

Technoscience – Domination – Resistance (Lyotard, Haraway).

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1. Introduction

The exhibition *Les Immatériaux* was shown at the Centre Pompidou in Paris in the spring of 1985. It was a large and quite unique show which presented exhibits from artistic, scientific, media and everyday contexts, and which through these exhibits sought to give a sense of the socio-cultural changes taking place under what one of the curators, the philosopher Jean-François Lyotard, had previously described as the *postmodern condition*.¹

Throughout the second half of his career, in the 1970s–1990s, Lyotard engaged with art and artists, publishing books about the likes of Marcel Duchamp, Daniel Buren, Karel Appel, and writing essays about the work of many other artists. Despite this extensive philosophical interest in the arts, *Les Immatériaux* remained the only exhibition project which Lyotard was actively involved in as a curator. There is however evidence that in the years following this exhibition, in the late 1980s, Lyotard was thinking about the theme for another exhibition. The starting point for these considerations was the notion of "resistance," of *résistance*.²

In the thinking of Lyotard, this notion of resistance forms a multi-faceted phenomenon. An important dimension is its relevance in the context of the new technologies and the "technosciences." These had featured prominently in *Les Immatériaux* – not least at the initiative of the co-curator and design theoretician Thierry Chaput –, and Lyotard struggled with their role and significance throughout the decade, and without finally resolving the issue. The question that Lyotard raised in the mid-1980s, and that I want to raise again here at xCoAx in 2022, is whether it is possible to develop an artistic practice that, while making use of digital technologies, resists the inscriptions of the cybernetic and capitalist regimes in which these technologies manifest, and from which they result.

Lyotard remained sceptical about the efficacy of such a resistance, but as we will see, he was seriously debating the possibility of evading the tendencies of capture, inherent in what he called the "technoscience of domination." In order to accentuate this discussion, I want to contrast Lyotard's position with that of Donna Haraway who, around the same time in the 1980s, was also thinking intensely about the relationship between technology and social power, which she addressed in her famous *Cyborg Manifesto* as the "informatics of domination." I hope that this confrontation of Lyotard and Haraway can help us think through the conceptual and ethical caveats of an artistic practice that deliberately positions itself in the framework of these technologies.

In our discussion, here in Coimbra in 2022, I want to focus on these historical positions for two reasons: on the one hand, to affirm the necessity to reformulate these considerations in the framework of our own, contemporary situation; and thus to think about how the conditions of asking that question have changed, and to urge us to apply the same kind of critical rigour to the "postmodern" condition of today. But on the other hand, these historical positions also serve to highlight the fact that our current situation is in fact continuous with what was already observable in the 1980s. For those of you who are in doubt about the continued relevance of these historical analyses, I want to quote a passage from Haraway's *Cyborg Manifesto*, from the section called, "Women in the integrated circuit." Haraway lists a whole set of ways in which everyday lives are entangled with technologies, the home, the work place, the state, the hospital – and also the "market":

Market: Women's continuing consumptive work, newly targeted to buy the profusion of new production from the new technologies (~~especially as the competitive race among industrialized and industrializing nations to avoid dangerous mass unemployment necessitates finding ever bigger new markets for ever less clearly needed commodities~~); bimodal buying power, coupled with

¹ Jean-François Lyotard, *The Postmodern Condition* [1979]. – This paper was presented on 8 July 2022, at xCoAx 2022, 10th Conference on Computation, Communication, Aesthetics & X, Coimbra, Portugal. I'm grateful to the organisers for the invitation to develop these thoughts, and to Kiff Bamford and Sergio Meijide Casas for their comments on an earlier draft.

² The French artist Philippe Parreno remembers that during a lecture at the independent art school IHEAP (presumably on 14 June 1989, Palais de Tokyo, Paris), Lyotard mentioned that he was considering a "second exhibition" which would have been entitled "*Résistance(s)*". Parreno related these memories in 2000–2002 to Hans Ulrich Obrist, who published a book of their conversations in 2008 with this remark, from where the rumour was taken up a.o. by Birnbaum/Wallenstein (*Spacing Philosophy*, 2019) and Hui ("Exhibiting and Sensibilizing", 2019). An unpublished document that was found recently – the handwritten eulogy that Lyotard wrote on the occasion of Thierry Chaput's funeral in 1990 – confirms that Lyotard had in fact considered the theme of *résistance* for an exhibition which he, as he says in the eulogy, wouldn't have wanted to do without Chaput, and which they had no occasion to discuss.

advertising target of the numerous affluent groups and neglect of the previous mass markets; growing importance of informal markets in labour and commodities parallel to high-tech, affluent market structures; surveillance systems through electronic funds transfer; intensified market abstraction (commodification) of experience, resulting in ineffective utopian or equivalent cynical theories of community; extreme mobility (abstraction) of marketing/financing systems; interpenetration of sexual and labour markets; intensified sexualization of abstracted and alienated consumption.³

If someone wanted to develop a critical analysis of the so-called Social Media today, this 1985 remark (on "intensified market abstraction (commodification) of experience, resulting in ineffective utopian or equivalent cynical theories of community") might yet be a good place to start... – So let's look at the arguments that Lyotard and Haraway developed with regard to the conjunction of new technologies and domination.

