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Abstract: This article argues that Harun Farocki's *Workers Leaving the Factory* and *Counter-Music*, produced in 1995 and 2004 respectively, embody the passage from a representational to a non-representational account of labour. On the one hand, *Workers Leaving the Factory* puts forth a thorough analysis of the connection between cinema and industrial labour, which attempts to show that the latter remains under-represented by the former. On the other hand, *Counter-Music* can be read as a non-representational account of labour that systematically explores the role of machines in contemporary capitalism. Hence the passage from a non-representational to a representational approach to labour can be interpreted as a broader reflection upon the transformation of labour in a post-industrial context. To develop this interpretation, this article suggests that there is a strong complicity between Gilles Deleuze and Félix Guattari's notion of machinic surplus value and Harun Farocki's depiction of vision machines in *Counter-Music*.

Keywords: Harun Farocki, cinema, video installation, Marx, Deleuze & Guattari, machinic surplus value, ideology, power, images

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1. Introduction

A recurring theme in Harun Farocki's films and video installations is the evolution of labour and its representation. As Richard Langston (2016, 9) puts it, Farocki's work "wrestles with the evolution of ways of seeing [in relation to] the historical transformation of labour-power as it morphed from handwork to machine work to data work". Even though the question of labour can be said to be present in Farocki's entire oeuvre, some of his works treat the issue in a particularly explicit and systematic manner. Examples of this are the films *Workers Leaving the Factory* (1995), *In Comparison* (2009), the video installation *Counter-Music* (2004), and the collaborative project *Labour in a Single Shot* (2011-2015).

This article focuses on the film *Workers Leaving the Factory* and the video installation *Counter-Music*. Its main argument is that these two works, produced by Harun Farocki in 1995 and 2004 respectively, embody the passage from a representational to a non-representational account of labour. On the one hand, *Workers Leaving the*



Factory puts forth a thorough analysis of the connection between cinema and industrial labour which attempts to show that the latter remains under-represented by the former. On the other hand, *Counter-Music* can be read as a non-representational account of labour which systematically explores the role of machines in contemporary capitalism. Accordingly, the passage from a non-representational to a representational approach to labour appears as a broader reflection upon the transformation of labour in a post-industrial context. To develop this interpretation, this article suggests that there is a strong complicity between Gilles Deleuze and Félix Guattari's notion of machinic surplus value and Harun Farocki's depiction of vision machines in *Counter-Music*.

The first section introduces Deleuze and Guattari's reinterpretation of Karl Marx's concept of surplus value. To this end, this section contends that a new definition of machines is required. Unlike the traditional Marxist contention that machines produce no value, Deleuze and Guattari assert that in order to understand the production of surplus value in post-industrial capitalism, Marx's theory of surplus value needs to be "corrected" by introducing the category of "machinic surplus value" (2004a, 255). The second section analyses *Workers Leaving the Factory* from the standpoint of labour. In this film, Farocki reflects upon the mutual exclusion between cinema and the factory and the gradual eviction of the worker from industrial labour. The third section uses the notions of "operational images" and "vision machines" in order to interpret *Counter-Music*. By reading this installation through the lens of Deleuze and Guattari's concept of machinic surplus value, the section contends that the non-representational approach to labour developed in *Counter-Music* offers a more adequate understanding of labour in a post-industrial context.

2. Machinic Surplus Value

According to Marx, technical machines produce no value (1976, 438; 1973, 701). Their only economic function is to reduce the amount of necessary labour time required to produce each commodity and thus increase the portion of surplus value appropriated by the capitalist. This leads to a paradoxical situation in which more and more technology is being deployed in order to increase the ratio of surplus value while simultaneously eliminating the only true source of value, that is, human labour.¹ Contrary to this, Deleuze and Guattari introduce the controversial claim according to which it is no longer possible to sustain that machines produce no value in post-industrial capitalism:

[How can one] maintain human surplus value as the basis for capitalist production, while recognizing that machines too work or produce value, that they have always worked, and that they work more and more in proportion to man, who thus ceases to be a constituent part of the production process, in order to become adjacent to this process? (2004a, 252)

¹ For a thorough defence of Marx's position, see Caffentzis (1997).



Deleuze and Guattari contend that the answer to this question requires a reconceptualisation of the concept of machine as well as the category of surplus value. Firstly, Deleuze and Guattari challenge the traditional concept of machine understood as a mechanism, a tool, that is, a means to achieve a given result. In Marx's account, a machine consists of three parts: "the motor mechanism, the transmitting mechanism, and finally the tool or working machine" (1982, 494). From this perspective, the machine "is a mechanism that, after being set in motion, performs with its tools the same operations as the worker formerly did with similar tools" (1982, 495). For Marx, then, a machine replaces a fragment of an already simplified labour process, rendering the worker redundant. This means that the development of a given machine is the direct consequence of the division of labour within the workshop.² According to Deleuze and Guattari, this definition of the machine as a tool that mediates a labour process can be traced back to the Greek root *mekhane* which can be understood as "device, means". For Deleuze and Guattari, however, the definition of machine as mediation presupposes a subject that actively carries out the mediation between the machine and its object. So instead they introduce a definition of machines that refers to any assemblage that connects, disconnects and regulates flows. Furthermore, as Matteo Pasquinelli has pointed out (2015, 58), Deleuze and Guattari's novel concept of machine must be understood in relation to the notion of augmentation as contained in the German root *mach* (power). Pasquinelli suggests that "impressed by this etymology and in accord with Marx", Deleuze and Guattari's concept of machine can be defined "as an apparatus to accumulate and amplify a given flow, whereas device, tool and medium would be more appropriate to describe just a translation or extension of that given flow (energy, labour, information, etc.)" (2015, 58).³ In this sense, the concept of machine seems to be closer to the question of a surplus (an augmentation of a given flow) than of a mechanism (that mediates and transmits a given energy).

Secondly, Deleuze and Guattari argue that in order to understand how machines can produce surplus value, a reconceptualisation of Marx's notion of surplus value becomes necessary. More specifically, these authors suggest that the problem of valorisation in post-industrial capitalism "can only be viewed under the conditions of the transformation of the surplus value of code into a surplus value of flux" (2004a, 253). This means that Deleuze and Guattari address Marx's theory of surplus value by splitting the notion in two: on the one hand a surplus value of code; on the other, a

² Marx develops the relation between machinery and division of labour in his book *The Poverty of Philosophy* (1995). Here, Marx challenges Proudhon's theory according to which machinery represents the antithesis of the division of labour (1995, 150). For Marx, a machine is the putting in motion of the instruments of labour (already separated by the division of labour within the workshop) by the employment of natural forces (1995, 151). In this specific section, Marx quotes Babbage's explanation of how the division of labour provides the material ground for any machine: "when, by the division of labour, each particular operation has been simplified to the use of a single instrument, the linking up of all these instruments, set in motion by a single engine, constitutes a machine" (Babbage, quoted in Marx, 1995, 151).

