

Digital Traceability and the Right to be Forgotten

Ricoeurian Perspectives

ALBERTO ROMELE*

ABSTRACT: The goal of this article is to show how Ricoeur’s perspective on traces could be used in the current debate on digital traces and the “right to be forgotten” — the recent ruling by the Court of Justice of the European Union according to which people have the right, under certain conditions, to ask search engines like Google to remove results for queries that include their name. In the first section, the author discusses Ricoeur’s unexpected “love for technology.” In particular, he shows how externalizations — i.e. methods, techniques and technologies — have been at the heart of Ricoeur’s hermeneutical reflections. In the second section, he takes into account Ricoeur’s considerations on traces and memory in *Memory, History, Forgetting* as potential replies to the several issues posed by digital traceability. The hypothesis is that Ricoeur’s perspective, and especially his motto “you are better than your actions,” could represent an *ethical* integration of both the *juridical* imposition of the European Court of Justice and the *technical–moral* solutions suggested by authors such as Luciano Floridi and Viktor Mayer–Schönberger.

KEYWORDS: P. Ricoeur, philosophy of technology, digital studies, G. Simondon, post–phenomenology.

Introduction

Several academics have already dealt with the topic of Paul Ricoeur as a philosopher of technology. According to Ernst Wolff, one can distinguish between three main research directions.¹ The first one is that of David Kaplan who investigated what Ricoeur effectively said about technology. He then tried to develop a “Ricoeurian critical theory” and to think of the manner in which the Ricoeurian philosophy and philosophy of technology could con-

* Alberto Romele, Universidade do Porto (romelealberto@gmail.com).

1. E. WOLFF, *Compétences et moyens de l’homme capable à la lumière de l’incapacité*, “Etudes Ricoeurianes/Ricoeur Studies,” 4 (2013), n. 2, pp. 50–63.

tribute to each other.² The second one is that of David Lewin who tried to show how Ricoeur's thoughts could be relevant in a debate *à la* Heidegger on Being and Technology.³ The third one is the work of Wolff himself who has been using Ricoeur's hermeneutics and philosophical anthropology for some years in order to develop an interdisciplinary approach on the technical dimension of human action.⁴ In addition to these approaches, my personal contribution consists of using the Ricoeurian hermeneutics in the specific context of ICTs (Information and Communication Technologies) for the past two or three years.⁵

This article belongs precisely to this line of research. In particular, its goal is to show how Ricoeur's perspective on traces could be used in the current debate on digital traces and the "right to be forgotten" — the recent ruling by the Court of Justice of the European Union according to which people have the right, under certain conditions, to ask search engines like Google to remove results for queries that include their name.

The discussion will be developed in two steps. In the first section, I am going to discuss Ricoeur's unexpected "love for technology." In particular, I will show how externalizations — i.e. methods, techniques and technologies — have been at the heart of his hermeneutical reflections. In the second section, I will take into account his considerations on traces and memory in *Memory, History, Forgetting* as potential replies to the several issues posed by digital traceability.

My hypothesis is that Ricoeur's perspective, and especially his motto "you are better than your actions,"⁶ could represent an *ethical* integration of both the *juridical* imposition of the European Court of Justice and the *technical-moral* — the relation between morality and technology will be explained — solutions suggested by authors such as Luciano Floridi and Viktor Mayer-Schönberger.

2. D. KAPLAN, *Ricoeur's Critical Theory*, New York, SUNY Press, 2003, pp. 164–173; Paul Ricoeur and the Philosophy of Technology, "Journal of French Philosophy", 16 (2006), n. 1/2, pp. 42–56.

3. D. LEWIN, *Ricoeur and the capability of modern technology*, in T. S. MEI and D. LEWIN (eds.), *From Ricoeur to Action. The Sociopolitical Significance of Ricoeur's Thinking*, London–New York, Continuum, pp. 54–71.

4. Cf. also E. WOLFF, *Ricoeur et Giddens: L'herméneutique de l'homme capable et la théorie de la structuration*, "Études Ricoeuriennes/Ricoeur Studies", vol. 5 (2014), n. 2, pp. 105–127.

5. A. ROMELE, *Narrative Identity and Social Networking Sites*, "Études Ricoeuriennes/Ricoeur Studies", 4 (2013), n. 2, pp. 108–122; *Herméneutique du digital: les limites techniques de l'interprétation*, "Études Digitales", 1 (2015), n. 1 (forthcoming).