2. Lyotard and the "technoscience of domination"

In order to approach Lyotard's critique of the "technoscience of domination," I will first give a brief summary and then go into a discussion of the different elements of this critique.

(a.) Initially, "domination" is here the mastery of the modern human subject over things, and over nature; related to this form of domination is the political formation of the hegemonic state.

(b.) An important factor in the development of this relation of domination is the logic of capitalism: it objectifies nature, and by integrating everything into its economic calculus, capital interlaces scientific exploration, technical development, and economic exploitation; the modern "technoscience" that Lyotard speaks about is this entanglement of technological, scientific and economic practices which become increasingly interdependent and whose logic and justification appear increasingly fused.

(c.) As this modernist project unfolds, the scientific understanding of the dominion deepens: of the organic and the inorganic world, of the universe and the particle structures of all matter; this knowledge affords the realisation that the human, as a part of nature, is not only the cognisant and ruling subject, but also one of the objects of these sciences; the domination that is enabled by technoscience, and that was once presumed to be a singular instrument of the modern subject, turns out to be a force that dominates that very subject, treating it like an object similar to all other objects of the dominion.

From here Lyotard poses two questions: one is, whether there can be an alternative politics of interaction, a politics in which technoscience does not operate as a means of domination, but as a means of relations; and the second question is, what forms of resistance might be enacted against the "technoscience of domination" and its regimes.

Before we go on, a word of caution: what I am presenting here is a synopsis of comments that Lyotard made over a period of several years, and on a topical field which he was thinking about without yet having settled on all of its aspects. Therefore, between the different contributions to this debate, we find inconsistencies and, most importantly, real open questions which we should continue to ask.

I would like to read a few passages from the discourse where Lyotard develops the notion of the "technoscience of domination" (in French, he uses *technoscience de la domination*, and *technoscience de la interaction*). In March 1984, one year before the opening of *Les Immatériaux* and six months into its preparation, he speaks about the conceptual framework for the exhibition. An important distinction that he starts out from, and that is implicit in the following passage, is the linguistic difference between data and phrase – which roughly translates as the difference between "information" in the sense of information theory, and "meaning" in the sense of the use of words in natural human language. In modernity, Lyotard claims, phrase and meaning are increasingly absorbed into an information-theoretical model of data:

"When modernity presupposes that everything speaks, this means that so long as we can connect to it, capture it, translate it and interpret it, there is no fundamental difference between data and a phrase; there is no fundamental difference between a phenomenon of displacement in an electromagnetic spectrum and a logical proposition, and given this fact, in this face-to-face relation

³ Donna Haraway: "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" [1985]. In *Simians, Cyborgs, and Women*. London: Free Association Books, 1991, 170–171. These listings formed part of the original version of the *Cyborg Manifesto* and were left out in more recent re-publications of the text.