³ For an extended analysis of the notion of machine in Deleuze and Guattari, see Gerald Raunig's book *A Thousand Machines* (2010).



surplus value of flux. As Matteo Pasquinelli (2015, 57) puts it, Deleuze and Guattari's controversial reinterpretation of Marx's notion of surplus value refers "to the process of transformation of general intellect into constant capital", that is, the transformation of a surplus value of code (knowledge) into a surplus value of flow (profit).

For Deleuze and Guattari, the aim of every society is to organise flows of desire. Ultimately, there are two ways in which such organisation can occur: qualitatively or quantitatively (Holland 1999, 64). In this sense, Deleuze and Guattari's distinction between two different notions of surplus value (a surplus value of code and surplus value of flux) is based on the distinction between a qualitative (symbolical) and quantitative (economic) organisation of flows. Non-capitalist societies, they argue, organise flows of desire by coding them, namely by fixing them to stable surfaces of inscription. In this regard, non-capitalist societies produce surplus value of code, which means that "social codes determine what is of value and therefore worth accumulating" (Holland 1999, 64). In contrast to non-capitalist societies, capitalism produces surplus value of flux. This means that in capitalist societies the category of value does not refer to fixed codes but to an abstract, deterritorialised measure. Therefore, capitalist surplus value is not produced by accumulating meaningful objects, but depends on a strictly quantitative operation that creates a difference between the quantity of capital invested and the quantity of capital that returns (Deleuze and Guattari 2004a, 248). In the capitalist social machine, the production of surplus value does not depend on the qualitative character of what is produced, but on the quantitative difference (the augmentation) between the input flow (the money invested in the production of a commodity) and the output flow (the money that returns as profit).⁴

Nevertheless, it is important to point out that for Deleuze and Guattari the distinction between surplus value of code and surplus value of flux is merely analytical. In reality, the two flows operate as intertwined aspects of capitalist production of surplus value:

In defining precapitalist regimes by a surplus of code, and capitalism by a generalized decoding that converted this surplus of code into a surplus of flux, we were presenting things in a summary fashion, we were still acting as though the matter were settled once and for all, at the dawn of

⁴ According to Deleuze and Guattari, the production of surplus value in capitalism depends on the asymmetrical relation between two flows of money, namely a "flow of the means of payment" which "goes into the pocket of the wage earner, and "flows of financing" entered "on the balance sheet of a commercial enterprise" (2004a, 248-9). The problem is that money functions as a surface of inscription that imposes a common analytical unit to both flows and conceals the asymmetrical power relations which ground the dualism between the purchase of labour power and the realisation of surplus value. It is important to note that conceptually this distinction between two flows of money derives from Marx's distinction between labour power and labour process. On the one hand, the flow of money that works as means of payment corresponds to the buying and selling of labour power in the job market. On the other, the flow of money produced by the selling of commodities corresponds to the value produced by the actualisation of the labour power in the labour process and its later realisation in the market.

a capitalism that had lost all code value. This is not the case however.
(2004a, 253)

Despite substituting surplus value of flux for surplus value of code as the general aim of the production process, capitalism still requires the latter in order to ensure the production of the former. To explain how a surplus value of code complements the production of a surplus value of flux in contemporary capitalism, Deleuze and Guattari use the example of technology. They argue that technical machines presuppose specific flows of code which “are both interior and exterior to the machine, forming the elements of a technology and even a science” (2004a, 253). With the historical development of technical machines, the flows of code necessary to operate them become increasingly complex. Whereas a simple machine or tool depends almost completely on the ability of the worker, a cybernetic machine operates through an extremely complex flow of code that is completely alien to the user.⁵ For Deleuze and Guattari, capitalism has deterritorialised the flows of code to such a degree that the cybernetic machine has been able to absorb them “in its body or its structure as a field of forces, while depending on a science and a technology, on a so-called intellectual labour distinct from the manual labour of the worker” (2004a, 253). This means that cybernetic machines absorb deterritorialised flows of intellectual labour to the same extent that industrial machines absorb deterritorialised manual labour. In a way that resembles the reinterpretation of Marx put forth by authors such as Romano Alquati (1962), Antonio Negri (1999), Maurizio Lazzarato (1996), and Paolo Virno (2004), Deleuze and Guattari contend that in post-industrial capitalism “knowledge, information, and specialised education are just as much parts of capital (‘knowledge capital’) as is the most elementary labour of the worker” (2004a, 255).⁶

By introducing the concepts of surplus value of code and surplus value of flux, Deleuze and Guattari question the traditional opposition between living labour and machines. Additionally, they suggest that in post-industrial societies, technical machines are absorbing the decoded flows of code and putting them at the service of a new axiomatic of decoded flows: the world capitalist market. This axiomatic, which subsumes all the technical and scientific flows of code that organise the productive process, is “much severer than all the scientific axiomatics, much severer too than all the old codes and overcodes that have disappeared” (2004a, 254). This means that the productive powers unleashed by the development of science and technology are reterritorialised for the sake of capital. As Deleuze and Guattari explain, what happens is that

⁵ As Carlo Vercellone (2007, 19) puts it, modern industry is characterised by the gradual “parcelling out and disqualification” of the labour process and by the increasing complexity of the knowledge that becomes accumulated in the shape of fixed capital.