6. P. RICOEUR, *Memory, History, Forgetting*, Chicago, The University of Chicago Press, 2004, p. 493.

1. Paul Ricoeur or the love of technology

I was rather surprised when I first read this statement in a still little known text by Ricoeur entitled *Sens et fonction d'une communauté ecclésiale* (*Meaning and Function of a Church Community*):⁷

I am very attached to the work of a young philosopher, named Simondon, who wrote a very interesting book on “the technical object.” He shows that, too often, we regard the technical object as an enemy, simply because we ignore it. But if we had a better knowledge of how machines work, we would realize that it is a materialized humanity, a crystalized humanity into things. The modern matter is much more spiritual than the ancient matter. We master unleashed forces, like the steam, less than information’s schemes, which are our intellect (*raison*) into the things; [...] we tame signs, systems of signs, much more than nonhuman energies. [...] The modern citizens will have to be more competent!⁸

This passage is remarkable for two reasons. First, because it is one of the rare occasions — to my knowledge the only one — when Ricoeur explicitly refers to Simondon and the book resulting from his minor thesis *Du mode d'existence des objets techniques* (*On the Mode of Existence of Technical Objects*). Incidentally, that book is not part of Ricoeur’s private library, housed at the Fonds Ricoeur in Paris, yet the two authors met at least twice. The first meeting took place when Simondon defended his major thesis *L'individuation à la lumière des notions de forme et information* (*Individuation in the light of the notions of Form and Information*) in 1958. Ricoeur was one of the members of the jury. The second one occurred on February 27, 1960, when Simondon presented his works at the *Société française de philosophie* before a prestigious audience, and Ricoeur was part of it.⁹ On that occasion, Ricoeur criticized Simondon for having attempted an axiomatization of human sciences from a domain that does not belong to them: “Can we attempt an axiomatization of humanities from a field that does not belong to humanities? More precisely, what seems to me prior to human sciences is not nature, but the totality of Humaness + Nature; can we, from a structure of thought borrowed from nature, axiomatize the totality of Humaness + Nature? I think that we are necessarily doomed to something like a fallacy whenever we try to explain the totality of the laws through one of its

7. The text (II.A.247 according to the Vansina’s bibliography) was published in 1968 in the “Cahiers d’études du Centre protestant de recherches et de rencontres du Nord”.

8. P. RICOEUR, *Sens et fonction d'une communauté ecclésiale*, cit., p. 63 (my translation).

9. G. SIMONDON, *Forme, Information, Potentiels. Intervenants: MM. Berger, Bouligand, Dugué, Hyppolite, Marcel, Ricoeur, Schuhl, Wahl, Weiberg*, “Centenaire de la société française de philosophie. Les grandes conférences du XXe siècle: texts téléchargeables en intégralité”, pp. 723–765, <http://www.sofrphilos.fr/?idPage=34> (accessed July 16, 2015).

parts.”¹⁰ Reproached for the “metaphorical character” of his transpositions from nature to human signification, Simondon claimed that in his reflection it is not a matter of metaphors or translations, but rather of “transduction.” For him, “the transductive process of thinking consists of establishing identities among relations. Such a process, however, cannot be assimilated into a simple translation. Indeed, it is not based on identity, but rather on the differences that it aims to explain.”¹¹ With this notion, whose value is both epistemological and ontological, he wanted to formulate a “relational ontology,” which, however, is capable of maintaining the distinctions between the different modes of existence, in particular between nature — animals, plants and minerals —, human beings and technologies.¹² With regard to the relation between human beings and technical objects, he argues in *Du mode d’existence* that “the first condition for incorporating technical objects into culture would be to acknowledge that human beings are neither inferior nor superior to technical objects. It would consist in approaching them, getting to know them, having an equal relationship and a reciprocity of exchanges with them: a kind of asocial relationship.”¹³ Because of his predilections for symbols and signs, Ricoeur has obviously the tendency to humanize both nature and technologies. For Simondon, by contrast, signification cannot be reduced to human discourse. For this reason, he replies to Ricoeur that “there is here [in your critique] a theory of the word that overlooks what can be admitted; it means to attribute all the value to the word. In what I have tried to present, there is a theory of nature that cannot admit such a theory of signification as if it were included entirely in the word.”¹⁴ Similarly, when Ricoeur presents Simondon’s modern machines as being “materialized” and “crystallized” humanity, he is clearly misunderstanding Simondon’s intentions. Yet despite this “idealism of the matter,”¹⁵ the fact remains that Ricoeur defends the necessity for human beings “to find a certain fraternity with technological machines.”¹⁶ In the text entitled *Prévision économique et choix éthique (Economic prevision and ethical choice)* and published in 1966, he had already stressed that technicization does not cause alienation, but

10. Ivi, p. 758 (my translation).

11. G. SIMONDON, *L’individuation à la lumière des notions de forme et d’information*, Grenoble, Millon, 2005, p. 108 (my translation).

