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Hesselberth, P.; Houwen, J.; Peeren, E.; de Vos, R.

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Hesselberth, P.; Houwen, J.J.M.; Peeren, E.; Vos, R. de; Plaitano, G.; Venturini, S.; Villa, P.

Pepita Hesselberth, *Film and Literary Studies, Centre for the Arts in Society, Universiteit Leiden*
Janna Houwen, *Film and Literary Studies, Universiteit Leiden*
Esther Peeren, *Universiteit van Amsterdam*
Ruby de Vos, *Rijksuniversiteit Groningen*

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Abstract

This paper reflects on what the notion of legibility might entail in a machinic world, in which any form of cultural expression necessarily partakes in ever-more complex processes of (mass) mediation. What is and is not (conceived as) legible from a cultural, literary, cinematic, curatorial, historical, material, juridical, computational, affective, human, technological and machinic point of view? What are the new conditions, forms, and technologies of il/legibility in a machinic world? What new ways of reading (and new kinds of readers) are emerging in relation to old and new media, what do they imply about the modes and aims of il/legibility, and what kinds of agency, subjectivation and individuation do they entail, afford or presuppose? In unpacking some of these and related questions concerning the il/legibility of our present-day culture, this paper calls attention to the urgency of asking what makes something legible or illegible to whom (or, indeed, what); what kinds of reading, processing or navigating such il/legibility facilitates or forecloses; and what role film and critical (media) theory, and the humanities at large, can (still) play in tackling these and related issues.

The question of il/legibility

This essay picks up on some of the issues that we address, at more length, in an edited volume entitled *Legibility in the Age of Signs and Machines* that came out with Brill in 2018.[1] The topic of the volume resonates strongly with the subject of this year's Film Forum on "Moving Pictures, Living Machines." For what we are interested in are precisely issues of automation, representation, and the question concerning the legibility of the image/machine today. What we present here are parts of the introduction.
In *Margins of Philosophy*, Jacques Derrida notes that

> *it is a mistake to believe in the immediate and ahistorical legibility of a philosophical argument, just as it is a mistake to believe that without a prerequisite and highly complex elaboration one may submit a metaphysical text to any grid of scientific deciphering, be it linguistic, psychoanalytic, or other.*[2]

This warning pertains not only to the legibility of philosophical arguments and metaphysical texts, but to the legibility of any form of cultural expression, from literary texts, films and artworks to social structures, beliefs and practices, from performances and language to binary code and algorithms. All legibility is historically, culturally and materially specific, and has a political and ethical dimension. Consequently, what is required is a complex elaboration of what makes something legible – or, alternatively, illegible – and to whom or what, as well as a careful account of what kinds of reading, processing or navigating this il/legibility facilitates or forecloses.

To enable such an elaboration or account, it is first necessary to specify what legibility is. The *Oxford English Dictionary* defines "legible" as that which is clear enough to read; that which is available for reading, comprehensible, and enjoyable or interesting to read; and that which is easily understood. The primary association with clarity indicates that the legible should be presented in an unobstructed, recognizable manner; a badly typeset or handwritten text may be illegible, as may a corrupted digital file. Legibility is also tied to comprehension, enjoyment, interest and ease of understanding. While it is significant that comprehension is highlighted through its reiteration as "ease of understanding," it is possible to imagine a reading generating enjoyment and interest without comprehension, for example when someone unable to read musical notes encounters a score. Similarly, the legible as clear enough to read does not necessarily imply understanding; a clearly presented text in a language one does not speak can, after all, be read in a basic sense of identifying letters, words, sentences and paragraphs (pattern recognition). In this regard, it is instructive to also look at the *OED* entry on "readable," which has "legible" as its first definition, suggesting the two are synonyms. However, the rest of the definitions, while alike, are not identical, tying the readable first to the decipherable or understandable; then to what is clear, easy or enjoyable to read; and, finally, to what is capable of being processed or machine-readable (to the extent that one can speak of such a thing at all). Although here the quality of being clear is subsumed to that of being decipherable or understandable, like the legible, the readable is not restricted to that which can be understood (in the sense of being processed cognitively or hermeneutically), but includes what can be processed machinically and what generates affect.