⁶ For an overview of the shared ground between Deleuze and Guattari and Italian Operaismo, see Matteo Pasquinelli’s article *Italian Operaismo and the Information Machine* (2015); chapter four in Nicholas Thoburn’s book *Deleuze, Marx and Politics* (2003); and the first chapter of Maurizio Lazzarato’s *Signs and Machines: Capitalism and the Production of Subjectivity* (2014).



the flows of code that are ‘liberated’ in science and technics by the capitalist regime engender a machinic surplus value that does not directly depend on science and technics themselves, but on capital – a surplus value that is added to human surplus value and that comes to correct the relative diminution of the latter, *both of them constituting the whole of the surplus value of flux that characterises the system.* (2004a, 255)

Deleuze and Guattari introduce the concept of “machinic surplus value” as a way of “correcting” Marx’s concept of surplus value and thus offering a more suitable explanation of the role of machines in post-industrial capitalism. They write: “the definition of surplus value must be modified in terms of the machinic surplus value of constant capital, which distinguishes itself from the human surplus value of variable capital and from the nonmeasurable nature of this aggregate of surplus value of flux” (2004a, 258). Machinic surplus value is produced by the labour process carried out by constant capital, which itself has developed “along with automation and productivity” (2004a, 252-53).⁷

The concept of machinic surplus value challenges the traditional understanding of the organic composition of capital which clearly demarcates living labour from the dead labour of machines. Put differently, Deleuze and Guattari contend that in post-industrial capitalism the concepts of constant and variable capital become an obsolete framework to explain the relation between labour, value and technology.⁸ For Deleuze and Guattari, these notions need to be replaced by an understanding of capitalism that takes into account the distinction between smooth and striated capital:

The present-day accelerated forms of the circulation of capital are making the distinctions between constant and variable capital, and even fixed and circulating capital, increasingly relative; the essential thing is instead the distinction between striated capital and smooth capital, and the way in which the former gives rise to the latter through complexes that cut across territories and States. (2004b, 543)

⁷ The notion of machinic surplus value makes it possible to further develop the connection between Deleuze and Guattari’s reading of Marx and of Italian post-Marxism. In both cases there is an attempt to explain the productive role of technology in a post-industrial context. The questions that guide both of these approaches are: how does intellectual labour become objectified as fixed capital? How does post-Fordism challenge the traditional opposition between living labour and dead technical machines? For an extended discussion on the intersection between Italian post-Marxism and Deleuze and Guattari’s novel reinterpretation of Marx’s concept of surplus value, see Celis (2016).

⁸ Maurizio Lazzarato (2014, 120) contends that Marx’s labour theory of value (and his definition of the organic composition of capital), by distinguishing between living labour and dead labour, and assigns “all creativity and productivity to the former and relegates to the latter a mere reproductive function”. This distinction, he argues, may function at the level of social subjection and signifying semiotics, but is insufficient to understand fully the role of machines in contemporary capitalism (defined by the emergence of machinic enslavement and asignifying semiotics). According to Lazzarato, humans as well as machines “are hybrids of dead and living labour” (2014, 130). This means that without a proper theory of machines there can be no proper understanding of contemporary capitalism nor its relations of domination (Lazzarato 2014, 90).



The “smooth” and the “striated” refer to two forms of distributing movement within a given space: smooth (or nomad) space defines movement freed from any fixed or hierarchic trajectory, whereas striated (or sedentary) space structures and organises movement according to stable points that delimit its range and extension. Put differently, smooth space tends to absolute movement in which variation is intensive, while striated space organises movement in a way that variation can only manifest itself extensively. To a certain extent, it could be said that smooth space tends towards the deterritorialisation of movement and striated space towards its reterritorialisation.

In order to illustrate the difference between smooth and striated capital, Deleuze and Guattari distinguish labour from free action: while the latter belongs to the domain of smooth space, the former can be seen as a result of striated space (2004b, 541). More specifically, they contend that it is only with the emergence of the State apparatus (that is, the institutional organisation of striated space) that free action is systematically transformed into labour (2004b, 541). This is the case mainly for two reasons:

first, because labour appears only with the constitution of a surplus, there is no labour that is not devoted to stockpiling; in fact, labour (in the strict sense) begins only with what is called surplus labour. Second, labour performs a generalized operation of striation of space-time, a subjection of free action, a nullification of smooth spaces. (2004b, 541)

In recent interpretations of Marx (e.g. Postone, 1993) labour is not understood as a human essence, but as a strictly capitalist category according to which human activity is subsumed under the logic of value (entailing both abstraction and measurability). As such, labour constitutes a reterritorialisation of human activity: labour demands a striated space-time that functions as its abstract measure. Furthermore, by subsuming labour to the striated category of value, the State apparatus measures labour in relation to the amount of surplus that it does or does not produce. In other words, the State is constantly measuring the value of living labour against that of dead, accumulated labour. With the development of technology, however, labour becomes “less and less distinguishable” from its surplus (2004b, 542). This is so because technology (which is itself surplus labour accumulated as fixed capital) begins to gradually replace portions of labour within the valorisation process of capital. In a similar account to that of Antonio Negri's deconstruction of Marx's law of value (1996), Deleuze and Guattari ask: “how could one possibly distinguish between the time necessary for reproduction and ‘extorted’ time, when they are no longer separated in time?” (2004b, 542). For Deleuze and Guattari, the merging of labour and surplus labour put forth by the development of the productive forces does not “contradict the Marxist theory of surplus value” (Ibid.). On the contrary, the authors contend, Marx was the first one to acknowledge that with the development of the productive powers, “surplus value ceases to be localizable” (Ibid.). In this sense, Marx's “fundamental contribution” was to suggest that with the development of capitalism, “machines



would themselves become productive of surplus value” and that this would in turn “challenge the distinction between variable and constant capital” (Ibid.). Once again there is a close similarity between Deleuze and Guattari’s argument and the Italian post-Marxist reinterpretation of Marx. Pushing this resemblance further, Deleuze and Guattari contend that in post-industrial capitalism “it remains true that all labour involves surplus labour; but surplus labour no longer requires labour” (Ibid.). This means that post-industrial capitalism

operates less and less by the striation of space-time corresponding to the physicosocial concept of work. Rather, it is as though human alienation through surplus labour were replaced by a generalized ‘machinic enslavement’, such that one may furnish surplus value without doing any work. (2004b, 542-543)

The physicosocial notion of labour consists of the reterritorialisation of human activity under a striated space-time (abstract labour time). This notion of labour informed classical political economy as well as Marx’s labour theory of value. It also informed Marx’s treatment of the tendency of the rate of profit to fall. In post-industrial societies, however, the application of information technologies in the productive process unveils a cognitive and immaterial dimension of human activity which demands a new conceptualisation of labour, time and surplus value. In this new productive context, surplus value is no longer produced only by reterritorialising human activity under a striated space-time, but by integrating cybernetic machines together with the cognitive dimension of labour. This integration produces what Deleuze and Guattari call machinic surplus value, that is, a specific surplus (augmentation) of productive energy that does not necessarily involve labour (understood as the striated expenditure of human energy measured in terms of abstract time) but which nonetheless produces a surplus by means of exploiting the collective productive powers (general intellect) that become objectified in science and information technologies.⁹

Deleuze and Guattari’s notion of machinic surplus value is deployed as a conceptual tool in order to examine the contemporary changes in capitalist production. As such, this concept offers a useful framework when analysing the transformations of labour put forward by the passage from industrial to post-industrial capitalism. Furthermore, this concept makes it possible to explore the complex relationship between vision and labour in Harun Farocki’s *Counter-Music* (2004). Before moving to the analysis of the video installation, however, it is useful to examine the question of labour in an earlier film that works as its counterpoint: *Workers Leaving the Factory* (1995).