12. On the notion of transduction in Simondon and the difference between Simondon’s and Bruno Latour’s relationism, cf. R. DE ANGELIS and A. ROMELE, *Pensare le reti sociali online con Gilbert Simondon*, in A. GIVIGLIANO and C. STANCATI (eds.), *Prospettive sul luogo. Discussione di un oggetto sociale*, Roma, Aracne, 2015, pp. 194–208.

13. G. SIMONDON, *Du mode d’existence des objets techniques*, Paris, Aubier, 2012, pp. 126–127 (my translation).

14. G. SIMONDON, *Forme, Information, Potentiels*, cit., p. 760 (my translation).

15. B. LATOUR, *Prendre le plis des techniques*, “Réseaux”, 163 (2010), n. 5, p. 20.

16. P. RICOEUR, *Sens et fonction d’une communauté ecclésiale*, cit., p. 63 (my translation).

rather increases prevision, and then choice and responsibility: “One might think that prospective, prevision and planning denote progress in the mechanization of existence. On the contrary [. . .], it must be understood that the more we multiply the zones of intervention, the more we multiply the zones of responsibility, stolen from chance and disorder, the wider are the range of alternatives.”¹⁷ In his *Moralizing Technology*, the Dutch philosopher Peter–Paul Verbeek has similarly argued that “when technology is used, it organizes a situation of choice.”¹⁸ According to him, while fulfilling their function, technologies do much more. They give shape to what we do and they contribute actively to the ways we live our lives: “By making it possible to detect specific diseases, medical diagnostic devices do not simply produce images of the body but also generate complicated responsibilities, especially in the case of antenatal diagnostics and in situations of unbearable and endless suffering.”¹⁹ In the next section, I will show how some academics suggested the implementation of new technical features in digital devices as a moral solution for the issue of online traceability.

The context is the second reason why the passage quoted at the beginning of this section is interesting. Ricoeur is talking about the role of the Protestant church communities in the modern societies before a non-academic audience. In a long part of *Sens et fonction*, Ricoeur discusses the importance of Rudolph Bultmann’s “demythologization” for an internal critique that would permit the Protestant church communities to have a role in contemporary technicized societies. Such a role would consist of bringing “hope for a meaning, to witness this meaning by reflecting on the methods and the goals of our society [. . .].”²⁰ When I titled this section “Paul Ricoeur or the love of technology,” I was clearly thinking of Bruno Latour’s book *Aramis ou l’amour des techniques* (*Aramis or the love of technology*). In this book, Latour investigated the reasons for the failure of the project Aramis, a revolutionary transport system that the company Matra, supported by RATP (the Parisian transport company), conceived in the 1970s. The book is both a popularization of STS (science and technology studies) and a strong critique of the thesis on the autonomy of technology, put forward, for instance, by Jacques Ellul: “I have sought to offer humanists a detailed analysis of a technology sufficiently magnificent and spiritual to convince them that the machines by which they are surrounded are cultural objects worthy of their attention and respect. [. . .] I have sought

17. Ivi, pp. 181–182 (my translation).

18. P.P. VERBEEK, *Moralizing Technology: Understanding and Designing the Morality of Things*, Chicago, The University of Chicago Press, 2015, p. 5.

19. Ivi, p. 1.

20. P. RICOEUR, *Sens et fonction d’une communauté ecclésiale*, cit., p. 16 (my translation).

to show technicians that they cannot even conceive of a technological object without taking into account the mass of human beings with all their passions and politics.”²¹ Rather than approaching human beings and technologies as belonging to two separate domains, Latour suggests to keep the interwoven character of the two spheres at the center. Humans and nonhumans are conceived according to the “principle of symmetry,” which confers upon them the same dignity. Reflecting on the possible sources of Latour’s approach toward techniques, I remembered a rather long passage of an interview that he released when his latest book was published, *Enquête sur les modes d’existence* (*An Inquiry into Modes of Existence*):

From 1966 to 1973, when I was a militant Catholic student at the University of Dijon, I had the good fortune to have as a philosophy professor André Malet, a Protestant minister and Rudolf Bultmann’s French translator. In his hands, which were as lustrous as parchment, the Biblical text finally became comprehensible, revealed as a lengthy process of transformations, inventions, glosses, and diverse rationalizations which, taken together, sketched out a layer of interpretations that played out — this is the essential point — each in its own way the question of fidelity or treason: faithful or falsified invention, impious reworking or astounding rediscovery? We spent hours outside of class comparing the various resurrection narratives; for example, should they be read as informative stories — the tomb really is empty — or as *transformational* stories — the angel with a raised finger makes it clear how the Scriptures are to be read, how what they say manages to *resuscitate* the person to whom they are addressed? *Because they escaped from an inexplicable form of transcendence and immobility, because they became localized, historical, situated, artificial, yes, invented and constantly reinvented, by raising the question of their own veracity anew at every turn, these texts finally became active and accessible.* [...] Strangely, to my eyes, the systematic destruction by exegesis of all dogmatic certitudes, far from weakening the truth value that the successive glosses played out over and over, made it possible at last to raise the question of religious truth.²²