to a universe that is his to dominate – a heroic relation, I would say – in order to make himself the master of it, man must become something else entirely: the human subject becomes no longer a subject but, I would say, one case among others, albeit a case which retains this privilege, ~~until proven otherwise (which is extremely improbable): that we can well imagine that there is no similar case in the whole universe, subject to a complete inventory being made.~~ Yet it is just one case among the many multiple interactions that constitute the universe. You see that, from this “immaterial” point of view, we have emphasised – and this is a part of the work of mourning – a kind of counter-figure that takes shape within the figure of modernity, a counter-figure within which man does not play the role of the master. One might call this figure postmodern, insofar as it has always been present in modernity, but it might be the very completion of the technoscientific project of modernity. ~~And as this project is destabilised, it allows this counter-figure to appear more clearly than before. I would say that we could call it postmodern insofar as this counter-figure brings with it a sort of disappointment in regard to the project of domination, and that it consists in mourning it; but I would say that this makes the figure rather cheerful because, once mourning is over, then happiness comes. But of course this counter-figure is uncertain. And above all, I would say that what this exhibition is interested in – probably the most important thing – is that we know very well that there was a metaphysics corresponding to the technoscience of domination, which was the metaphysics of the subject, the metaphysics of Descartes and of all thinking of the subject up to and including the twentieth century; but that we are not sure what kind of metaphysics could be appropriate to the technoscience of interaction. Not only what metaphysics, what thought, but also what politics, since it is easy to see what the politics of the subject corresponding to the technoscience of domination was: precisely the politics of state power, I would say. If not that of the totalitarian state then in any case that of the hegemonic state – a state that, moreover, allows, before its very eyes, the development of capital as the truth of the metaphysics of will and domination. But this metaphysics is becoming less and less pertinent – I think many scientists are aware of this – for contemporary technosciences and contemporary politics alike. I don’t mean to say that the hegemony of the state and of capital has disappeared – far from it, alas – but that in a certain sense it was already destroyed, that we no longer expect any good, any justice, [34] from these figures, and that, consequently, it falls to us to find a thought and a practice within the framework of the technoscience of interaction – one which, in short, would break from the thought and the practice of science, of technology, and of domination. And in a certain sense, it is this formidable problem that *Les Immatériaux* tries to pose. More formidable yet would be the claim that, in this exhibition, we have to pose the problem that is linked to postmodernity – that is to say, the question of what kind of political power is compatible with a generalised figure of interaction.”⁴~~

We should note that this talk, that remained unpublished during Lyotard's lifetime, appears to be the only occasion where he actually used this formulation, “technoscience of domination.”⁵ He spoke, however, on several other occasions about the various tropes of this critique, starting from his book of 1979, *The Postmodern Condition*, and its elaborate renunciation of the notion of technological “performance,” and the repeated critique of an information-theoretical understanding of “communication.”

In order to substantiate our understanding of the workings of the technosciences, whence Lyotard develops the question of resistance, let us also look at a talk that Lyotard held a year later, in April 1985, at a symposium at the Centre Pompidou during the *Immatériaux* exhibition. Lyotard speaks about the conflation of mind and matter, in the medium of modern physics, and about the fact that technological complexity is not a product of the human mind, but of matter itself:

An immaterialist materialism, if it is true that matter is energy and mind is contained vibration.
One of the implications of this current of thinking is that it ought to deal another blow to what I

⁴ Jean-François Lyotard, *After Six Months of Work*, 1984/2015, 33–34; the same set of ideas (technoscience, immaterials, questioning human, against modern mastery) also comes up in the second preparatory concept text for the exhibition, issued in April 1984, yet without using the formulation “technoscience of domination;” see CGP-AP 1977001W130_009.

⁵ For Lyotard's usage of the term “technoscience,” see Massimiliano Simons: “Jean-François Lyotard and Postmodern Technoscience.” In: Alberto Romele, François-David Sebbah (eds.): *Philosophy & Technology*. Special issue of *Philosophy of Technology and French Thought*, Vol. 35, No. 2, June 2022. – It would be interesting to know from where Lyotard took, in March 1984, this formulation “of domination.” Throughout his discussions of the concept (which Lyotard presumably first uses in 1981, in the text “An Answer to the Question: What is the Postmodern,” first published in Italian [*Alfabeta*, No. 32, 1981], then in French [*Critique*, No. 419, 1982], and reprinted in *The Postmodern Explained* [1986/1993]), *technoscience* is associated with a sense of modern mastery, but nowhere else do we find this particular formulation, *technoscience de la domination*.

shall call human narcissism. Freud already listed three famous ones: man is not the centre of the cosmos (Copernicus), is not the first living creature (Darwin), is not the master of meaning (Freud himself). Through contemporary techno-science, s/he learns that s/he does not have the monopoly of mind, that is of complexification, but that complexification is not inscribed as a destiny in matter, but as possible, and that it takes place, at random, but intelligibly, well before him/herself. S/he learns in particular that his/her own science is in its turn a complexification of matter, in which, so to speak, energy itself comes to be reflected, without humans necessarily getting any benefit from this. And that thus s/he must not consider him/herself as an origin or as a result, but as a transformer ensuring, through techno-science, arts, economic development, cultures and the new memorization they involve, a supplement of complexity in the universe.⁶

The realisation that the human subject does not dominate, control and master the world, but is itself an aspect or one of the forces in this field of forces, suggests that we can translate the notion of "domination" into its opposite, the human as "supplement". The notion of a *modern* "technoscience of domination" is thus retorted by the diagnosis of *postmodern* non-mastery.