When considering legibility, therefore, we cannot take the term's meaning for granted, and one cannot equate it with readability. The essays in our volume *Legibility in the Age of Signs and Machines* probe the question how the notion of legibility functions in relation to interpretation, or questions of how to read for meaning, and how machinic processes have come to complicate such notions of il/legibility. For perhaps more important than the question *how* to read in the age of signs and machines, becomes the question: what is legible, in what ways and to whom or what; what is, should or can(not) be the object of critical inquiry (whether we call this inquiry reading, analyzing, navigating, processing or computing) in the age of signs and machines; and what role is there for film, media and critical theory, still, to probe these questions?

Representation and automation: legibility in the age of signs and machines

In choosing the second part of our title, then, we draw on Maurizio Lazzarato's acclaimed 2014 book *Signs and Machines: Capitalism and the Production of Subjectivity*.[3] A follow-up to his self-proclaimed "homage to Félix Guattari" entitled "'Semiotic Pluralism' and the New Government of Signs,"[4] *Signs and Machines* unpacks Guattari's claim that "capital is a semiotic operator" and outlines its implications for critical theory. In order to explain how signs function in power apparatuses and the production of subjectivity today, Lazzarato claims, we need to move beyond the dualism of signifier and signified, and develop a theory of semiotics that can account for the distinct registers in which semiotic components operate under the conditions of global capitalism and our increasingly media-saturated culture. It is worth quoting Lazzarato at some length here:

> The first is the register of "representation" and "signification" or "production of meaning," both of which are organized by signifying semiotics [in particular language] with the purpose of producing the "subject," the "individual," the "I." The second is the machinic register organized by a-signifying semiotics [like stock market indices, currency, mathematical equations, data, diagrams, algorithms, code, scientific functions, statistics, accounting and so on], which "can bring into play signs which have an additional symbolic or signifying effect, but whose actual functioning is neither symbolic nor signifying."[5]

The production of subjectivity today, Lazzarato claims, takes place at the intersection between these two modalities: on the one hand social subjection, on the other hand machinic enslavement. Where the mechanisms of social subjection resort to a semiotics that equips us with subjectivity and turns us into individuals

by assigning us to pre-established social places and roles, from which we then feel necessarily alienated, the mechanisms of machinic enslavement – ironically and precisely – work to dismantle the individuated project. Its operations and forces are at once pre-personal, in that it aims to capture and activate affects, emotions and perceptions, and supra-personal, in that it makes these elements "function like components or cogs in the se-miotic machine of capital."[6] Unlike in the first regime, in the second, signs act as "sign-operators." Rather than mobilizing representation and taking the subject as referent, they enter directly into the flows and functioning of capitalism's social and technical machines, thus bypassing consciousness and representation. Where signi-fying signs refer above all to other signs, a-signifying signs, Lazzarato claims, "act directly on the real."[7] This is possible because the machine fundamentally disregards distinctions between subjects and objects, words and things, human and non-human operators.

It was Karl Marx who first used the term "machine" in this way. In his famous "Fragment on Machines" from *Grundrisse*,[8] he reflects on the – detrimental implications of the – historical transformation of the machine from a tool or instrument for the individual worker into a form of fixed capital, that is, a means for producing surplus-value through the exploitation (rather than the reduction) of labor. Significantly, the machine Marx speaks of – and Lazzarato, Deleuze, Guattari and many others have expanded on – is more than a technical machinery, device or technique. It is the complex technological, intellectual and above all social assemblage that objectifies (and ultimately automates) all human skill, expertise and knowledge into the machine, thus taking it away from the individual worker, who starts to function as an instrument (or indeed cog) of the ma-chine itself, part and parcel of its complex socio-technical assemblage.

That we have come a long way since the publication of Marx's treatise, the pertinence of which seems ever greater in the age of robotics, digital labor and the mass-digitization of almost every aspect of our everyday lives,[9] becomes clear when we consider how this technical, political, social and cultural machine is envisioned in popular culture, from Charlie Chaplin's *Modern Times* (1936) to, say, the Wachowski's *The Matrix* (1999). Where Chaplin's little tramp is portrayed as, at once, an extension of and cog in the machines of industrial labor, the protagonists of *The Matrix*, Ari Folman's *The Congress* (2013) and Benjamin Dickinson's *Creative Control* (2015) appear first and foremost as the battery (in *The Matrix*) and raw material of the machines of semio-capitalism – their desire and mental capacity objectified, captured in the machine; their bodies exploit-ed and/or left behind.[10]

