Writing in Digital Materiality

1 Introduction

In 2016, Stéphane Crozat presented a general overview of digital writing which underlined the duality present in traditional digital writing and computational digital writing¹. Such a point of view goes beyond what Kenneth Goldsmith, in his 2011 monograph, sought to develop with the notion of “uncreative writing”². However, “uncreative writing” is not strictly related to digital writing since Goldsmith considers its premise already illustrated by James Joyce³: “in uncreative writing, new meaning is created by repurposing pre-existing texts”⁴, and it is thus distanced from the notion of auctorial intention⁵. By reusing previously written material⁶, uncreative writing is facilitated on a large scale by digital writing, while still clearly related to the traditional form thereof.

Using Crozat as a starting point, this chapter seeks to extend the notion of computational digital writing by examining it through the prism of the new relationship between digital technologies and human bodies as posed by Derrida⁷. At a time when the presence of the human body is so frequently required by the interaction with new bodily technologies – such as facial recognition⁸ – what happens to writing when it becomes *embedded* in digital materiality? To analyze this question, Chapter 3 analyzes the rhythm of digital writing production (2.1) and its locus (2.2). Section 3 examines the evolution of the authorial ‘I’ in digital culture. Part 4 will examine what stops, changes or appears in the usual features of a book: the cover and its layout (4.1), the index and

1 Crozat, “De l’écriture qui veut imprimer à l’écriture qui veut programmer”.

2 Goldsmith, *Uncreative Writing. Managing Language in the Digital Age*.

3 Goldsmith, *Uncreative Writing*, p. 28.

4 Goldsmith, *Uncreative Writing*, p. 35.

5 Goldsmith, *Uncreative Writing*, p. 4.

6 Goldsmith, *Uncreative Writing*, p. 8: “For the past several years, I’ve taught a class at the University of Pennsylvania called ‘Uncreative Writing’. In it, students are penalized for showing any shred of originality and creativity. Instead, they are rewarded for plagiarism, identity theft, repurposing papers, patch-writing, sampling, pondering, and stealing. Not surprisingly, they thrive”.

7 Derrida, *Sur parole*, Kindle edition, l. 484.

8 See for example this example in Switzerland : RTS, “Reconnaissance faciale”, <<http://www.rts.ch/play/tv/12h45/video/reconnaissance-faciale-des-starts-up-suissees-se-lancent-dans-laventure?id=9359971>>.

referentiality (4.2), multimodality and computing code (4.3). Point 5 concludes by returning to the starting point of digital writing and the human body. Chapter 3 thus aims to take readers on a simulated, fulfilling journey through the challenges of digital writing.

2 In Quest of the Rhythm and Locus of Digital Writing

2.1 *Words and Writing in the Crucible of Rhythm*

Sections 2.1 and 2.2 analyze notions relating to the rhythm and locus of digital writing based on a series of radio interviews given by Jacques Derrida in France in 1998, and subsequently published in 2000⁹. The philosopher begins by reminding us that his entire study of writing began with the reading and translation of the *Origin of Geometry* by Husserl: this was the *locus* from which Derrida chose to start his meditation on writing¹⁰. The locus of writing has always been important: its digital modality is analyzed in 2.2. Derrida also foregrounds the proximity of orality to writing¹¹: they exist in a continuum of sorts, pointing to the notion of rhythm. Between printed books and electronic communications there is a diversity of rhythm:

I cannot separate that which you call the thought of singular invention from the responsibility which each holds. At one's own rhythm - and here the question of rhythm is important indeed – it is necessary to take the time to think and read. So naturally, since I say “to read”, at once I will be with those who fight for the book, for the time of the book, for the duration of reading, for all that the old book culture commands, but at the same time I cannot defend the book against any kind of technical progress which would seem to threaten the book. So I am going to do both things at once. I want to be for the book, and for means of communication, printing, distribution, and exchanges that do not simply depend on the book, and there are many. And so there in between the two, I will try to invent a strategy that will be singular¹².

9 Derrida, *Sur parole*.

10 Derrida, *Sur parole*, Kindle edition, l. 184-189.

11 Derrida, “Philosophie et littérature”, 16min51 to 17min45 ; <<https://www.franceculture.fr/2016-01-20-l-ecriture-a-la-trace-a-voix-nue-jacques-derrida-25>>.