For Latour and Ricoeur, Bultmann’s approach opens up a more authentic understanding of the Biblical texts. Demythologization is a technique for interpreting the New Testament that enables people today to grasp the message of the myths without abandoning their scientific knowledge. In fact, “we cannot use electric lights and radios and, in the events of illness, avail ourselves of modern medical and clinical means and at the same time believe in the spirit and wonder world of the New Testament.”²³ Would it be too rash to see a continuity between demythologization and the love for technology? Doesn’t demythologization mean acknowledging the theoretical (and moral) relevance

21. B. LATOUR, *Aramis or the Love of Technology*, Cambridge, Harvard University Press, p. VIII.

22. B. LATOUR, *Biography of an Inquiry: On a Book about Modes of Existence*, “Social Studies of Science”, 43 (2013), n. 2, pp. 288–289 (my emphasis).

23. R. BULTMANN, *New Testament and Mythology: The problem of Demythologizing the New Testament Proclamation*, in *New Testament and Mythology and other Basic Writings*, Philadelphia, Fortress, 1984, p. 4.

of science and technology for the contemporary societies? At the same time, isn't demythologization, the effort of tidying up two opposite attitudes toward the same object, an *esprit de finesse* and an *esprit de géométrie*? If it were so, it could not be a coincidence that Jacques Ellul considered Karl Barth the most important theologian of his century.²⁴

Last but not least, isn't all this closely related to Paul Ricoeur's famous motto "explain more is to understand better," which in turn is a *mise en abyme* of his entire hermeneutical challenge of bringing together truth and method? Ricoeur is the philosopher who abandoned symbols in favor of signs, because of their higher controllability — especially after the development of the structural linguistics' techniques. Moreover, among the representatives of ontological hermeneutics, he is the one who most externalized the language and its effectiveness. Let us consider, for example, the role of narrative for the reconfiguration of the self. Of course, Ricoeur remains an "idealist of the matter," insofar he never questioned the materiality and the technicity of texts and traces. However, it is fair to say that he paved the way for a hermeneutical understanding of science and technology.²⁵ In the next section, I will consider how Ricoeur's hermeneutics might possibly contribute to the specific issue of digital traceability and the right to be forgotten.

2. Digital traceability and the right to be forgotten

It is often said that we live in an information and communication society. Yet what characterizes contemporary societies is not information and communication per se, but rather the fact that all information and communication leave a digital trace of its passage. Digital technologies — e.g. Internet, Web 2.0, mobile access to the Internet, Internet of things and wearable devices — are making digital traceability a "total social fact." There are at least two kinds of issues related to this phenomenon. First, digital traces can be easily

24. The relation between Ricoeur, Barth, Bultmann and the theology of the Word is rather complex. For instance, in his *Preface to Bultmann* — available today in *The conflict of Interpretations* — he praises demythologization and defends it from possible misunderstanding. Yet he also accuses Bultmann of having remained within the limits of anthropological philosophy. In this way, he assumes, at least implicitly, a Barthian perspective. It is noteworthy that Ricoeur's criticism of Bultmann's existentialism is mitigated in an article he wrote in 1991, which is devoted to the work of Latour's first master. Cf. P. RICOEUR, *Hommage à André Malet, interprète de Bultmann*, in M.-F. CONAD, C. PICARD and M. VAUTRIN (éds.), *André Malet ou un homme en quête de Dieu. Hommage de l'université de Bourgogne*, Editions Universitaires, Dijon, 1991, pp. 157–166. On Ricoeur and the theology of the Word, cf. A. ROMELE, *La parole efficace chez Gerhard Ebeling et Paul Ricoeur*, "Revue de théologie et de philosophie", 144 (2012), pp. 305–318.

25. Cf. D. IHDE, *Expanding Hermeneutics: Visualism in Science*, Evanston, Northwestern University Press, 1999.

collected and analyzed both for commercial and for scientific purposes. “Critical data studies” is an emerging research field focusing on the ontological, epistemological, anthropological, political and ethical challenges posed by (big) data analytics.²⁶ Second, there is daily access via search engines to the part of these traces that is available on the Internet, the consequences of which are not less problematic. This is precisely the topic of this section.