The caveats of popular culture notwithstanding, the machinic, rationalized and technocratic logic of con-temporary culture, Lazzarato and others have pointed out, poses a significant challenge for critical theory, so much so that some have deemed it necessary to contemplate the end(s) of critique.[11] For where critical theory has traditionally paid a great deal of attention to the processes and language through which we are socially subjected, Lazzarato argues, it has largely (but, we would like to add, not entirely) been blind to the machinic nature of our present-day culture.[12]

We are sympathetic to Lazzarato's claim that we are in need of a different, or at least additional theory of se-miotics, and to his idea that critical theory has its blind spots when it comes to the legibility of cultural signs and apparatuses, and to the crisis in the production of subjectivity today. For if we are indeed surrounded by "sign machines [that] operate 'prior' and 'next' to signification, producing a 'sense without meaning,' an 'operational sense'," unearthing and redirecting these operations will require new methods and attitudes, originating not only in individual or even collective subjects but in a convergence/assemblage of forces that do not split into "living" and "dead," subjective and objective, but are all variously "animated" (physical and sub-physical forces of matter, human and subhuman forces of "body and mind," machine forces, the power of signs, etc.).[13] As Frederik Tygstrup writes: "Following Lazzarato, we could say that contemporary cultural analysis is not about reading what the objects we study are saying about something extraneous to them, but about reading how they retain a particular function in such contexts."[14]

At the same time, as Lazzarato also insists, established forms of reading remain necessary, since "asignifying semiotics remain more or less dependent on signifying semiotics" that "are used and exploited as techniques for control and management of the deterritorialization undermining established communities, social relations, politics, and their former modes of subjectivation."[15]

The more fundamental question thus concerns the constitution of legibility itself: what appears to us as legible (as signifying or a-signifying sign systems), and what remains illegible? Answering this requires thinking the relation, and arguable incommensurability, between the legible and the illegible. One way to do this is by taking the relation between the visible and the invisible as an analogy. In *The Gift of Death*, Derrida distinguishes two orders of the invisible: the *absolute invisible*, which is inaccessible to the facility of sight, and the *visible in-visible*, which is hidden from sight but potentially accessible to it.[16] To this, Akira Lippit has added the *avisual* as that which is "presented to vision, there to be seen," but nevertheless remains unseen.[17] Paradoxically, what is *avisual* is at the same time *hypervisible*: it is excessively visible in a way that makes the eyes not want to take it in. The example Lippit uses is that of Ralph Ellison's *The Invisible Man* (1995 [1954]), in which the black man is unseen precisely because the difference that negatively marks him, the color of his skin, is so conspicuous.

Are these forms of (in)visibility paralleled by similar forms of il/legibility? The absolute illegible is difficult to imagine, as legibility is not a circumscribed capacity like (human) sight. What is illegible today could conceivably be made legible tomorrow, as writing in ancient languages has been deciphered over time. So being illegible appears to always be relative and thus not absolutely illegible but legible-illegible. However, in the digital age, it is more and more common for the legible to, quite quickly, become illegible as technology evolves. While this illegibility still falls within the realm of the legible-illegible, as the fact that something was once legible suggests it could be made legible again, it does introduce a new anxiety around legibility, which can no longer be assumed to last (far) into the future, as previous, analog forms of legibility could. What we might call the a-legible comes into play with regard to particular historical realities, such as colonial or neoliberal ones, that are not illegible at all but remain (deliberately or not) unread. The hyperlegible, in turn, could be used to denote something of which certain elements are taken to be particularly easy to read in a predetermined manner according to fixed frames of legibility, leading to it only ever being read in this way (or, in the case of the a-legible, to it not being read at all).

Machines, metaphors, and the opacity of events: on the role of the humanities

The chapters in *Legibility in the Age of Signs and Machines* deal with what is and is not (conceived as) legible from cultural, literary, cinematic, curatorial, historical, material, juridical, computational, affective, human, technological and machinic perspectives. They ask: what are the new conditions, forms and technologies of il/legibility in a machinic world? How does cultural and historical difference impact on legibility, which has often been considered in terms of general (even universal) accessibility and assimilability? What new ways of reading (and new kinds of readers) are emerging in relation to old and new media – from distant, surface and descriptive reading to automated perception and data mining? What do these new ways of reading imply about the modes and aims of il/legibility, and what kinds of agency and subjectivation do they afford or presuppose? What values are attached to il/legibility in museum and archiving practices? How does the legible relate to the law (to which it has been etymologically linked) and to the sensible or affective?