12 Derrida, *Sur parole*, Kindle edition, l. 472-476 ; English translation by Brad Anderson ; French text p. 96 above.

Derrida's analysis is in line with Henri Meschonnic's works on orality, writing and rhythm, as section 2.1 demonstrates. Orality is a central notion in the changes provoked by the digital turn in Humanities research¹³. It is even present in an OS like Unix according to Neal Stephenson: "Windows 95 and MacOS are products, contrived by engineers in the service of specific companies. Unix, by contrast, is not so much a 'product' as it is a painstakingly compiled oral history of the hacker subculture. It is our Gilgamesh epic. [...] Unix is known, loved, and understood by so many hackers that it can be re-created from scratch whenever someone needs it"¹⁴. The rhythms of thinking and writing appear to be key notions when it comes to facing the digital disruption announced by Stiegler¹⁵. The irregular, unpredictable, new digital rhythms actually shape the digital locus.

2.2 *The Digital Writing Locus*

According to Bernard Stiegler, digital culture could lead us to disruption and *τέχνη* could lead us to madness¹⁶. Given these possibilities, Section 2.2 argues that we need to lucidly face this "strange" new locus of writing and digital materiality. Furthermore this section proposes to present a representation of this locus by considering two pieces of Ancient cultural heritage: the Heraclea stone and the *khôra*. Magnetic stones were called Heraclea stones in Antiquity, a topic of fascination mentioned by Plato in his youth in his writing on the *techne*, *Ion*. In this dialogue, Socrates tries to convince the Homeric interpreter Ion that inspiration and art commentaries are a type of divine madness, like a magnetic power coming from the gods to a poet (*Ion* 533e-534a).

This use of the Heraclea stone postulates a dichotomy between two spheres: madness (like *mania*, which is associated with the divine) and magic, standing in opposition to *techne*, represented by the Socratic logos discourse and thus contrasting with the Heraclea stone. Such a point of view affects the perception of what electricity is. We may still experience repulsion in front of our own electronic Heraclea stones – our electronic devices – however, this may also be combined with great fascination, as attested to by the discussions around whether or not the word "internet" should be capitalized, also summarized in this section. Thus, being conscious of this centuries-old, ambiguous relationship to many different forms of the "Heraclea stone", how should the digi-

¹³ Shaw, "Humanities Digitized", p. 42.

¹⁴ Stephenson, *In the Beginning*, Kindle edition, l. 937-947.

¹⁵ See Chapter 2, p. 49-50.

¹⁶ Stiegler, *Dans la disruption*, p. 411.

tal locus best be considered in order to avoid repeating our repulsion and fascination for it?

With this in mind it is worth retrieving the Ancient Greek concept of the *khôra*. This concept designates remote regions known to exist but rarely actually seen, like the Penjab in Alexander the Great stories¹⁷. Plato's comments on the *khôra* in the *Timeaus* is the topic of the last volume in Derrida's triad: *Passions – Sauf le nom – Khôra*¹⁸. "Neither sensible, nor intelligible", the *khôra* is a *tritos genos* even if it is often described using female concepts in Ancient Greek and French such as mother, womb, place, or region¹⁹. The ancient concept is also politically important²⁰ which makes it useful when considering the internet.

When considering a possible digital *khôra* and its limits, we can ask whether it will be able to modify our brains via smartphones²¹ and open up a "porosity space", in the words of Violaine Houdart-Merot and Anne-Marie Petitjean²². "Porosity" here goes beyond hybridity and describes the digital *khôra* as the new locus for the conditions of writing in that it influences the authorial "I".

3 The Authorial "I" and the Inner Self in Digital Writing

According to a study published in 2010, the auctorial "I" has been in a state of significant, constant evolution since the Second World War, as summarized in Section 3.1²³. Based on recent evolutions, Sections 3.1 and 3.2 present important arguments for ways in which digital writing conditions affect the authorial "I". This includes the increasing porosity of "I" accentuated by the multimodal aspects of digital writing, and the pressures placed on the author by algorithmic governmentality which try to limit the "power of the subjects", according

17 See for example Diodore de Sicile, *La Bibliothèque historique*, p. 126.

18 Derrida, *Passions, Sauf le nom, Khôra*.

19 Derrida, *Khôra*, p. 53.

20 Derrida, *Khôra, Prière d'insérer* (added page): "il n'y a, au sujet de *khôra*, ni théologie négative ni pensée du Bien, de l'Un ou de Dieu au-delà de l'Etre. Cette incroyable et improbable expérience est aussi, entre autres dimensions, *politique*. Elle annonce une pensée, plutôt, sans la promettre, une mise à l'épreuve du politique".