As promised, I want to arrive, a little later, at the question of resistance against this technoscientific regime. In order to pave the way towards the important role that Lyotard accords to writing, understood in an extended sense of *écriture*, I want to illustrate the effects of such technoscientific domination with the example of language. In an interview with the Italian philosopher Giairo Daghini, early in 1984, Lyotard speaks about the motivation for writing the book *The Differend* which he had published in 1983. For Lyotard, it is a crucial aspect of language that it can be used to express a diversity of claims, thus forming the very basis of contradiction and antagonism. In his view, this possibility to contradict, to say something that runs against what has been said before, is now critically undermined by the "commodification of language":

"For example, the "teaching crisis" at all levels and in all "industrialised" countries, the deprofessionalisation of the teaching function, the changes in natural languages ("basic English", media idioms, etc.) are symptoms of this modification. Secondly, it must be stressed that the commodification of language itself is based on communicative ideology. [In this ideology,] a sentence is a message. It conveys information about a referent. This information is information only if the sender and the receiver of the message are in possession of the same code, or have an interface ensuring the translation of the message from one code to the other. Conclusion: what cannot be translated is not language. [-] It is against this ideology, among others, that *The Differend* is written. The emphasis is on the heterogeneity of sentence regimes. [...] Language is not one, homogeneous, [...] there are regimes and kinds of sentences that are precisely untranslatable into each other, and [...] the difference which arises from this heterogeneity, must be respected, listened to, expected, cultivated. It is the basis of a resistance to communicational trivialisation."⁷

For Lyotard, the arts were an important field of experimentation and of potential resistance, which is why in October 1986, a year after the *Immatériaux* experience, he asked whether the new technologies employed in the arts might "not also help to refine our anamnestic resistance?", a resistance that *works through*, rather than simply repeating or projecting.⁸ But Lyotard immediately went on to shed doubt on such a "vague hope, which is too dialectical to take seriously."

In order to better grasp the reasons for this doubt, and to understand how Lyotard sees the technoscientific regimes enacted, let us look at Lyotard's talk at a symposium on art and communication, held in October 1985, a few months after the exhibition. Here Lyotard confronts the notion of communication in the aesthetic theories of the philosophers Immanuel Kant and Theodor W. Adorno, through whose theories Lyotard asks whether art "communicates" at all, or whether it is rather experienced, and conveys sense, without communication. He emphasises the "here and now" of aesthetic experience and asks, with regard to technological art:

"How can there be an *aesthetic* feeling issuing from calculated *re*-presentation alone? How could the traces of the conceptual determination of the forms proposed by the new *techne* leave free play of reflexive judgement which constitutes aesthetic pleasure? How could the communicability

⁶ Jean-François Lyotard: "Matter and Time", 1985/1988, *The Inhuman*, 45.

⁷ Jean-François Lyotard: "Langage, temps et travail. Entretien avec Giairo Daghini", *Change International*, No. 2, May 1984, 42–47, qu. p. 46–47.

⁸ Jean-François Lyotard: "Logos and Techne, or Telegraphy" [1986], *The Inhuman*, 1988, 57 (the English translation uses "breaching" and "scanning" for *frayage* and *balayage*).

constitutive of this pleasure, which remains potential, promised and not affected, not be excluded by the conceptual, argumentative and techno-scientific – 'realistic' – determination of what is communicated in the product of these new technologies?"⁹

For our own question about the workings of technoscientific domination, we can deduce that, according to Lyotard, an artistic content conveyed by the new technologies is determined by the conceptual, argumentative and technoscientific conditions of these technologies, and that it inherits the ideological "realism" of their application.

For Lyotard, these conceptual conditions undermine the aesthetic experience of art which, according to a notion that he takes from Adorno, communicates to its recipients without referring to concepts – a thought that is also the source for the paradoxical title of Lyotard's talk, "Something like: 'Communication ... without communication'." Lyotard asks:

"The question I want to dramatize is this: what about communication without concept at a time when, precisely, the 'products' of technologies applied to art cannot occur without the massive and hegemonic intervention of the concept?"¹⁰

Note the word "hegemonic" which we earlier encountered with regard to the sovereign modern state, constituting the political dimension of the modern mastery of the world. What is hegemonic here is the *intervention of the concept*, and in the course of his talk Lyotard will add to this two further determinants of technoscientific domination, namely the logic of the *calculus*, and the disruption of *space and time*.