⁹ Matteo Pasquinelli (2015, 63-64) uses the example of “metadata” and “algorithmic machines” in order to illustrate how contemporary capitalism is producing “machinic surplus value”, that is, augmented flows of “information about information” which function both as a way of regulating the production of commodities as well as a mechanism of social control.



3. *Workers Leaving the Factory*

Workers Leaving the Factory was produced for the 100th anniversary of the homonymous film by the Lumière brothers. In what is considered to be the first film in the history of cinema, the Lumière brothers placed their camera in front of the gates of their factory in Lyon to show for about 45 seconds how the workers left the workplace as if they had just finished a day's work. Harun Farocki (2004, 243) contends that even if the primary aim of this first film was "to represent motion", an "additional sense [was] already being signalled", that is, "that the visible movement of people is standing for the absent and invisible movement of goods, money, and ideas circulating in the industrial sphere". In 1995, Farocki decided to explore how this "additional sense" which marks the "birth" of cinema had been "repeated" throughout the hundred years of film history. In relation to the process behind the production of this film, Farocki (2004, 237) writes: "over the past twelve months, I set myself the task of tracking down the theme of this film 'workers leaving the workplace', in as many variants as possible. Examples were found in documentaries, industrial and propaganda films, newsreels, and features". The result is a collection of recycled scenes from the history of cinema where the same *motif* of workers abandoning the workplace can be identified. Among others, these include scenes from Griffith's *Intolerance* (1916), Lang's *Metropolis* (1927) and *Clash by Night* (1952), Pudovkin's *Deserter* (1933), Chaplin's *Modern Times* (1936), and Antonioni's *Red Desert* (1964).

Workers Leaving the Factory is a clear example of the strategy of appropriation and repurposing of found footage that characterises most of Farocki's films and video installations.¹⁰ As David Rodowick puts it, "Farocki was a master of building arguments from appropriated images and situations – from surveillance cameras, automated drones, aerial photography, computer displays, training sessions and so forth" (2015: 191). Farocki would then weave these images together "to bring forward unseen and unexpected correspondences" (Rodowick 2015, 191). In doing so, he develops an immanent critique of images by means of images (Rodowick 2015, 191). It must be emphasised, however, that this immanent critique is never reduced to an aesthetic dimension but is rather an analysis of the "networks of forces that produce,

¹⁰ We could classify a large portion of Harun Farocki's film and video works as "found footage" cinema (Blümlinger 2009, 102). According to William Wees (1993), found footage cinema can be understood as a critical film practice that aims at interrupting the unreflective consumption of images. By appropriating and recycling found footage, these films "invite us to recognize it as found footage, as recycled images, and due to that self-referentiality, they encourage a more analytical reading than the footage originally received" (Wees 1993, 11). Hence, "found footage films offer an implicit critique of the film industry's conventional, standardized representations of the world, and [...] they interrupt the endless recirculation and unreflective consumption of mass media images. [...] Recycled images call attention to themselves as images, as products of the image-producing industries of film and television, and therefore as pieces of the vast and intricate mosaic of information, entertainment, and persuasion that constitute the media-saturated environment of modern life" (Wees 1993, 32). In the case of Farocki, the practice of found footage does not focus only on the images produced by the media industry (the "image producing industries of film and television") but also on the operational images produced in institutional contexts (factories, prisons, the army, etc.).



disconnect and recombine images as we encounter them today” (Rodowick 2015, 197).

There is an internal correspondence between Farocki’s immanent critique and the historical development of capitalism. As Nicole Brenez (2009, 130) puts it, Farocki does not only study images but also the cinema and the audiovisual itself, grasped in their connection to the emerging technologies of control and the changing nature of labour. Farocki’s reflections on the immanent relationship between images and power contain a defined historical awareness according to which the changes in the technologies of visual representation respond to the historical transformations of labour and the consequent emergence of technologies of control. As Deleuze (1995, 175) has shown, the analysis of any technical machine needs to be considered from the perspective of the collective assemblages to which it belongs. Accordingly, Farocki’s immanent visual critique must be interpreted as a systematic exploration of the internal relationship between technologies of visual representation, the changes in the field of labour, and the emergence of new diagrams of power.

In the case of *Workers Leaving the Factory*, Farocki explores the immanent relation between images and labour from at least three perspectives. First, the film explores how throughout the twentieth century cinema and factory have mutually excluded each other. In the first film by the Lumière brothers, the camera remains outside the factory. It does not represent a labour process nor labour time; it represents the workers as they are exiting the workplace. For Farocki, the fact that cinema was born with this image can be read as symptomatic of the mutual exclusion between labour and cinema. On the one hand, cinema as a technical invention was quickly turned into a form of entertainment for the mass worker, an entertainment meant to fulfil non-labour time, that is, time outside the factory. On the other hand, most stories that narrative cinema has been telling for over a century begin once labour ends. As Farocki puts it,

The first camera in the history of cinema was pointed at a factory, but a century later it can be said that film is seldom drawn to the factory and even repelled by it. Films about work or workers have not emerged as one of the main film genres, and the space in front of the factory has remained on the sidelines. Most narrative films take place in that part of life where work has been left behind. (Farocki 2004, 238)

Second, Farocki’s *Workers Leaving the Factory* suggests that despite the fact that cinema and the factory have mutually dismissed each other, the factory gates can be employed as a symbol of the key antagonistic relation that defines capitalist society, namely the struggle between labour and capital. According to Farocki,

When it comes to the matter of strikes [...] the factory forecourt can become a productive setting. The factory gates serve as the boundary between the protected production sphere and public space; this is precise-



ly the right spot to transform an economic struggle into a political one.
(Farocki 2004, 240)

In this sense, two scenes in the film are of particular significance. To start, the scene from Griffith's *Intolerance* (1916) represents the factory gate as a space where an economic struggle becomes a political one, a workers' strike becomes a "civil war". Next, the fragments from the advertising video for industrial gates symbolise a power mechanism aimed at the privatisation of the public and political dimension of labour. By collecting different representations of factory gates, Farocki's film gives visibility to the space that remains invisible in the world of commodity production. The factory gates represent the invisible struggle between labour and capital that constitutes the "secret" of commodity fetishism and capitalist social relations.