According to Danah Boyd, four affordances — i.e. specific properties that make possible certain types of practices — characterize social media: persistence — the durability of online expressions and contents; visibility — the potential audience who can bear witness; spreadability — the ease with which content can be shared; searchability — the ability to find content.²⁷ These affordances can be extended to the entire Web 2.0. Taken together, they make the Internet a sort of flatland, lacking depth both in time and in space. According to Floridi, on the Internet information is “dynamically structured ‘on the fly’ by our researches.”²⁸ The “right to be forgotten” ruling has been introduced by European Commission with the intention to offer its citizen a juridical resource in case some digital traces are considered by someone detrimental for his or her own privacy.²⁹

In 2010, a Spanish citizen complained to the National Data Protection Agency about the presence of an auction notice of his repossessed home in Google’s search results. According to him, this infringed his privacy because all the proceedings concerning him had been fully resolved many years ago. The citizen requested that Google Spain and Google Inc. be required to remove the personal data relating to him, so that it no longer appeared in the search results. The Spanish court referred the case to the Court of

26. On the difference between digital traces and data, as well as the distinction between different forms of data, cf. M. SEVERO and A. ROMELE, *Soft Data. Essai d’une nouvelle définition des données pour les études territoriales*, in M. SEVERO and A. ROMELE (eds.), *Traces numériques et territoires*, Paris, Presses des Mines, 2015, pp. 61–85.

27. D. BOYD, *It’s Complicated. The Social Lives of Networked Teens*, New Haven–London, Yale University Press, 2014, p. 11.

28. L. FLORIDI, *Right to be forgotten poses more questions than answers*, “The Guardian”, November 11, 2014. As pointed out by Bruno Bachimont, digital technologies do not exclude *per se* a dynamic conception of memory. Since they involve a potential gap of intelligibility and obsolescence, digital contents need constantly to be reactualized and hermeneutically interpreted. Cf. B. BACHIMONT, *La présence de l’archive: réinventer et justifier*, “Intellectica”, 53 (2010), n. 1, pp. 1–29. On the importance of editorialization for digital and digitalized contents, cf. M. TRELEANI, *Mémoires audiovisuelles: les archives en ligne ont-elles un sens?*, Montréal, Les Presses Universitaires de Montréal, 2014.

29. If the trace is considered in his Derridean version of “absence of presence,” then one might say that on the Internet, where everything tends to be present in time and space, there is no trace at all. One might also say that the role of a hermeneutical understanding of digital technologies consists precisely into giving back to digital traces the depth that is proper to all traces. Cf. C. COLLOMB, *Et s’il n’y avait pas de traces numériques?*, presentation at the conference “E-réputation et traces numériques: dimensions instrumentales et enjeux de société,” in Toulouse, www.academia.edu/3510979/Et_sil_ny_avait_pas_de_traces_num%C3%A9riques_ (accessed September 5, 2015).

Justice of the European Union. In its ruling of May 13, 2014, the EU Court of Justice declared that (1) search engines are controllers of personal data. Google cannot therefore escape the EU data protection law; (2) even if the server of a company is located outside Europe, EU rules apply to it if it has a branch or a subsidiary in a Member State; (3) individuals have the right — under certain conditions³⁰ — to ask search engines to remove links with personal information about them.³¹ Google had to make an online complain form available for its European customers, specifying, however, that “when you make such a request, we will balance the privacy rights of the individual with the public’s interest to know and the right to distribute information. When evaluating your request, we will look at whether the results include outdated information about you, as well as whether there’s a public interest in the information.”³² Since the company first started to process requests in May 2014, it has received more than 280,000 requests. Less than 5% concern criminal, politicians and high-profile public figures, while 95% percent comes from everyday members of the public.³³ Google also set up an advisory council, which held consultations in several European cities in order to “gather input from Europeans.” In January 2015, the advisory council published its findings and recommendations in a report,

30. Generally, the ruling applies when the information is inaccurate, inadequate, irrelevant or excessive for the purposes of the data processing. Cf. the European Commission’s *Factsheet on the “Right to be forgotten” ruling*, ec.europa.eu/justice/data-protection/files/factsheets/factsheet_data_protection_en.pdf (accessed September 1, 2015).