Lyotard suggests that the basis of this crisis of aesthetics is the emergence of calculus and combinatorics since the 17th century, as well as the crisis of space and time:

"The question raised by the new technologies in connection with their relation to art is that of the here-and-now. What does 'here' mean on the phone, on television, at the receiver of an electronic telescope? And the 'now'? Does not the 'tele-' element necessarily destroy presence, the 'here-and-now' of the forms and their 'carnal' reception? What is a place, a moment, not anchored in the immediate 'passion' of what happens? Is a computer in any way here and now? Can anything *happen* with it? Can anything happen *to* it?"¹¹

Even though Lyotard remained sceptical – and perhaps we can also say hopeless – as regards the aesthetic and resistant potentials of the new technologies, I believe that these were real questions for him, and not just rhetorical ones. Asking them was a philosophical effort which was, during these years, articulated through the effort of *Les Immatériaux*. Both were ways of addressing the question:

"Can the uprooting which is linked to the new technology promise us an emancipation?"¹²

Towards the end of my talk, I will return to the role that the arts can play in developing resistant strategies against the technoscientific regimes. But before that I would like to take you on a small detour and look at the way in which biologist and science theorist Donna Haraway, around the same time in the mid-1980s, was conceptualising what she called the "informatics of domination." Her critique of the technosciences will make it easier for us to evaluate Lyotard's own contribution to this debate.

⁹ Jean-François Lyotard: "Something like: 'Communication ... without communication'" [1985], *The Inhuman*, 1988, 108–118, qu. 112. – We can only speculate about what Lyotard may have been thinking about more concretely, when he talked about "art, technology and communication". It is conceivable that he had projects in mind like those presented at *Les Immatériaux* – Like Jean-Louis Boissier's interactive installation *Le Bus*, or Jacques-Elie Chabert and Camille Philibert's non-linear Minitel novel, *L'Objet perdu*, or the automated composition of animated narratives in Marc Denjean's *Contes et chansons modulaires*.

¹⁰ *The Inhuman*, 1988/1991, 109.

¹¹ *The Inhuman*, 1988/1991, 118. A related concern for Lyotard is the problem of how what happens can be sensed: "What is attacked [by the new technologies] would be space and time as forms of the donation of what happens." (112) In this context, Lyotard summons Kant, Hölderlin, and Heidegger, whose concept of the *Gestell* he relates to the notion of *installation* (114, 117). Lyotard develops the concept of "passibility" (*passibilité*), a form of receptivity that he contrasts with the notion of action, and relates to a critique of the concept of interactivity (110–111, cf. also 116–118).

¹² *The Inhuman*, 1988/1991, 116. At the end of this text, "Communication ... without Communication," Lyotard also reflects on the concept of "passibility," a type of aesthetic receptiveness that he distinguishes from both passivity and interactivity, and he develops a critique of interactivity (see p. 116–118).

3. Haraway and the "informatics of domination"

Donna Haraway's analysis of the contemporary condition, expounded in her seminal text, "A Cyborg Manifesto" (1985/1991), bears striking similarities to Lyotard's description of "the postmodern condition." Haraway is more directly concerned with political questions from the perspective of a socialist feminist; her focus in the "Cyborg Manifesto" is on the situation of women, though besides sex and gender she also considers resistance to other forms of classification, like race, class, and the modernist, Enlightenment idea of the human subject. Like Lyotard, Haraway speaks about the crisis of the subject of Enlightenment, about the erosion of boundaries between human and non-human, between human and technology, which culminates in her proposition of the cyborg as a new myth, or model of identification. Yet, the conclusion that Haraway draws from this analysis is drastically different from Lyotard's: whereas Lyotard remains sceptical about the new developments and speaks of a sense of mourning, of postmodern *chagrin* about the loss caused by the changes that the technosciences form part of, Haraway embraces these changes and sees their effects as potential for improving the social conditions of women and others who have been excluded from the (imagined) position of mastery.¹³

What Haraway calls the "informatics of domination", again, comes close to what Lyotard described as the "technoscience of domination." To characterise it, Haraway lists aspects like simulation, cybernetics, biotechnologies, genetic engineering, modularisation, all of which are part of the "scary new networks" through which, in her view, the "informatics of domination" is replacing "the comfortable old hierarchical dominations."¹⁴

At the beginning of my talk I already quoted Haraway's description of how the traditional position of women is transitioning from "family, market, factory," into the "Integrated Circuit" of a cybernetic society with its demands on behaviour, appearance and consumption. And in her comparison of the old regime with the new one, Haraway explicitly pitches the new "informatics of domination" against the old "white capitalist patriarchy."¹⁵

"The actual situation of women is their integration/exploitation into a world system of production/reproduction and communication called the informatics of domination."¹⁶