21 Gindrat et al., "Use-Dependent Cortical Processing".

22 Houdart-Merot – Petitjean, "Introduction", <<https://www.u-cergy.fr/fr/laboratoires/agma/cahiers-d-agma/numero-1/introduction.html>>.

23 Many thanks are due to the publisher Paul Peeters for his autorisation to summarize in the French Section 3.1 some pages of Clivaz, *L'ange et la sueur de sang*, part. p. 17-33 and 132-145.

to Antoinette Rouvroy²⁴. Given this pressure, which could be considered violent in some instances, Section 3 ends by encouraging the auctorial “I” to develop resistance within its inner self (3.3).

3.1 *Historicism, the Auctorial “I”, Literary Genres and Emotions*

Nineteenth century historicism saw the conceptualization of historical writing as *farblos* and *unschön*, colorless and unaesthetic, as articulated by Leopold von Ranke²⁵. Having been banished from historical discourse from the middle of the 18th century²⁶, emotions returned to history thanks to authors such as Walter Benjamin²⁷. Since the beginning of the 21st century, historians have even argued for an emotive history of events like the Holocaust, an event that can never be truly overcome or result in full reconciliation, according to the Dutch historian Frank Ankersmit²⁸.

The emergence of multimodal historical expressions, like videos²⁹, is now leading to the return to and foregrounding of emotions. Consequently, the question raised by French historian François Hartog in 2000 is even more pertinent: “is it possible to write history from the point of view of both the losers and the winners”³⁰? It is difficult to predict what will happen to our relationship to reality when emotional rhetoric becomes the norm – the current *fake news* phenomenon will perhaps grow. The auctorial “I” is embedded in this new cultural landscape through which all writers must navigate: from literary writers to historians, and from poets to witnesses and politicians, etc. Digital culture places the auctorial “I” within the context of extreme media exposition: in the internet, the auctorial “I” becomes porous, collectivized, and submissive to algorithmic governance, as Section 3.2 enlightens.

3.2 *Porosity, Collectivity and the (Un-)Power of the Auctorial “I” in Digital Culture*

Digital culture allows for diverse forms of collective authorship to emerge, such as the literary collective AJAR³¹, or the widely used tools such as *Google docs*³² and *Framapad*³³. When one compares these new forms of authorship

24 Rouvroy, “La vie n’est pas donnée”, p. 198.

25 Ranke, *Geschichten*, p. 4.

26 Marmotel, *Éléments de littérature*, p. 247.

27 Benjamin, *Walter Benjamin. Œuvres*, p. 436.

28 Ankersmit, *Historical Representation*, p. 193.

29 King, “Jesus said to them ‘my wife’”, <<https://www.youtube.com/watch?v=vlmoILJmH4M>>.

30 Hartog, “Le témoin et l’historien”, p. 14.

31 See notably AJAR, *Vivre près des tilleuls*.

32 <<https://www.google.com/docs/about/>>.

33 <<https://framapad.org/>>.

to the Romantic period concept of the author as a “solitary genius”, there is an obvious contrast. For example, the latter conceptualization has deeply influenced readings of the letters of Paul of Tarsius³⁴. Scholars are now attentive to the collective aspects of Pauline writing, as testified to by the discrete but clear presence of Tertius, the secretary at the end of the Roman epistle (Rm 16,22) who wrote it³⁵.

The French writer Annie Ernaux, in her milestone autobiography (2008), *Les Années*³⁶, adds a literary angle where her own “I” acquires collective aspects that she describes in the following way: “This ‘I’ that I employ here does not belong wholly to me, it is a place of thoughts, of desires, which I had to share with others. I am, in a way, that time which has passed through me”³⁷. With respect to digital culture projects, the phenomenon of a collective and porously auctorial “I” is increasing: the Romanian project *A collective memory 1950-2000* is an example thereof, standing at the crossroads of individual, familial and societal memories³⁸. Digital multimodal expressions can combine texts, images, sounds, and in doing so return orality to the foreground of culture³⁹.