Third, it can be argued that *Workers leaving the factory* is a metaphor of what Antonio Negri (2005) has called the transition from the mass worker to the socialised worker, that is to say, a metaphor of the "exodus of workers from industrial modes of production" (Steyerl 2009, 3). As Thomas Elsaesser (2004, 35) puts it, this film "stands as the emblem for the fact that [ever since the factory and the cinematograph] made contact, collided and combined, more and more workers have been 'leaving' the factory". This does not mean that labour ceases to exist. The fact that workers leave the factory "doesn't mean that they have left labour behind". Rather, it means that "they take it along with them and disperse it into every sector of life" (Steyerl 2009, 3). This dispersion of labour to every aspect of society is what Negri has named the passage from the mass worker to the socialised worker. This passage defines one of the key characteristics of post-industrial capitalism.

Antonio Negri introduced the concept of the socialised worker to explain "the new social dimensions of productive cooperation" (2005, 77). The concept emerges from the need to explain certain phenomenological transformations in the domain of labour: mainly, that "work has become diffused throughout the entire society. This is because it is carried on both within and outside the factory [...] The scale of production has become vaster and the integration of the various labour processes more complex than ever before" (Negri 2005, 77). In brief, the socialised worker is "the originator of the social cooperation necessary for work" (Negri 2005, 80). The passage from the factory worker to the socialised worker coincides with the emergence of new forms of cognitive, affective, and immaterial labour. Following Negri (2005) we could say that in this new stage of capitalist development, exploitation takes place not only by appropriating labour time, but also – and mainly – by appropriating the collective intellect (the accumulated productive powers of social cooperation). In this sense, the relation between the birth of cinema and workers leaving the factory becomes even more significant. As Hito Steyerl puts it, "as workers exit the factory, the space they enter is one of cinema and culture industry, producing emotions and attention" (2009, 5).

In *Workers Leaving the Factory*, the passage from the industrial factory to the social factory, and from the mass worker to the socialised worker, is presented in negative terms. We see what the workers are leaving behind but we do not see where



they are going. Farocki's video installation *Counter-Music*, on the contrary, is a systematic exploration of the relationship between labour and the processes of automation put forth by post-industrial capitalism. It is not a depiction of the place that workers leave behind but an examination of the new productive scenario into which they have been forced by post-industrial capitalism. In this sense, *Counter-Music* is guided by two major questions. How can cinema represent the abstract processes behind immaterial and cognitive labour? What happens to the distinction between human labour and technical machines in this new productive arena where even human perception is being replaced by algorithmic vision machines? To answer these questions, Deleuze and Guattari's reinterpretation of Marx is a valuable toolbox.

4. *Counter-Music*

Counter-Music is a double-screen video installation produced by Harun Farocki in 2004. Its aim is to explore the possibility of representing the French city of Lille in its contemporary form. As Michael Cowan (2008, 78) points out, *Counter-Music* should be understood in relation to the avant-garde, modernist city film. Farocki's video installation makes explicit references to both Dziga Vertov's *Man with a Movie Camera* (1929) and Walter Ruttmann's *Berlin: Symphony of a Metropolis* (1927). For these two modernist filmmakers, cinema was the only medium capable of representing the complex networks that regulated the emerging metropolis. Similar to Vertov's portrayal of a day in a soviet city, *Counter-Music* attempts to depict a day in Lille. Unlike Vertov, however, Farocki poses a question regarding the limits of visual representation to properly depict the contemporary city where more and more of the processes that regulate it have become automated. As usual, Farocki resorts to the appropriation and repurposing of recycled images. While for Vertov "the day begins with the production of images", for Farocki, "it begins with their reproduction".

The main difference between *Counter-Music* and *Workers Leaving the Factory* is the change in the status of the images that are appropriated and recycled. In the case of *Workers Leaving the Factory*, Farocki is still primarily dealing with scenes from feature films in which the *motif* of labour was limited to its representational content. In *Counter-Music*, Farocki shifts towards a new type of image to explore the transformation of labour in post-industrial capitalism from a non-representational approach. For a better understanding of the passage from a representational to a non-representational examination of labour and the critical value of Farocki's *Counter-Music*, two concepts are essential: operational images and vision machines.

A. Operational Images

In *Counter-Music*, Farocki appropriates and recycles what he calls "operational images". He coined this concept in 2001 while working on the video installation *Eye/Machine*. According to Farocki, operational images are "made neither to entertain nor to inform", as "these are images that do not represent an object, but rather are part of a [technical] operation" (2004b, 17). An operational image is a unique type of image whose primary function is not to represent an object for contemplation, but



to organise a concrete and specific technical operation.¹¹ These images can be used for surveillance, medical examination, or as a key aspect of a military, industrial or logistic process. A good example of an operational image is an one produced by a security camera. In most forms of CCTV, the image functions as part of a larger mechanism of surveillance which includes the surveilled subject; the camera; the control room; the guard or surveilling subject, etc. In such a system, the image is not produced for contemplation or entertainment, but for a very concrete technical purpose. Another example is medical imaging, where images again are part of a larger technical machine, which includes not only the human body and its organs; the medical technologist who operates the machine; and the doctor who diagnosis the problem, but also the healthcare system; the insurance company; the corporation that produces the technical equipment, etc.

Following the notions of surplus value of code and surplus value of flux and borrowing from Félix Guattari's theory of language, Maurizio Lazzarato (2014) has introduced the distinction between signifying and asignifying semiotics. The former refers to signs which produce "meaning, significations, interpretations, discourse and representations", whereas the latter refers to signs which "produce operations, induce action, and constitute [...] components of a social and technological machine" (2004, 39). The distinction between these two kinds of signs can be used to distinguish between the two uses of found footage that characterise Farocki's films and video installations. On the one hand, an image can be understood from the perspective of a fixed code – a signifying semiotics. This corresponds to the traditional definition according to which an image can be read either from the point of view of its representational content or its formal characteristics. In both cases, we remain within the sphere of meaning and signification. Even cinematic images, which by definition rely on an inherent movement that challenges the fixed stability of signifying semiotics (Lazzarato 2014, 109), are usually conceptualised from the perspective of the meaning they convey. In *Workers Leaving the Factory*, Farocki employs signifying images that represent workers leaving the factory. And even if this film may be interpreted as a metaphor for the gradual eviction of the mass worker from industrial labour, this interpretation remains restricted to the representational content of the images appropriated by Farocki.