For Haraway, with these continuing effects of domination, there is reason for anger, rage and frustration, but not for sadness (or for Lyotard's *chagrin*). The challenge for Haraway in this situation isn't to bemoan or reject technology, but to appropriate and use the transformations that it engenders. Her answer to Lyotard's question: "Can the uprooting which is linked to the new technology promise us an emancipation?", is "Yes."¹⁷

"One important route for reconstructing socialist-feminist politics is through theory and practice addressed to the social relations of science and technology, including crucially the systems of myth and meanings structuring our imaginations. The cyborg is a kind of disassembled and reassembled, postmodern collective and personal self. This is the self feminists must code."¹⁷

For Haraway, "domination" designates a social relation between humans, or between humans and non-humans, a relation of domination that for Haraway is both structural and actual. In contrast, for Lyotard "domination" is a quasi-systemic effect of technoscientific regimes, of the potential hegemony of concept and calculus, and the disruption of space and time. For him, therefore, resistance is a practice that turns against the "technical" infrastructures and institutions, whereas for Haraway the resistance aims at the transformation of particular social relations that these infrastructures and institutions engender, it is a cyborgian resistance within the infrastructures, which necessarily implies the employment of technoscientific know-how. For Haraway, the

¹³ For a comparison of Lyotard's and Haraway's positions on questions of sex and gender, see Margret Grebowicz, Emily Zakin: "On Promising and Destructive Monsters. Reading Lyotard's 'She'." In: M. Grebowicz (ed.): *Gender after Lyotard*. Albany/NY: State University of New York Press, 2007, 13–26.

¹⁴ Haraway 1985/1991, 161. See also Haraway's "Animal Sociology and a Natural Economy of the Body Politic: A Political Physiology of Dominance," in *ibid.*, 7–20; and *Modest_Witness @ Second_Millennium. FemaleMan_Meets_OncoMouse. Feminism and Technoscience*. New York, London: Routledge, 1997.

¹⁵ Cf. Haraway 1985/1991, 162, 170–172.

¹⁶ *Ibid.*, 163.

¹⁷ *Ibid.* For a contemporaneous feminist analysis of the social relations of science and technology, see Judy Wajcman (1991). It is remarkable that such a critique of social relations is all but absent from the exhibition *Les Immatériaux* and from the discourse around it – a fact that was also bemoaned by some of the team members in an interview held shortly before the opening; see "La Règle du jeu: Matérialiser Les Immatériaux. Entretien avec l'équipe du C.C.I." In Élie Théofilakis (ed.): *Modernes, et après? "Les Immatériaux"*. Paris: Editions Autrement, 1985, 15–20, esp. p. 17.

cyborg holds a potential for emancipation *because* it is enscribed into (or *with*¹⁸) the informatics of domination.¹⁹ For Lyotard, this technoscientific enscription scars the body, disables and obliterates it.²⁰ Unlike the feminist cyborg which Haraway imagines, the postmodern subject that Lyotard conceives of is not an intervening agent, but a supplementary transformer of forces.

4. Aesthetics of resistance

Such a dichotomous differentiation between these two theoretical positions, represented here by the names of Haraway and Lyotard, is to some extent rhetorical. We are looking at a specific moment in time when two intellectuals are considering a particular set of problems – one of them a sixty years old French philosopher based in Paris with frequent teaching assignment in the United States, including the University of California in San Diego, the other a US-American feminist historian of science, twenty years younger, working at the University of California in Santa Cruz and actively engaging with the current French philosophy. Both are seeking to develop a position towards, and a critique of, the new and emergent technoscientific regimes which will, some decades later, become the dramatic banalities of digital culture. Their thinking follows different paths, but they are speaking about similar phenomena and, as we saw, they agree about some of the basics in their analysis of the contemporary condition. I therefore imagine the differences between their respective positions not to be antagonistic, but complementary. And if they didn't have this conversation at the time, in the 1980s – if it had happened, it would have most likely taken place in California –, at least we can today imagine how they would have both benefited from the dialogue simulated here.

Haraway imagines resistance as different forms of intervening into the structures, the fabric in which subjectivity, social relations and institutions manifest – interventions in the form of coding, weaving, and writing. Here are a few samples from the manual of resistance that is the "Cyborg Manifesto":

"Feminist cyborg stories have the task of recoding communication and intelligence to subvert command and control."²¹

Haraway emphasises the ambivalence of the technical systems which configure the practice of affirmative managers and of oppositional feminists alike:

"The entire universe of objects that can be known scientifically must be formulated as problems in communications engineering (for the managers) or theories of the text (for those who would resist). Both are cyborg semiologies."²²

But she is looking to describe procedures and to invent narratives that follow a different procedural logic:

¹⁸ For the notion of inscriptions and prescription, see Lyotard's chapter on Franz Kafka's story *In the Penal Colony*, in *Lectures d'Enfance* (1991).