Within this context, all the authorial “I”s, from the common citizen blogging to the most famous writer, historian or philosopher, are all exposed to the increasing pressures of the rise in algorithmic governance. Anticipating the wide spectrum of technological possibilities, some scientists and lawyers are already at work finding ways to protect us from potential *brainjacking* in the future: when hackers will try to take control of implants grafted into our brains⁴⁰! Given these possibilities, Antoinette Rouvroy⁴¹ explains that algorithmic governance has as its ultimate purpose to limit or even shut down the power of

34 Dettwiler, “L’école paulinienne”, p. 429.

35 Blanton, *Displacing Christian Origins*, p. 127: “The place of (a) Tertius in the biblical legacy remains to be fixed [...], and promises a return on an investment in the further analysis of the ancient (and modern) intertwining of religion and writing technologies of all sorts”.

36 Ernaux, *Les Années*.

37 *Libr-critique. La littérature dans toutes ses formes*, <<http://www.t-pas-net.com/libr-critique/dossier-annie-ernaux-3-annie-ernaux-cinq-avant-textes-des-annees/>> : “Ce ‘je’ que j’emploie ici ne m’appartient pas complètement, il est un lieu de pensées, de désirs, que j’ai dû partager avec autrui. Je ne suis, d’une certaine façon, que du temps qui a passé à travers moi” ; English translation by Brad Anderson.

38 *A collective memory 1950-2000*, <<http://www.memoriecolectiva.org>>.

39 See the example of this interview on *YouTube* : “Emmanuelle Riva, interview 1959”, *YouTube* 16 septembre 2009, <<https://www.youtube.com/watch?v=kRMaDYUhos4>>; for a theoretical background, Meizoz, *La Littérature “en personne”*.

40 Ienca, “Preserving the Right”, <<https://www.scientificamerican.com/article/preserving-the-right-to-cognitive-liberty/>>.

41 Antoinette Rouvroy is “docteur en sciences juridiques de l’Institut universitaire européen” (<https://directory.unamur.be/staff/arouvroy>).

individuals. However, these individuals can always claim this power, develop and practice it and become unpredictable⁴². The same does not easily apply to the porous and collective auctorial “I” that we are fast becoming; instead the inner self should be cared for and fostered: the *for intérieur*.

3.3 *In Quest of the Inner Self with Nathalie Sarraute*

The inner self, or *for intérieur* as presented in Chapter 2⁴³, might be the designated place of resistance to algorithmic governance, the locus where people can develop their power and unpredictability. Related to unspoken words and sensations⁴⁴, the inner self brings together what can (still) escape to the *for extérieur*: the external jurisdiction, according to the historical balance between *for extérieur* and *for intérieur*⁴⁵.

At the frontier of the inner self and the external jurisdiction, the “I” instead appears to be a “we”, inhabited by a “crowd of voices”⁴⁶, like the collective “I” of Ernaux’s writing. Consequently, it does not escape to the political dimension, strongly reminiscent of Sarraute’s biography and thinking⁴⁷ but seldom underlined. By wrestling with algorithmic governance, our inner selves are now facing the question: will such governance be able to withhold some traces of our inner selves from being immediately available externally? Technological innovations such as the MIT *AlterEgo*, “decoder of thoughts”⁴⁸, are raising such questions, but they also demonstrate that each of us still has many open choices available. To become conscious of our inner self, of its own world and

42 Rouvroy, “La vie n’est pas *donnée*”, p. 198 : “La cible ou le ‘projet’ de la gouvernementalité algorithmique ne serait plus, comme dans le biopouvoir décrit par Foucault, la folie, la maladie, le crime, la déviance, les enfants ou les pauvres, mais plutôt ce qui, des comportements possibles des personnes échapperait au calcul et à l’optimisation, c’est-à-dire, leur ‘puissance’. On peut définir cette ‘puissance’ comme ce dont ils sont capables mais dont on ne peut à aucun moment être assuré, c’est-à-dire leur capacité à ne pas être là où ils sont attendus, en somme : leur non-coïncidence avec tout ‘profilage’, toute ‘prédiction’. De cette puissance des sujets, dirons-nous, il ne peut être rendu compte par des chiffres, par des données, mais seulement par des mots et toujours dans l’après-coup, sur le mode de la fabrication singulière, ou de la ‘comédie’, ou encore de la rationalisation contrefactuelle, à contretemps, par laquelle les personnes, aussi déterminées et peu libres aient-elles été dans leurs choix et leurs actes, se rendent néanmoins ‘dignes de ce qui leur arrive’”.