Conversely, Farocki's repurposing of operational images in *Counter-Music* places us in a non-representational dimension where an image is no longer understood as code. An operational image belongs to the realm of asignifying semiotics in which a sign has nothing to do with meaning. For Lazzarato (2014, 40) asignifying semiotics "act on things; they connect an organ, a system of perception, an intellectual activity [...] directly to a machine, procedures, and signs, bypassing the representations of a subject". Similarly, an operational image can be read as a decoded flow that

¹¹ Farocki (2004b, 17-18) claims that the term operational image was coined by displacing Roland Barthes' notion of operational language to the visual domain. See Barthes' essay "Myth Today" in his book *Mythologies* (1972). According to Christa Blümlinger (2014), another important reference for tracing the origin of Farocki's term operational images is Vilém Flusser's (2000) concept of technical image.



belongs to a technical, and thus abstract, machine. More specifically, an operational image is part of a technical process aimed at facilitating the transmission of decoded flows of information. Furthermore, Lazzarato (2014, 40) contends that operational images play a very important role in capitalism since capitalism depends mainly on asignifying machines. In this sense, surveillance, logistic, military, and medical operational images aim at the transmission of a given flow of asignifying information which in turn regulates the correct functioning of the capitalist machine.¹²

To exemplify how asignifying semiotics work, Deleuze and Guattari refer to McLuhan's notion of the electric language:

Three million points per seconds transmitted by television, only a few of which are retained. Electric language does not go by way of the voice or writing; data processing does without them both, as does the discipline appropriately named fluidics, which operates by means of streams of gas; the computer is a machine for instantaneous and generalized decoding. (2004, 262)¹³

According to Deleuze and Guattari, the electric language is “a nonsignifying language of decoded flows which remains indifferent to its substance or its support” (2004a, 261). Hence, the significance of McLuhan is “to have shown what a language of decoded flows is, as opposed to a signifier that strangles and overcodes the flows” (2004, 261). In a similar way, it could be argued that one of the major merits of Farocki's work is that it has introduced a new theory of the image. Just like McLuhan's notion of an electric language challenges the identity between language and code, Farocki overcomes the limitations of the traditional definition of the image understood as code, that is, understood as a conveyor of meaning.

¹² According to Maurizio Lazzarato, “what matters to capitalism is controlling the asignifying semiotic apparatuses (economic, scientific, technical, stock-market, etc.) through which it aims to depoliticize and depersonalize power relations” (2014, 41). With this statement, Lazzarato is offering an alternative reading of contemporary capitalism to the one put forth by other post-Operaismo authors. For Lazzarato (2014, 59-60), contemporary capitalism is not based primarily on linguistic processes (as Christian Marazzi, Paolo Virno or Carlo Vercellone suggest) but on asignifying semiotics that relate to machinic labour and machinic enslavement. In the theories of cognitive capitalism, “we remain in a ‘logocentric’ world, whereas with capitalism we have for some time entered a ‘machine-centric’ world that configures the functions of language in a different way” (Lazzarato 2014, 60). This “different way” in which capitalism configures the functions of language carries out important consequences for any interpretation of how subjectivity is being produced in contemporary society.

¹³ Similarly, Maurizio Lazzarato (2014, 85) states that the simplest example of a decoded flow is that of the microchip, “where sign flows act directly on the material components. The polarities of iron oxide particles are converted into binary numbers when a magnetic strip is passed through a reader equipped with the appropriate computer programme. The signs function as the input and outputs of the machine, bypassing denotation, representation, and signification. Sign flows engage real flows, giving orders and producing a change in conditions”.



A significant portion of Farocki's work is based on the compilation and recycling of these asignifying operative images.¹⁴ Commencing with his 1986 film *Wie man sieht* (*As you see*), Farocki began to explore different types of operative images that regulate contemporary forms of life. In films such as *Images of the World and the Inscription of War* (1988) and *Prison Images* (2000) and, most importantly, in his video installations, Farocki appropriates and reuses an incredible amount of operative images taken from a series of institutions (military, medical, scientific, logistic, penitentiary, etc.). These works represent a new form of appropriation and recycling of images in the work of Farocki in particular, and also in the practice of found footage cinema in general. Unlike *Workers Leaving the Factory*, *Counter-Music* appropriates and repurposes images that were not originally produced for contemplation. In doing so, Farocki removes the appropriated operational images from the mere asignifying dimension of technical operations and places them back into the realm of contemplation and signification. In doing so, Farocki forces the spectator to reflect upon their meaning. Thus Farocki relocates operational images, originally belonging to the sphere of abstract flows of information, within the realm of code. According to David Rodowick, an operational image "contains all the information it will ever convey; nothing is suppressed or invisible" (2015, 195). For this reason, Rodowick adds, operational images "have no ethics" (2015, 195). On the contrary, Farocki's work reintroduces these images into the realm of meaning forcing us to impose our own interpretation of them. In doing so, Farocki reintroduces the ethical dimension to a type of image that was completely empty of meaning (Rodowick 2015, 195). Nevertheless, the ethical dimension in Farocki's work should not be confused with a normative critique. Farocki's demand for an ethical response from the viewer who is confronted with these operational images remains always at an immanent level. This is so because the ethical question concerning operational images cannot be separated from the institutional network of power on which these images rest. The immanent aspect of Farocki's critique demands an exploration of the social and historical conditions that have made operational images possible. This is not just a matter of technical development. As Lazzarato (2014) has thoroughly shown, the need for asignifying semiotics (and hence for operational images) responds to a broader social and economic phenomenon which is internally connected to the development of post-industrial capitalism. In this sense, the emergence of operational images (analysed in *Counter-Music*) can be interpreted as a consequence of the gradual eviction of human

¹⁴ Nora Alter (2015, 154) refers to Harun Farocki's working method as a *Verbundsystem* (integrated system). This is "a procedure that Farocki developed to recycle, reassemble, and recombine footage" and which can be connected to the problem of labour and financing behind the production of images (2015, 154). Nevertheless, Alter suggests that "what began as a practice spurred by pragmatic concerns and economic necessity soon developed in a powerful system of critique. The refunctioned images and clips were used to comment on the context in which they initially circulated" (2015, 154). The images that Farocki appropriates and recycles are "always part of an apparatus of the production and circulation of visual material" which itself is not limited to the media industry (Blümlinger 2009, 102). Hence, the critique put forth by Farocki should not be understood from the perspective of ideology critique of the media industry but rather as a systematic analysis of the concrete networks of power within which operational images exist.



labour from the productive arena (depicted in *Workers Leaving the Factory*). Furthermore, this eviction goes hand in hand with a process of automation which includes not only the replacement of manual labour by technical machines but also the more recent replacement of intellectual and cognitive labour by algorithmic machines. This newer form of eviction of the worker is systematically examined in *Counter-Music* through the notion of vision machines.