¹⁹ Haraway's deconstruction of nature and technology transforms technology, "so that," as Grebowicz and Zakin have argued, "the technology which Haraway urges feminists to embrace is something other, something more than '[Lyotard's] inhuman of [technoscientific] development.'" (Grebowicz/Zakin 2007, 18.)

²⁰ Lyotard reveals a certain penchant towards this obliteration, since it undermines the fallacies of modernism: "I would say that we could call it postmodern insofar as this counter-figure brings with it a sort of disappointment in regard to the project of domination, and that it consists in mourning it; but I would say that this makes the figure rather cheerful because, once mourning is over, then happiness comes. But of course this counter-figure is uncertain." (Lyotard, "After Six Months," 33) But we can see how, unlike Haraway, Lyotard remains fundamentally sceptical towards technoscience. We can perhaps see them united in "the struggle for language and the struggle against perfect communication, against the one code that translates all meaning perfectly," but we can hardly imagine Lyotard adopting "cyborg politics" which "insist on noise and advocate pollution, rejoicing in the illegitimate fusions of animal and machine." (Haraway, 1985/1991, 176; see also below) Instead, the dominant tendency in Lyotard's reflexions is more negative, like for instance in an interview with Bernard Marcadé from 1988: "I understand the Nietzschean lesson well: it is true that there is no more philosophy, in the sense that metaphysics has become impossible as a discourse, for the simple reason that it is realized in the contemporary world. It has become reality. What [Martin] Heidegger calls *Gestell* [enframing], what [Jürgen] Habermas calls *technoscience*, what I myself have attempted, in the name of provocation, to call the *postmodern*, is the realization of metaphysics in everyday life. Metaphysics is a general physics, where one thinks everything in terms of the harnessing of energy, of total mobilization, of the setting-to-work of energies, be they physical, cosmological, human... We are immersed in a Leibniz without God, realized ... *mathesis universalis* [universal science]. Everything is calculated, and numbers themselves go crazy ..." (French version publ. in *Artpress* 1988, Engl. in *Cultural Politics*, Vol. 9, No. 2, July 2013, p. 217).

²¹ Haraway, *Cyborg Manifesto* (1985/1991), 175.

²² *Ibid.*, 162–163.

"I prefer a network ideological image, suggesting the profusion of spaces and identities and the permeability of boundaries in the personal body and the body politic. 'Networking' is both a feminist practice and a multinational corporate strategy – weaving is for oppositional cyborgs."²³

For both Haraway and Lyotard, the practice of writing and a critique of communication form the bedrock of their conceptions of resistance. As Donna Haraway writes:

"Writing is pre-eminently the technology of cyborgs, etched surfaces of the late twentieth century. Cyborg politics is the struggle for language and the struggle against perfect communication, against the one code that translates all meaning perfectly, the central dogma of phallogocentrism. That is why cyborg politics insist on noise and advocate pollution, rejoicing in the illegitimate fusions of animal and machine."²⁴

Again, there are significant differences between Lyotard and Haraway in the nuances. Haraway seeks a form of resistance that can be operated by everybody, while Lyotard speaks about resistance as an exceptional and extraordinary practice. When considering the resistant potential of writing, Haraway takes examples from feminist science fiction literature,²⁵ while Lyotard reverts to examples from the literary avantgarde, like Stéphane Mallarmé, James Joyce, and Gertrude Stein, and visual artists like Paul Cézanne and Marcel Duchamp.

In order to render Lyotard's notion of resistance more precisely, and by way of conclusion, I want to return to two aspects, firstly the speculation about the ideas that may have sparked Lyotard's thinking about another exhibition, and then secondly the discussion about artistic practices that employ new technologies, and their resistant potential.