43 Chapter 2, point 3.3.

44 Brée, “Le ‘for intérieur’”, p. 41.

45 Brée, “Le ‘for intérieur’”, p. 37.

46 Brée, “Le ‘for intérieur’”, p. 41.

47 See Chapter 2, p. 80.

48 MIT Media Lab, “AlterEgo”, <<https://youtu.be/RuUSc53Xpeg>>.

impact, represents a *voie royale* to counterbalance the digital porosity and collectivization in which the auctorial “I” is becoming increasingly embedded.

4 Facing the Heritage of the Books: Features that One Leaves, Transforms or Acquires

Section 4 attempts to present an overview, not exhaustive, but synthesized, of a complex topic⁴⁹: the future of the main features of printed books in digital writing. The features examined here are those that are the most evidently present in my intellectual journey over the last few years: the cover and its layout, the index, the footnote, referentiality, multimodality, and last but not least, the code. The central topic of the *corpus* of texts is reserved for Chapter 4, since it stands at the core of the question: how are the biblical Scriptures affected by the digital turn since they are *par excellence* a heteroclite corpus of texts?

4.1 *The Features One Leaves behind: the Cover and Its Layout*

The cover is generally our first physical contact with a book. It is an element we are losing in the digital forms of publishing, a jolt related to the rise of “material immaterial documents”, in the words of Olender⁵⁰. This loss and its consequences have been discussed in a previous study⁵¹, but it is worth recalling that, according to Jacques Derrida, to depart from paper is significant⁵². By progressively departing from regular contact with physical book covers, we are leaving behind an entire world, the physical structure of the book: “the flyleaf (or front and end sheets), the preliminary title page, the title page, the imprint, the back cover”⁵³, a world where French words have their own impact. Indeed, English speaks about *flyleaf*, whereas French uses *page de garde*. Our ambiguous relationship to paper and the cover seems to be summarized by these linguistic alternatives: *flyleaf* or *page de garde*.

Ambiguity is often present in our thoughts in the evolution of paper: Jacques Derrida concludes his thoughts on the topic by finally celebrating the freedom to depart from paper; twenty years later however, this perspective is no longer ecologically adequate⁵⁴:

49 See also notably the influence of design on the digital writing, Badouard – Longhi, “Débat public et écritures numériques”.

50 Olender, *Un fantôme*, p. 28.

51 Clivaz, “Covers and Corpus wanted”.

52 Derrida, “Paper of me, You Know...”, p. 42.

53 Sauvé, *Qu'est-ce qu'un livre ?*, p. 107; English translation by Brad Anderson.

54 About the digital ecological concern, see for example *W3C Community Group*, <<https://www.w3.org/community/wwca/>>.

On the other hand, I also suffer, to the point of suffocation, from too much paper, and this is another spleen. Another ecological sigh. How can we save the world from paper? And its own body? So I also dream of living paperless – and sometimes that sounds to my ears like a definition or “real life”, of the living part of life. [...] Let’s not count the books. So paper expels me – outside my home. It chases me off. This time, it’s an aut aut: paper or me⁵⁵.

The sensation of liberty is also present in the words of the ethicist Olivier Abel, and these are particularly useful when it comes to navigating the internet ocean: “the right to depart is the condition of the capacity to be bound. The political question will thus gradually become: ‘How can we stay together?’ when we can always become unbound?”⁵⁶. If we bid farewell to the physical covers and *pages de garde*, the question becomes how do we form links in the digital world? The “living part of life” pointed out by Derrida seems to be one of the major ways to consider new links. Indeed, the first data storages of DNA have been tested⁵⁷ and the metaphor “Human Library” is increasingly successful⁵⁸. Ray Bradbury has already illustrated in *Fahrenheit 451* the possibility of humans being used as a container for books⁵⁹. It remains debatable whether a world with fewer paper books and more digital publications will lead to a chaotic inferno or to the paradisiacal “living part of life” – but whatever the possibility, we are already on the road to this new world.