To probe these and related questions over the il/legibility of our present-day culture, *Legibility in the Age of Signs and Machines* focusses on four thematic clusters: desire, justice, heritage and machines. Especially the section on machines is relevant here.

Writing on topics as varying as computation and programming,[18] networked connectivity and image circulation,[19] robotics and cybernetics,[20] and big data and machine reading,[21] the essays of David Gauthier, Sean Cubitt, Yasco Horsman, and Inge van de Ven in this section respectively, all call attention to the use of metaphors to describe machines and machinic processes, thereby confronting us with the knottiness of notions like "computer language" (Gauthier), "personhood" (Horsman), "networks" and "connectivity" (Cubitt), and, indeed, "reading" itself (van de Ven). As Sean Cubitt reminds us in his chapter, while "the application of a technical metaphor to non-human realities" may be illuminating in its own performativity, it is also "just that: a metaphor" – and "as metaphor, it is a translation, a communication of incommensurable terms."[22]

It is this issue of incommensurability that lies at the heart of these chapters, and arguably, of the book as a whole. Thoroughly embedded in the discourses on computation, assemblages, cybernetics and big data, the chapters place emphasis on the socio-cultural, machinic and technological transformations that give rise to them. Yet, each one of them, also points to the significance of critical theory and the Humanities in probing these phenomena, claiming that the task at hand is first and foremost to identify and expose what remains illegible in the machinic processes at work in our present-day culture and society, so as to unmask – through these legible illegibilities – the power dynamics at play. For, as Cubitt reminds us, "Humanities alone are equipped to identify what is truly illegible, a task we perform precisely by reading, using every technique we have, eclectically, to find an entry into the opacity of events." It is precisely here, on what could be referred to as the sliding scale between the legible and the illegible, that the political-aesthetic task of film, media, and critical theory lies today. We are therefore exceptionally grateful to the organizers of Film Forum 2019 for choosing *Automation, Animation and the Imitation of Life in Cinema and Media* as the main topic of this year's Film Forum.

Notes

1 Pepita Hesselberth, Janna Houwen, Esther Peeren, Ruby de Vos (eds.), *Legibility in the Age of Signs and Machines*, Brill, Leiden 2018. We are grateful to Brill for allowing us to publish this excerpt here, and want to express our sincere thanks to the many contributors to the volume for pushing our thoughts often in new and unexpected directions.

2 Jacques Derrida, *The Gift of Death*, trans. David Wills, University of Chicago Press, Chicago 2007 (1992), p. 188.

3 Maurizio Lazzarato, *Signs and Machines: Capitalism and the Production of Subjectivity*, trans. Joshua David Jordan, Semiotext(e), South Pasadena 2014.

4 Maurizio Lazzarato, "'Semiotic Pluralism' and the New Government of Signs: Homage to Félix Guattari," trans. Mary O'Neill, *Transversal: EIPCP Multilingual Webjournal*, June 2006, http://eipcp.net/transversal/0107/lazzarato/en, last visit 12 May 2017.

5 *Ibidem*; see also: Maurizio Lazzarato, *Signs and Machines*, cit., p. 39.

6 Maurizio Lazzarato, "'Semiotic Pluralism' and the New Government of Signs: Homage to Félix Guattari," cit.

7 Maurizio Lazzarato, *Signs and Machines*, cit., p. 40.

8 Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy*, trans. Martin Nicolaus, Penguin Classics. London 1993 (first published in 1938, written between 1857 and 1858).