31. Jurists have been discussing the eventuality of a “right to be forgotten” ruling in Europe and its consequences for many years. In particular, US scholars have seen a possible conflict with other fundamental rights such as the freedom of expression and the freedom of the media. Law professor Jeffrey Rosen, for instance, argued that EU and US have opposite approaches to the issue. In Europe, the right to be forgotten finds its intellectual roots in the French *droit à l’oubli*, which allows a convicted criminal, who has served his time, to object to the publication of the facts of his conviction. In the United States, by contrast, publication of someone’s criminal history is protected by the First Amendment, which concerns among other things the freedom of speech and of the press. According to him — the article was published in 2012 — after the European ruling “it’s hard to imagine that the Internet results will be as free and open as it is now.” For Steven C. Bennet, despite cultural divisions between the EU and the US on the substance of privacy rights and the reach of jurisdiction over the Internet, a process of convergence seems inevitable. Firstly, because outside the context of newsworthy stories, US courts have been generally less inclined to insist on unrestrained access to information. Secondly, because recent EU pronouncements expressly recognize the need to balance right of privacy with freedom of expression. For the European Commission, the right to be forgotten is not a “super-right” and the request for erasure has to be assessed on a case-by-case basis. Cf. J. ROSEN, *The Right to be forgotten*, “Stanford Law Review”, <http://www.stanfordlawreview.org/online/privacy-paradox/right-to-be-forgotten> (accessed September 1, 2015); S.C. BENNETT, *The ‘Right to be forgotten’: reconciling EU and US perspectives*, “Berkeley Journal of International Law”, 30, 1, pp. 161–195.

32. Cf. support.google.com/legal/contact/lr_eudpa?product=websearch&chl=en (accessed on September 1, 2015).

33. S. TIPPMANN and J. POWEL, *Google accidentally reveals data on ‘right to be forgotten’ requests*, “The Guardian”, July 14, 2015.

which is available online.³⁴ It is noteworthy that the report refers to the right to be forgetting as “delisting.” In fact, the European ruling does not concern the source site and hence it does not really have the effect of “forgetting” information about data subjects: “Once delisted, the information is still available at the source site, but its accessibility to the general public is reduced because search queries will not return a link to the source publication.”³⁵ There are many issues related to the EU ruling. As Floridi, who was among the members of the advisory council, pointed out, “some expected a grand finale, a denouement in which the problems raised by the ruling would be resolved. Instead, a sense of déjà vu soon dawned on the final meeting in Bruxelles. [. . .] Perhaps it was a missed opportunity to run some intellectual risks and think outside the proverbial boxes.”³⁶ According to me, the most evident limit of the ruling is its contingent character. First, because it does not prevent, but rather intervenes afterwards, when privacy is felt as having been already infringed. Second, its application depends upon the individual sensitivity to digital traceability’s pervasiveness.

Some academics thought of another kind of solution that might be called technical–moral. Floridi, for instance, suggested the technical implementation of a right to comment: “There are many alternative technical possibilities to de-indexing, including reordering information results, de-identifying information, and appending additional qualifying information [. . .]. Instead

34. Cf. drive.google.com/file/d/oBrUgZshetMd4cEI3SjlvVohNbDA/view (accessed September 3, 2015).

35. Ivi, p. 4. In the central part of the report, the authors highlight the main criteria for assessing delisting requests such as the types of information, their source and time — “the Ruling refers to the notion that information may at one point be relevant but, as circumstances change, the relevance of that information may fade.” (Ivi, p. 14) In the final part, the report refers to procedural elements that are not explicitly addressed by the ruling, but on which the authors chose to give their advice: the need to make the removal request form easily accessible; the need of notifying webmasters of a delisting; the possibility for data subjects of challenging the delisting decision; the appropriate geographic scope of the delisting — the links are removed just from the European-directed services of Google such as google.fr and google.it; the issue of transparency toward the public and the data subject.

36. L. FLORIDI, *Right to be forgotten poses more questions than answers*, cit. For him, the most significant questions that were raised during the consultations concern: the sedimentation of personal information online; a new, two-tier approach to information; the territoriality of the law versus the non-territoriality of the Internet; a conflict by proxy — the right to be forgotten and the right to information; information cartography — indexing by search engine is today more important than the corresponding information; public interest versus what is interesting to the public; the relevance of relevance — it is impossible to identify the relevance of some information without referring to the context; the all-encompassing nature of data processing — there is currently no distinction between recording, copying, formatting, linking and manipulating data; algorithms versus humans; information powers. Cf. also L. FLORIDI, “*The Right to be Forgotten*”: a Philosophical View, “Annual Review of Law and Ethics”, forthcoming. A pre-print version of the article is available at www.academia.edu/16491066/_The_Right_to_Be_Forgotten_a_Philosophical_View_-_forthcoming_in_Annual_Review_of_Law_and_Ethics (accessed October 13, 2015).