4.2 *The Features One Transforms: the Index and Referentiality*

Section 4.2 initially presents the way in which Olivier Le Deuff reconsiders the emergence of digital humanities through the century old topic of the index: to search repeatedly is the general action that defines DH⁶⁰. Le Deuff’s analysis culminates in affirming that the hypertext is an “architext” according to Genette’s vocabulary⁶¹. With Le Deuff, we can conclude that, materially speaking, electronic hypertextuality accomplishes the desire and the functions of architextuality that have been present for centuries since the use of *manicula* in ancient manuscripts.

55 Derrida, “Paper of me, You Know...”, p. 64.

56 Abel, “Essai sur la prise”, p. 114–115.

57 Goldman et al., “Towards practical, high-capacity”.

58 See *Living Library*, <<https://www.livinglibrary-so.ch/>>, and information on these websites: <<http://www.scich.org/de/einsatz-schweiz/freiwilliges-engagement/Projektgruppe-living-library/>>; <<https://www.livinglibrary-so.ch/%C3%BCber-uns/>>; <<https://www.facebook.com/events/1914065902239698/>>.

59 Bradbury, *Fahrenheit 451*, 1953. See Chapter 1, p. 19.

60 Le Deuff, *Les humanités digitales*, p. 35.

61 Le Deuff, *Les humanités digitales*, p. 40.

Referentiality is also a notion dating back to Antiquity⁶², but highly dependent on writing material and the conditions of information circulation. A decisive turn occurred at the beginning of modernity thanks to Etienne Pasquier and the *Recherches de la France* (1596), as Paul Veyne and Anthony Grafton have demonstrated⁶³. The rise of the footnote is a feature emblematic of Modern culture; interestingly, Jacques Derrida notes that computers tend to reintroduce orality in footnotes or annotations⁶⁴. In fact, the rapid increase in possibilities for accessing references and sources makes it clear that we have often been overly confident in the footnote as attesting to reality. Hyperlinks and quotability are currently major challenges in digital culture. These challenges are leading to the development of a sense of communal duty to maintaining the frontiers between reality and unreality according to Peirce's definition:

The very origin of the conception of reality shows that this conception essentially involves the notion of a COMMUNITY, without definite limits, and capable of an indefinite increase of knowledge. And so those two series of cognitions – the real and the unreal – consist of those which, at a time sufficiently future, the community will always continue to reaffirm; and of those which, under the same conditions, will ever after be denied⁶⁵.

4.3 *The New Features: Multimodality and Code*

The two first generations of digital humanities projects have seen interest and effort focused mainly on textuality, the central Humanities research activity according to Roberto Busa (2004)⁶⁶. However, for scholars such as Kathleen Fitzpatrick (2009) and Kenneth Goldsmith, multimodality and digital materiality have come to the fore:

What we are experiencing for the first time is the ability of language to alter all media, be it images, video, music, or text, something that represents a break with tradition and charts the path for new uses of language.

62 See notably Veyne, *Les Grecs ont-ils cru*.

63 Veyne, *Les Grecs ont-ils cru*, p. 18 ; Grafton, *The Footnote*, p. 142.

64 Derrida, "Ceci n'est pas", p. 13 : "l'ordinateur rend possible l'intégration fluide de la digression ou du rajout dans l'écriture linéaire".

65 Houser et alii (ed.), *The Essential Peirce*, vol. 1, p. 52.

66 Busa, "Foreword", <<http://www.digitalhumanities.org/companion/>> : "Humanities computing is precisely the automation of every possible analysis of human expression (therefore, it is exquisitely a 'humanistic' activity), in the widest sense of the word, from music to the theatre, from design and painting to phonetics, but whose nucleus remains the discourse of written texts".

Words are active and affective in concrete ways. You could say that this isn't writing, and, in the traditional sense, you'd be right. But this is where things get interesting: we aren't hammering away on typewriters; instead – focused all day on powerful machines with infinite possibilities, connected to networks with a number of equally infinite possibilities – the writer's role is being significantly challenged, expanded, and updated⁶⁷.