9 The example of robotics is instructive here. In the weeks leading up to the writing of the first draft of this it was announced that Uber is planning to buy 24,000 self-driving cars (Pollard 2017) and that Walmart has silently started to replace their cleaning personnel with self-driving scrub-machines (Cutter 2017). Largely crafted on the competences and skills of the people it seeks to replace and that are now captured in large data aggregates (think of the connective data chip in your car), platform capitalism thrives on the "free labor" (Terranova) that makes our waged labor redundant. Chip Cutter, "It's Not Just Google and Tesla: Walmart Is Quietly Testing a Self-Driving Vehicle, but This One Scrubs Floors," in *LinkedIn*, 20 November 2017, Web. 15 December 2017; Niklas Pollard, "Volvo Cars to Supply Uber with up to 24,000 Self-Driving Cars," in *Reuters*, 20 November 2017, Web. 15 December 2017; Tiziana Terranova, *Free Labor*, in Trebor Scholz (ed.), *Digital Labor: The Internet as Playground and Factory*, Routledge, New York 2012, pp. 33-57. Also see Trebor Scholz (ed.), *Digital Labor: The Internet as Playground and Factory*, Routledge, New York 2012; Trebor Scholz, *Uberworked and Underpaid: How Workers Are Disrupting the Digital Economy*, Polity, Cambridge 2016.

10 The irony of our own disregard of the machinic processes at work in broaching this example does not escape us but is discussed elsewhere, see: Pepita Hesselberth, "Creative Control: Digital Labour, Superimposition, Datafication, and the Image of Uncertainty," in *Digital Creativity*, vol. 28, no. 4, 2017, pp. 1-16.

11 See for example: Bruno Latour, "Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern," in *Critical Inquiry*, vol. 30, no. 2, 2004, pp. 225-48; Antoinette

Rouvroy, *Algorithmic Governmentality and the End(s) of Critique*, in Mireille Hildebrandt, Katja de Vries (eds.), *Privacy, Due Process and the Computational Turn: The Philosophy of Law Meets the Philosophy of Technology*, Routledge, New York 2013, pp. 143-68.

[12]   It should be pointed out that Lazzarato here upholds a rather narrow definition of critical theory, which is mostly due to his critique of the (im)possibility of political and existential rupture in certain forms of critical theory that lies at the heart of *Signs and Machines*. Thus, while he directs his metaphorical arrows predominantly at Badiou, Rancière, Hardt and Negri, Virno, Žižek and Butler, he finds clear allies in Guattari, Deleuze, Foucault, Latour and Bakhtin. Though his claim that "machines and machinic assemblages can be found everywhere except in contemporary critical theory" may thus hold true, to some extent, for the theorists he confronts, it largely disregards the most recent developments in critical media and network theory, as well as the impact his self-identified allies have already had on some more recent (but perhaps less established) debates in critical theory (Maurizio Lazzarato, *Signs and Machines*, cit., p. 13).

[13]   *Idem*, p. 27.

[14]   Frederik Tygstrup, *Representational Assemblages: Forms, Concerns, Affects*, in Pepita Hesselberth, Janna Houwen, Esther Peeren, Ruby de Vos (eds.), *Legibility in the Age of Signs and Machines*, cit., pp. 263-274, 267.

[15]   Maurizio Lazzarato, *Signs and Machines*, cit., pp. 40, 42.

[16]   Jacques Derrida, *The Gift of Death*, cit., p. 90.

[17]   Akira Mizuta Lippit, *Atomic Light (Shadow Optics)*, University of Minnesota Press, Minneapolis 2005, p. 32.

[18]   David Gauthier, *Machine-Language and the Illegibility of the Zwischen*, in Pepita Hesselberth, Janna Houwen, Esther Peeren, Ruby de Vos (eds.), *Legibility in the Age of Signs and Machines*, cit., pp. 147-165.

[19]   Sean Cubitt, *Connectivity, Legibility and the Mass Image*, in Pepita Hesselberth, Janna Houwen, Esther Peeren, Ruby de Vos (eds.), *Legibility in the Age of Signs and Machines*, cit., pp. 166-179.

[20]   Yasco Horsman, *OK, Computer? Understanding Cybernetic Personhood*, in Pepita Hesselberth, Janna Houwen, Esther Peeren, Ruby de Vos (eds.), *Legibility in the Age of Signs and Machines*, cit., pp. 133-146.

[21]   Inge van de Ven, *Too Much to Read? Negotiating (Il)legibility Between Close and Distant Reading*, in Pepita Hesselberth, Janna Houwen, Esther Peeren, Ruby de Vos (eds.), *Legibility in the Age of Signs and Machines*, cit., pp. 180-197.

[22]   Sean Cubitt, *Connectivity, Legibility and the Mass Image*, cit., p. 177.