of an all-or-nothing approach, internet services could be encouraged to consider a generally-available right to comment — for example, by linking metadata to alternative URLs that clarify, update, or contextualize.”³⁷ For Viktor Mayer-Schönberger, an expiration date for the information would be the most suitable solution. Our digital devices would be made to automatically delete information that has reached its expiry date. When saving a document, users would have to select an expiration date in addition to the document’s name.³⁸ According to him, “the need to enter an expiration date should prompt users to reflect, at least for a moment, about the lifespan of the information they intend to store.”³⁹ The author is not directly concerned with the right to be forgotten but, more generally, with information persistency in the digital age. However, his idea could be extended to uploading and availability of contents online. I call this solution “technical-moral” because it suggests the implementation of technical features in order to introduce a situation of choice. As Verbeek said, when technologies are used, moral decisions are not taken autonomously by humans. Rather, moral agency is distributed among humans and nonhumans: “Ultrasound imaging organizes a specific form of contact between expectant parents and unborn child, in which the parents and the child are constituted in specific ways with specific moral roles.”⁴⁰ The introduction of an expiration date for the information would fully recognize such a morality to digital traces, which organize a specific form of contact between search engines’ users and data subjects. Yet this approach has two limits. First, it could positively affect the way one treats his or her personal data, but it is uncertain what kind of effect it would have on the information he or she makes available online about others. Indifference is a possibility, but it could also happen that a person decides for some reasons to unduly delay the expiration date of an information concerning someone else. Second, the possibility to choose an expiration date for information, as Mayer-Schönberger presents it, remains, so to speak, externally induced. Referring to the work of Foucault, Verbeek distinguishes between morality as the behavior corresponding to a specific moral code, and ethics as the way in which human beings constitutes themselves as subjects: “Ethics is not only a matter of a person who is the ‘subject’ of his or her actions [...] but of a person who also ‘subjects’ himself or

37. J. POWELS and L. FLORIDI, *A manifesto for the future of the ‘right to be forgotten’ debate*, “The Guardian”, July 22, 2014, www.theguardian.com/technology/2014/jul/22/a-manifesto-for-the-future-of-the-right-to-be-forgotten-debate (accessed on September 4, 2015).

38. V. MAYER-SCHÖNBERGER, *Delete: the Virtue of Forgetting in the Digital Age*, Princeton, Princeton University Press, 2011, p. 171.

39. Ivi, p. 172.

40. P.P. VERBEEK, *Moralizing Technology*, cit., p. 53.

herself to [. . .] a vision of what constitutes a good life or a good behavior.”⁴¹ This means that we cannot confine ourselves to disciplining humans by implementing new technical features. However useful it might be in the short term, one must also consider the long-term necessity to “subject” users to a vision of what is a good use of digital traces. Mayer–Schönberger refers to it as “cognitive adjustment.” Yet cognitive adjustment would fail for him to address a fundamental downside of digital memory: incompleteness. In other words, people might become comfortable in dealing with digital traces, but they would also become increasingly incapable to see their limits — fortunately, not everything we communicate, think and do is captured in digital format.⁴² But it is precisely with the intention of putting a spotlight on the incompleteness of the digital traces that I am going to discuss Ricoeur’s hermeneutics of the traces — “hermeneutics of the historical condition,” as he calls it — in the rest of this section and in the brief conclusion.⁴³

First of all, it is important to say what, according to me, is a hermeneutical approach to technology. On one hand, it means to recognize the relevance that technological mediations have on the relation between human beings and the world.⁴⁴ On the other hand, it also means to recognize the limits of technological mediation as such. For Don Ihde, all technologies have a “magnification/reduction structure,” i.e. they amplify some aspects of reality but neglect some others. This is also the case of the technologies related to digital traceability. As I said, among the representatives of ontological hermeneutics, Ricoeur is the one who most valued the externalizations of language. Symbols, signs, metaphors and narrations are necessary mediations for the human understanding of the world, the others and oneself. It is precisely this predilection for externalizations that makes Ricoeur’s hermeneutics interesting for the philosophy of technology. There is no room here for such a reflection, but his perspective should be confronted with popular notions from the philosophy of technology such as Bernard Stiegler’s “tertiary retention” and Clark and Chalmers’ “extended mind.” The central part of *Memory, History, Forgetting* is devoted to the articulation — the hermeneutical circularity — between the phenomenology of memory and the epistemology of history. On one hand, Ricoeur stresses the importance of historiography for fixing, accessing and processing living

41. Ivi, p. 74.

42. V. MAYER–SCHÖNBERGER, *Delete*, cit., 156.

43. On the application of Ricoeur’s hermeneutics of traces to digital traceability, cf. A. SERRES, *Quelle(s) problématique(s) de la trace?*, presentation at the seminar of CERCOR (now CERSIC), December 13, 2002, hal.archives-ouvertes.fr/sic_00001397/document (accessed September 5, 2015).