Section 4.3 thus presents different examples of multimodal digital production and editing tools. The new rhythm created by digital writing material influences cultural production and literature as exemplified by the recent essay by Marina Skalova, *Exploration du flux*⁶⁸, where the graphics in the last part of the book attempt to convey the fragmentary but continuous rhythm of digital expression⁶⁹. If multimodal expressions have always existed, digital culture fosters them in ways that we are just beginning to discover. Furthermore, we will need time to consider its diverse contributions to writing, images and sounds, including its ambiguity: where sounds can be manipulated and writing can have a policing role, according to Juliette Volcler and Philippe Artières⁷⁰. If we draw attention to electronic code, it becomes apparent that images do not have power over written signs in this language: indeed, the *Command-line interface*⁷¹ (CLI) is more exact and efficient than the *Graphical user interface*⁷² (GUI). As Goldsmith summarizes:

What we take to be graphics, sounds, and motion in our screen world is merely a thin skin under which resides miles and miles of language. Occasionally, as on my flight, the skin is punctured and, like getting a glimpse under the hood, we see that our digital world – our images, our film and video, our sound, our words, our information – is powered by language⁷³.

In front of code, the power of images is suddenly unmasked, and a new scribal world emerges. Consequently, Section 4.3 argues for the consideration of code as writing in the fullest sense of the word, as an interpretative gesture⁷⁴ that

67 Goldsmith, *Uncreative Writing*, p. 24.

68 Skalova, *Exploration du flux*.

69 Skalova, *Exploration du flux*, p. 53-66.

70 Volcler, *Le son comme arme*, 2011; Volcler, *Contrôle. Comment s'inventa l'art de la manipulation sonore*, 2017; Artières, *La police de l'écriture. L'invention de la délinquance graphique (1852-1945)*, 2013.

71 <https://en.wikipedia.org/wiki/Command-line_interface>.

72 <https://en.wikipedia.org/wiki/Graphical_user_interface>.

73 Goldsmith, *Uncreative Writing*, p. 17.

74 Fiormonte, "The Digital Humanities", p. 30 ; quoted Chapter 1, p. 26.

should already be taught at school⁷⁵. The UNESCO and INRIA project *Software Heritage*⁷⁶, which wishes to build an Alexandria library of source codes, represents an important symbolic step in this direction. The importance of code as a cultural notion can also be observed with respect to genetic code: there are numerous comparisons made by philosophers⁷⁷, scientists⁷⁸ and journalists⁷⁹ between electronic code and the DNA code. These comparisons contain assumptions that need to be examined because this particular fascination has still not diminished, but instead have regained significant momentum⁸⁰.

5 Conclusion: towards the Body, the Corpus

Section 5 reviews the main points of Chapter 3 and in doing so refocuses on the central question and hypothesis: is Derrida correct in considering the body and a new relationship to it as the horizon of new technologies? Do we indeed encounter the body at the extension limits of this new technology, digital writing? When French is reluctant to translate *embed* as a single word, does it mean that something is changing profoundly between the former cultural – and Christian – pattern of *incarnation* towards embedding?

All the elements gathered together in this chapter seek to answer these questions, in particular: the return of orality to the foreground, with its physical impact; the necessity of overcoming our repulsion when faced with the Heraclea stone, by considering the way in which digital objects affect us, such as smartphones when we write on them; the porosity and the collectivization of the auctorial “I” by this new kind of *khôra*, the internet; the impact of new technologies like *AlterEgo* that could transform us into “human libraries”; the rise of multimodality that embeds digital writing with senses and corporality; finally, the code itself that enriches DNA writing, including the first DNA information storage experiences.

75 See Clivaz, “De l’encre aux pixels”, <<https://blogs.letemps.ch/claire-clivaz/2017/08/11/de-l-encre-aux-pixels-la-mue-de-lecriture-scientifique/>>.

76 *Software heritage*, <<https://www.softwareheritage.org/>>.

77 Burri, “Entretien: Peter Sloterdijk”, <<https://www.letemps.ch/culture/peter-sloterdijk-on-toujours-elimine-surhommes>>.

78 Kiefer, “Nouveaux concepts : tout se complique”, p. 816.

79 Meier, “Der Code ist unsere Wahrheit”, p. 41.

80 See for example the 17th Wright colloquium organized in Geneva in 2016 and entitled *Decoding the book of life. The genomic revolution*, <<http://www.colloque.ch/2016/en/who-we-are/>>.