B. The Machinic Labour of Vision

In *Counter-Music* (2004), Farocki compares the eviction of the manual worker from the industrial factory with the eviction of the cognitive worker from the post-industrial “social factory”. Whereas in the first form of eviction machines still operated “blindly” and thus required the human eye for supervision purposes, in the latter intelligent vision machines are taking over the small portion of the productive process where human activity was still necessary. This creates a paradoxical situation in which the development of algorithmic vision machines transforms even the “work of watching” into an obsolete and redundant human activity. In his analysis of *Counter-Music*, Martin Blumenthal-Barby writes:

The increasing ‘abolition’ of humans in modern-day surveillance is one that Farocki explicitly problematizes by way of analogy with the textile industry in Lille. Just as human beings, in the course of industrialisation and the automation of weaving, have turned into ‘appendages of the apparatus’, so the human eye, according to Farocki’s suggestive montage, has been relegated, in line with the automation of surveillance via automatic-recognition systems, to ‘appendages of the apparatus’. The labour of weaving, as well as the labour of seeing, is ever less dependent on the involvement of human beings, an observation that led Paul Virilio to speak of the ever-increasing importance of ‘vision machines’.
(2015, 137)

Farocki’s video installation compares the difference between users of satellite TV who “pay for images” and cognitive workers who are “paid to view images”.¹⁵ This distinction allows to further the definition of operational images by introducing the notion of “operational spectators”, that is, consumers of images that become active elements within a given technical operation. Ingrid Hoelzl and Rémi Marie (2015, 101) use Farocki’s notion of operational images in order to show how the “algorithmic turn” that characterises websites like Facebook and Google implies that, actually, images are “operating us”. At the same time, *Counter-Music* explores the idea that some operational images are not produced for a human observer. With the appearance of advanced algorithms and the fast development of automation, a gradual process in

¹⁵ For an interesting analysis of how watching can become a new form of labour, see Sut Jhally and Bill Livant’s *Watching as Working: The Valorization of Audience Consciousness* (1986). For a critical reading of Jhally and Livant’s article, see chapter 4 in Christian Fuchs’ book *Digital Labour and Karl Marx* (2014).



which operative images are breaking free from the presence of a human eye can be witnessed. Farocki's video installation makes it possible to suggest that as a consequence of the separation between operative images and the human eye, contemporary societies are entering an age characterised by what Paul Virilio (1994) called "vision machines". In 1988, Virilio wrote:

After all, aren't they talking about producing a 'vision machine' in the near future, a machine that would be capable not only of recognising the contours of shapes, but also of completely interpreting the visual field, of staging a complex environment close-up or at a distance? Aren't they also talking about the new technology of 'visionics': the possibility of achieving sightless vision whereby the video camera would be controlled by a computer? The computer would be responsible for the machine's – rather than the televiewer's – capacity to analyse the environment and automatically interpret the meaning of events. Such technology would be used in industrial production and stock control: in military robotics, too, perhaps. (1994, 59)

Virilio speaks of an "automation of perception" and of "artificial vision" (1994, 59), both of which correspond to "the latest and last form of industrialisation: the industrialisation of the non-gaze" (1994, 73). During the highpoint of industrial capitalism, Fordism and the culture industry functioned as two aspects of a systematic industrialisation of life which aimed at producing a disciplined body and a disciplined perception.¹⁶ The industrialisation of the gaze was a crucial aspect of the generalised industrialisation of life characteristic of Fordist capitalism. The industrialisation of the gaze took place in an age where industrial machines were still "blind machines" (Tomas 2013, 232). This means that industrial machines were incapable of adapting automatically to unforeseen events and situations. For this reason, the worker was needed to provide the necessary vision to the productive chain. As Marx (1973, 692) puts it, with the development of modern industry, workers are cast as the "conscious linkages" between the different mechanical organs that conform the "automatic system of machinery", and their immediate productive task is limited to supervising the overall system and guarding it "against interruptions". In this sense, the industrialisation of the gaze can be understood as the result of the automatic system of machinery that reduced the labour process to the sphere of visual supervision.

With the development of automation and information technologies, however, a new form of industrialisation became possible, the "industrialisation of the non-gaze": new forms of automatic, sightless vision; images produced by machines and for

¹⁶ Adorno and Horkheimer (2002) have shown the internal complicity between the triumph of industrialisation and the "Taylorisation" of culture put forward by the culture industry. Similarly, Jonathan Crary (1991, 2001) develops a Foucauldian study on the relationship between industrial production and the emergence of the modern observer. For an analysis of the difference between Fordism and post-Fordism from the perspective of the culture industry and the industrialisation of perception, see Paolo Virno's *Grammar of the Multitude* (2004, 56-59).



machines. This intensified the already systematic eviction of the worker from factory labour, replacing the visual and intellectual labour of the worker as the conscious linkages between the different components of the automated system of machinery with the automated work of algorithmic vision machines. In this new context of sightless vision, Virilio suggests that it becomes necessary to rethink the concept of image:

‘image’ is just an empty word here since the machine’s interpretation has nothing to do with normal vision (to put it mildly!). For the computer, the optically active electron image is merely a series of coded impulses whose configuration we cannot begin to imagine since, in its automation of perception, image feedback is no longer assured. (1994, 73)

In Virilio there is an almost identical concern with a new theory of the image as in Farocki: how can we conceptualise the new forms of technical representation in which images are not conveyors of meaning but active elements of the industrialisation and automation of life? Analogously, Farocki’s films and video installations constitute a systematic exploration of Virilio’s almost prophetic analysis of machine vision. As Hal Foster (2004, 160) suggests, “Farocki intimates that a new ‘robo eye’ is in place, one that, unlike the ‘kino eye’ celebrated by modernists like Dziga Vertov, does not extent the human prosthetically so much as it replaces the human robotically”. As such, Farocki’s work “points to a postsubjective seeing, ‘an optical nonconscious’” (Foster 2004, 160). Similarly, Martin Blumenthal-Barby (2015, 137) contends that the work of Farocki explores the emergence of machine vision on at least three levels: a) the production of images with no cameraman; b) the production of images in which humans are no longer the subject-matter (the subject matter may be the data of human conglomerates but not the human as an individual subject); and c) images produced by machines and for machines, abolishing the need for a human spectator. Some examples of vision machines given in *Counter-Music* include: automated CCTV capable of identifying people who are moving and people who remain still (and are therefore problematic) in public spaces meant for circulation; traffic control cameras that automatically detect traffic incidents; software that uses cameras in order to keep count of people entering and exiting from a metro station; and heat-meters used to measure the frequency of trains.¹⁷ Towards the end of *Counter-Music*, while showing us archival images of an industrialised textile factory, the video installation states that all these forms of vision machine are examples of software aimed at “reducing the amount of work for the viewer, or abolishing it”.

