Journal of Philosophy* 33, no. 4 (2014), 487–500.

A number of scholars have taken up one of Ricoeur's earliest concerns, namely work. Todd Mei⁷⁷ elaborates on Ricoeur's coordination of word and work in an examination of the poetic moment in each. This double poetics holds on to the productive and literal meaning of work, while seeking to open up new possibilities through the figurative dimension of such a poetics. In a follow-up study he reflects on meaningful work as analogous to meaningful speech acts. Marcel Hénaff⁷⁸ tries to show numerous ways to re-engage with Ricoeur on the problem of work in its relation to social justice through a critical reading of Ricoeur's evolving stance on work. Likewise, Nicolas Smith⁷⁹ attempts to consider the contemporary relevance of Ricoeur's project in *Work and the Word*, but only through a critical engagement with the tension between the anthropological and phenomenological commitments at work in that text.

I know of three cases, to date, where the scholarly projects discussed above have been worked out to a full monograph.⁸⁰ They all subject Ricoeur to a critical reading, while giving a significant place to core aspects of his philosophy. Alberto Romele⁸¹ offers a hermeneutic investigation of the digital technical milieu and the corresponding digital culture. He examines the changing relations between the virtual and the real and expands his earlier study on imaginative machines. He also uses his understanding of digital hermeneutics to oppose the anthropocentrism of traditional hermeneutics. Wessel Reijers and Mark Coeckelberg⁸² advance a narrative theory and ethics of technology. Their approach to artefacts and practices, re-

77 T. Mei, *Form and Figure: Paul Ricoeur and the Rehabilitation of Human Work*, in: *Journal of French Philosophy* 16, no. 1 & 2 (2006), 57–70; *The Poetics of Meaningful Work: An Analogy to Speech Acts*, in: *Philosophy & Social Criticism* 45, no. 1 (2019), 50–70.

78 M. Hénaff, *Labor, Social Justice, and Recognition: Around Paul Ricoeur*, in: R. Savage (ed.), *Poetics, Praxis, and Critique: Paul Ricoeur in the Age of Hermeneutical Reason*, Lanham 2015, 21–33.

79 N. H. Smith, *Between Philosophical Anthropology and Phenomenology: On Paul Ricoeur's Philosophy of Work*, in: *Revue Internationale de Philosophie* 278, no. 4 (2017), 513–534.

80 I also report the doctoral dissertation in philosophy of E. Carney, *Technologies in Practice. Paul Ricoeur and the Hermeneutics of Technique*, Dundee 2018.

81 A. Romele, *Digital Hermeneutics: Philosophical Investigations in New Media and Technologies*, New York 2020.

82 W. Reijers, M. Coeckelberg, *Narrative and Technology Ethics*, Cham 2020.

search and innovation, develops insights from Ricœur's narrative hermeneutics to a broader view on technological mediation. Furthermore, the virtue-ethical orientation of their ethics also extends aspect of Ricœur's later ethics. Ernst Wolff⁸³ develops an interpretive theory of the technical dimension of all human action, that is, of embodied capabilities and the mediation of action by technical means. The technicity of action, he argues, is found in individual and collective action, over the whole range of practical contexts, from everyday practices and in ethico-political engagement. All three of these projects integrate a critical appropriation of parts of Ricœur's work in a broader interdisciplinary framework and are concerned with the political implications of their study.

Finally, the volume *Interpreting Technology* brings together twenty co-authors for advancing a Ricœurian »hermeneutic philosophy of technology«.⁸⁴ Ricœurian approaches to technological mediation are situated in relation to major paradigms in the philosophy of technology. Moreover, by zooming in on a number of specific domains the value of such approaches for studying and reflecting on contemporary technological dilemmas is demonstrated.⁸⁵

83 Wolff, *Between Daily Routine and Violent Protest*.

84 W. Reijers, A. Romele, & M. Coeckelbergh, *Interpreting Technology. Ricoeur on Questions Regarding Ethics and Philosophy of Technology*, Lanham 2021. My literature overview stopped at the time of publication of this work.

85 Shorter versions of this chapter have been published as *Ricœur's Polysemy of Technology and its Reception*, in: W. Reijers, A. Romele & M. Coeckelbergh, *Interpreting Technology*, 3–25; and *Ricœur and the philosophy of technology*, in: *Studia z Historii Filozofii – Studies in the History of Philosophy* 11, no. 4 (2020), 97–121.