It is not surprising to find Lyotard, in 1989, considering "resistance" as a theme for an exhibition, given that there are many related remarks in his writings of the mid-1980s, published especially in the books *The Postmodern Explained* (1986/1993) and *The Inhuman* (1988/1991). Throughout the essays and lecture manuscripts collected in these volumes, the notion of resistance has a positive connotation, it is summoned – I give you a short, non-exhaustive list – against the failure of modernity, against totalitarianism, against pragmatism and dogmatism, against synthesis, simplification and so-called "safe values," against communicational trivialisation, and against the inhumanity of capitalism. Lyotard recurrently posits the body as a "line of resistance," but even more frequently he speaks about the resistance constituted by writing, understood in the broad sense of *écriture* which includes different forms of artistic expression. In a text about George Orwell's novel *1984*, Lyotard picks up on the fact that the hero, Winston, takes up writing a diary. This self-exploratory writing practice in the face of totalitarian control comes to epitomise Lyotard's understanding of resistance. – If we were to speculate about what Lyotard may have thought about when thinking about an exhibition on "resistance," we can only presume that, in the conversation with Chaput, that never happened, about the exhibition that never happened, ideas like these would perhaps have been the first points of departure.²⁶

As regards, finally, the role and resistant potentials of new technologies, Lyotard wavers between two positions. On the one hand, he remains fundamentally sceptical about technologies, reiterating the necessary spatio-temporal immediacy of aesthetic experiences, and denouncing what he calls "telegraphic" inscriptions at a distance. And even where the aesthetics eludes this immediacy towards the sublime, or towards infancy, the line of flight he envisages, the line of resistance is not technological.

On the other hand, Lyotard sometimes asserts that the potentials of *écriture* are not restricted to traditional forms of artistic practice, but are relevant for art in general, because it is possible to "write" on different supports, including electronic ones.²⁷ To the contrary, Lyotard occasionally affirms that the "line of resistance" should be followed by taking a keen interest in the new technologies:

²³ Ibid., 170.

²⁴ Ibid., 176.

²⁵ cf. 178–180.

²⁶ Arguably, elements of such a resistance to technoscientific regimes were already present in *Les Immatériaux*, both in some of the exhibits, and more generally in the scenographic strategies that Lyotard and the curatorial team developed. – For the conjectures by Daniel Birnbaum and Sven-Olof Wallenstein for what Lyotard may have considered for an exhibition about the theme of "resistance," see their *Spacing Philosophy*. Berlin: Sternberg Press, 2019, p. 19, 202, 234–236.

²⁷ See *Le Postmoderne expliqué aux enfants*, (*Traverses*, No. 33–34, 1985, p. 65). On another occasion, in the text "Conservation and Colour" (Oct. 1986/1988), Lyotard refers to Bernard Stiegler's analysis of how any culture is dependent on modes of inscription, and thus on an *écriture* which is always technical (IH, 1988/1991, 148–149).

"By following this line, one does not shut oneself away in an ivory tower, one does not turn one's back on the new means of expression with which contemporary science and technology equip us. On the contrary, we seek, with them and through them, to bear witness to what alone counts, the childhood of the encounter, the welcome given to the marvel that something happens, the respect for the event."²⁸

This is Lyotard speaking in October 1984, at the peak of the preparations for *Les Immatériaux*. Exactly two years later, and after the *Immatériaux* experience, in October 1986, Lyotard again speaks about the resistant potential inherent in writing, in *écriture*, and again returns to the question of the new technologies:

"We envisage this writing as passing or anamnesis in both writers and artists [...] as a resistance ([...] like that of Winston in Orwell's *1984*) ~~to the syntheses of breaching and scanning~~. A resistance to wily programmes and coarse telegrams. The whole question is this: is the passage possible, will it be possible with, or allowed by, the new mode of inscription and memoration that characterizes the new technologies? Do they not impose syntheses, and syntheses conceived still more intimately in the soul than any earlier technology has done? But by that very fact, do they not also help to refine our anamnestic resistance? I'll stop on this vague hope, which is too dialectical to take seriously. All this remains to be thought out, tried out."²⁹

To me, this sounds ambivalent and uncertain, but it does also sounds as though Lyotard did not want to just abandon the possibility that an artistic practice employing these new technologies might in fact yet "help to refine our anamnestic resistance," and that "the uprooting which is linked to the new technology [might in fact yet] promise us an emancipation."

²⁸ *Le Postmoderne expliqué aux enfants*, (here qu. *Traverses*, No. 33–34, 1985, p. 65) (*en suivant cette ligne, on ne s'enferme pas dans une tour d'ivoire, on ne tourne pas le dos aux nouveaux moyens d'expression dont les sciences et les techniques contemporaines nous dotent. On cherche, au contraire, avec eux et par eux, à témoigner de ce qui seul compte, l'enfance de la rencontre, l'accueil fait à la merveille qu'il arrive (quelque chose), le respect pour l'événement.*) Lyotard affirms this more positive attitude in the text "Obedience" ([June 1986], IH, 1988/1991, 165–181), in which he discusses the use of the new technologies in music and sound art.

²⁹ "Logos and Techne, or Telegraphy" [1986], IH, 1988/1991, 56 (transl. modified, AB).