¹⁷ In his trilogy *Eye/Machine* (2001; 2002; 2003), Harun Farocki explores how these vision machines are used for military purposes. Another example of a vision machine is the recently released Google’s *Cloud Vision*, a new algorithm that attempts to connect machine learning with image recognition software. This allows for production of software that is capable of identifying people, analysing their emotions, detecting piracy, reading and translating text, etc.



5. Conclusion

Harun Farocki's *Counter-Music* can be read as a systematic exploration of a post-industrial city in which modern industry exists only through its archival traces. It depicts how contemporary society replaces more and more human labour (that is, physicosocial labour¹⁸) with algorithmic vision (machinic labour). This depiction, in turn, makes it possible to reflect upon the different ways in which machine vision begins to take part in the production and accumulation of surplus value. On the one hand, Farocki's *Counter-Music* assumes a Marxist stance according to which only human labour is responsible for the production of value. In this sense, the city of Lille is shown as a place in which the passage towards post-industrialism has rendered the human body redundant for production and where algorithmic technologies of surveillance and control aim at the correct circulation of these unproductive bodies within the sphere of consumption (Cowan 2008, 78).

On the other hand, however, by attesting the emergence of image processing software, *Counter-Music* raises the complex question regarding the relation between value and machines. In line with the reinterpretation of Marx put forth by Deleuze and Guattari, Farocki's repurposing of operational images triggers in the spectator the question of how vision machines are transforming information into a new source of machinic surplus value. As mentioned above, operational images refer to a new kind of images that are not intended for conveying a given meaning, but for transmitting a flow of information within a technical process. As such, operational images form an essential aspect in the transaction of abstract flows that leads to the extraction of a surplus value of flux in contemporary capitalism. Vision machines are the result of an algorithmic form of automation which produces and analyses operational images: images produced by machines and for machines. More precisely, the main function of vision machines is to collect, distribute, and process information in order to regulate the different technical operations that conform the capitalist production, circulation, and consumption of commodities. As such, vision machines are machines whose main function is to process information about information (metadata) in order to generate and accumulate capital.¹⁹ In this sense, vision machines automate the production, circulation and consumption of information, thus deepening the production of a surplus value of flux.

It was mentioned already that for Deleuze and Guattari a machine has to be understood as an apparatus aimed at the augmentation of a given flow. From this perspective, the vision machines depicted in *Counter-Music* constitute a specific kind of machine aimed at the augmentation of flows of information (surplus value of flux).

¹⁸ Deleuze and Guattari use the notion of physicosocial labour in order to historicise the concept of abstract labour. Physicosocial labour defines a specific form of human activity subsumed under abstract time and organized within a Cartesian space.

¹⁹ In his article *Italian Operaismo and the Information Machine* (2015), Matteo Pasquinelli explores the political dimension of metadata and connects it to the critical theories of Italian post-Marxism as well as to the conceptual work of Deleuze and Guattari. Similarly, Maurizio Lazzarato (2014) explores how asignifying semiotics play a leading role in the reproduction of power relations in contemporary capitalism.



This augmentation of flows of information both accelerates the production, distribution and consumption of commodities (and hence the production of economic surplus value) while at the same time reinforcing the given power relations (more specifically, new forms of machinic enslavement).²⁰

All of this implies that vision machines do not subsume human activity under abstract (striated) time. Rather, vision machines appropriate the cognitive dimension of post-industrial labour (“the informational content of commodity production” – as Maurizio Lazzarato [1996] puts it). Vision machines reterritorialise the productive forces unleashed by technological transformation, putting machines to “work” in order to produce machinic surplus value. Therefore, the traditional categories of labour and labour time appear insufficient when it comes to understanding the production of surplus value in the new context of machine vision portrayed by Farocki’s *Counter-Music*.

Furthermore, Deleuze and Guattari’s notions of striated and smooth capital can be connected to Lazzarato’s (2014) concepts of signifying and asignifying semiotics. Since striated capital is based on the physicosocial definition of labour (that is, it refers to human action that has been subsumed under a striated space and time), it is correct to say that striated capital operates in the domain of signifying semiotics. This means that striated capital (human surplus value) depends on a coding system that operates as a “general equivalent” that reterritorialises the liberated decoded flows through a system of signifying semiotics (Lazzarato 2014, 70). On the contrary, smooth capital is produced by machinic labour and, as such, it refers to a domain of asignifying semiotics where signs do not communicate a given content but operate as specific elements within a technical and machinic operation. Lazzarato’s notions of signifying and asignifying signs make it possible to strengthen the bridge between Deleuze and Guattari’s concept of machinic labour and Farocki’s vision machines. In both cases, signs and images operate within an asignifying technical domain, as conveyors of flows of information. Machine vision and machinic labour belong to the same collective assemblage of smooth capital in which social subjection and signifying semiotics have been replaced by machinic enslavement and asignifying semiotics. The analysis of Farocki’s *Counter-Music* thus reveals that, in order to better understand the production of value and the reproduction of power relations in contemporary capitalism, a non-representational exploration of labour becomes necessary. To achieve this, Farocki’s treatment of operational images and vision machines understood through the lens of Deleuze and Guattari’s notion of machinic surplus value represents a significant step forward.

²⁰ In his book *Signs and Machines*, Lazzarato claims that in contemporary capitalism the entire production of wealth (and production in general) begins to operate “at the intersection of this two heterogeneous power apparatuses: social subjection and machinic enslavement” (2014, 24). According to Lazzarato, modern political thought has looked at the problem of social subjection in detail, whereas the concept of machinic enslavement should be considered as “Deleuze and Guattari’s original contribution to our understanding of how contemporary capitalism works” (2014, 36). Lazzarato’s (2014) contribution, respectively, can be said to have highlighted the connection between machinic enslavement as a new form of power and machinic surplus value as a new source of capitalist profit.



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