44. Cf. D. IHDE, *Technology and the Lifeworld: From Garden to Earth*, Bloomington–Indianapolis, Indiana University Press, 1990, pp. 80–97.

memory. On the other hand, he highlights its reductionist character. He refers in particular to Plato's myth of Theuth, god of writing and Derrida's critical interpretation of it: "That this extension of the myth of the origin of writing may sound as a myth on the origin of history, thanks to rewriting, is, if I may put in this way, authorized by the myth itself, inasmuch what is at stake is the fate of memory. [. . .] It is to true memory, genuine memory, that the invention of writing and its related drugs is opposed as a threat."⁴⁵ History, writing, traces and, more generally, all kinds of inscription are *pharmakon*, i.e. remedy and poison, for the living experience of memory. For Ricoeur, the moment of the archive determines the passage of memory from its oral to its written form: "The moment of the archive is the moment of the entry into writing of the historiographical operation. Testimony is by origin oral. It is listened to, heard. The archive is written. It is read, consulted."⁴⁶ Moreover, he defines the archive as "the physical place that shelters the destiny of that kind of trace that I have so carefully distinguished from the cerebral trace and the affective trace, namely, the documentary trace."⁴⁷ It seems possible to me to transpose Ricoeur's pharmacological attitude toward history, writing and traces to digital traceability, all the more so because the Internet is understandable as — although not reducible to — a dynamic archive, i.e. a database where information can be added, browsed and, with much more difficulty, changed and destroyed. Digital traces are *pharmakon*, since they are both important resources to access information and, because of their intrinsic incompleteness, limits for a genuine understanding of the world, the others and oneself.

Conclusion

In *Memory, History, Forgetting*, Ricoeur articulates forgetting and forgiveness; despite a certain reticence, he also sketches the outlines of an *ars oblivionis*, "a path of a forgetting that would no longer be a strategy, nor a work, an idle forgetting. [. . .] If memory—as-care we hold ourselves open to the past, we remain concerned about it. Would there not then be a supreme form of forgetting, as a disposition of being in the world, which would be insouciance, carefreeness?"⁴⁸ In our context, insouciance would be a specific disposition of being in the digital world: despite their "being-ready-to-hand," digital traces might not always be the most authentic way to access the world,

45. P. RICOEUR, *Memory, History, Forgetting*, cit., p. 141.

46. Ivi, p. 166.

47. Ivi, p. 167. On archives, documents and traces Cf. also P. RICOEUR, *Time and Narrative*, vol. 3, Chicago, The University of Chicago Press, 1988, pp. 116–126.

48. Ivi, p. 504–505.

the others and oneself. This does not mean abstinence, but rather moderation. Verbeek insists on the fact that ethics should not aim at protecting “humanity” from “technology” but should consist in carefully assessing and dealing with technological mediations.⁴⁹ According to him, ethics is “about excellence in living, or mastering the art of living. In a technological culture, an ethics of the good life is about developing forms of excellence in living with technology.”⁵⁰ When moderation — which might be seen as a hermeneutical process of distantiation and appropriation — is not contemplable, another principle intervenes. Ricoeur argues: “Under the sign of forgiveness, the guilty person is to be considered capable of something other than his offenses and his faults.”⁵¹ He also suggests expanding this principle to all relations between a person and his or her own actions. In this sense, “the formula for this liberating word, reduced to the bareness of its utterance, would be: you are better than your actions.”⁵² “You are better than the digital traces your actions left behind you” is the principle of charity that should guide our attitude toward traceability in the digital age. As principle of charity, it goes further than the golden rule according to which “one should treat others’ digital traces as one would like others to treat one’s own digital traces.” In conclusion, the question arises whether the limit of Ricoeur’s ethical perspective consists of remaining “externalist” with respect to the digital technologies of traceability. Yes and no. Yes, insofar it does not permit to sketch the outlines of an ethics of design.⁵³ By contrast, this is among the main tasks of Verbeek’s approach.⁵⁴ No, because Ricoeur’s reflection on traces, and, more generally, his hermeneutical approach has the merit to encourage reflection on the excellence of living *in relation with*, and not outside of externalizations, i.e. methods, techniques and, potentially, technologies.

49. P.P. VERBEEK, *Moralizing Technology*, cit., p. 82.

50. *Ivi*, p. 156.

51. P. RICOEUR, *Memory, History, Forgetting*, cit., p. 493.

52. *Ibid.*

53. With such a term, Verbeek indicates the possibility to build objects that entail specific ethical values and orient users’ actions. According to him, “designers engage in ‘ethics with other means;’ that is, their products codetermine the outcome of moral considerations, which in turn determine human action and their definition of ‘the good life.’” (P.P. VERBEEK, *What Things Do. Philosophical Reflections on Technology, Agency, and Design*, University Park Pennsylvania, Pennsylvania University Press, 2005, p. 212).

54. Cf. P.P. VERBEEK, *Moralizing Technology*, cit., pp. 90–138.