



Communication Breakdown: Cutting off the Flow

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Introduction

Following Foucault's famous study of disciplinary society, Deleuze suggests that we are moving away from discipline toward a regime characterised by "continuous control and instant communication" (1990b: 174). This is not a claim that disciplinary mechanisms are obsolete, but that the overall regime of power has evolved: the architecture of "panopticism", as we will see, is too rigid a model of functioning to capture "the ultrarapid forms of apparently free-floating control" (Deleuze 1990a: 178) that have become reality with the cybernetic machine. In control societies we are confronted with a new arrangement of space-times, a redistribution of visibilities, and a new mode of knowledge and of the production of statements.

The first section of this article will give a brief summary of Foucault's analysis of panopticism, the regime of power in disciplinary societies, and of Deleuze's reading of it. The second section examines the shift in regimes: from a panoptic to a cybernetic modality of power. This is an attempt to shed light on what has changed and what the new "diabolical powers" are that knock at the door (Deleuze/Guattari 1986: 12). The control societies that we live in are coupled with a new generation of technologies: we are dealing with "a new computer and cybernetic race, automata of computation and thought, automata with controls and feedback" (Deleuze 1989: 264-65). The new regime is one in which power is "diluted in an information network where 'decision-makers' manag[e] control" (Deleuze 1989: 265).

In the second section, the connection with cybernetics will show that these "new" diabolical powers are not so new after all. The dream of a universal symbolism that mediates between human and machine, between society and technics, making organisation and control possible, has been articulated by cybernetic thinkers since the 1940s. Today we are in a better position to assess where the cybernetic dream of communication and control may lead (surveillance, data extraction and predictive analytics, real-time modification of actual behaviour). But the task of analysing the relation between forms of power and modes of knowledge in our digital era remains in many ways to be undertaken. This is a relation that is characterised by an increasing asymmetry between those



agencies with access to and control over data and processing power on the one hand, and the ordinary user as the producer of data on the other. The last section, therefore, deals with Deleuze's admonition that "the quest for 'universals of communication' ought to make us shudder" (1990b: 175) and searches for possible strategies of counter-effectuation.

1. Panopticism

Michel Foucault is known as a philosopher with a particular interest in sites of confinement: the psychiatric asylum, the reformatory, the prison, the school, the hospital, the factory, and so forth. These places constitute a regime of visibility, distributing what can be seen and what remains hidden from view. Foucault's analysis of Jeremy Bentham's proposed prison-design, the "Panopticon", is well known: Bentham devised a centralised building, in which rows of cells were arranged like rings around a central watchtower. In this way it was possible for the guard in the watchtower to observe every prisoner, an observation facilitated through backlighting, as lattice windows opened each cell to the outside. The guard himself was protected from the prisoners' view, since the lookouts of the watchtower were shaded with blinds. Foucault summarises the specific functioning of the Panopticon as a dissociation of "the see/being seen dyad: in the peripheric ring, one is totally seen, without ever seeing; in the central tower, one sees everything without ever being seen" (1979: 202). He further argues that this principle of the dissemination of visibilities comes to operate not only in prison but more widely in schools, hospitals, the army barracks, the factory, etc.

The effect is a disciplinary function, which can be abstracted from the concrete assemblages and generalised into a model of the functioning of power. The definition of disciplinary power is "*to impose a particular conduct on a particular human multiplicity*" (Deleuze 1988: 34).¹ The Panopticon is thus the emblem for a political technology, which can be called "panopticism":

the Panopticon must not be understood as a dream building: it is the diagram of a mechanism of power reduced to its ideal form; its functioning, abstracted from any obstacle, resistance or friction, must be represented as a pure architectural and optical system: it is in fact a figure of political technology that may and must be detached from any specific use. (Foucault 1979: 205)

The effect of this political technology is to be witnessed in the disciplined behaviour of those who are subject to the possibility of constant observation and suffer from the impossibility of knowing whether or not they are being watched. The upshot is an internal-

¹ In Foucault's words: "Whenever one is dealing with a multiplicity of individuals on whom a task or a particular form of behaviour must be imposed, the panoptic schema may be used" (1979: 205).



isation of authority: the prisoner will now watch or “guard” himself. Without having to take recourse to outright repression, panopticism establishes a disciplinary regime that permits the fabrication of docile, disciplined subjects. Paraphrasing Nicolaus Heinrich Julius, a German physician and reformer of the Prussian judicial and penitentiary system, Foucault writes: “it is not that the beautiful totality of the individual is amputated, repressed, altered by our social order, it is rather that the individual is carefully fabricated in it, according to a whole technique of forces and bodies” (1979: 217).

Foucault loosely cites from Julius’ book on the science of penitentiary institutions (*Gefängniss-Kunde*), which comprises a lecture course given by Julius in the spring of 1827 in Berlin.² This reference is just one example of the proliferation of scientific discourses in the 19th century: criminology, clinical medicine, psychiatry, child psychology, education, and so forth. As Foucault explains, these new discourses were linked to sites of visibility that fostered observation, examination, experiments and analysis. Thus, in parallel to institutional places of visibility, discursive fields of sayability and readability were opened up that contributed to the disciplinary function: these produced statements that effectuated the exercise of power, directed the behaviour of their subject-objects and promoted conformity to the norm. In his book on Foucault, Deleuze calls these two fields of visibilities and of statements “form of content” and “form of expression”, thereby following (albeit in a novel way) Louis Hjelmslev’s fourfold distinction of form, substance, content and expression.

The content has both a form and a substance: for example, the form is prison and the substance is those who are locked up, the prisoners [...] The expression also has a form and a substance: for example the form is penal law and the substance is “delinquency” in so far as it is the object of statements. Just as penal law as a form of expression defines a field of sayability (the statements of delinquency), so prison as a form of content defines a place of visibility (“panopticism”, that is to say a place where at any moment one can see everything without being seen). (Deleuze 1988: 47)

These two forms – the form of content, which is visibility, and the form of expression, which is sayability – are heterogeneous and irreducible, but nevertheless connected: for instance, penal law supplies prisoners to fill the cells, while the prison reproduces delinquency and the delinquent as an object of moral, psychological, medical, criminological and legal studies.

² The full title of the book in German is *Vorlesungen über die Gefängniss-Kunde oder über die Verbesserung der Gefängnisse und sittliche Besserung der Gefangenen, entlassenen Sträflinge u[nd] s[o] w[eiter]*. (Berlin: Stuhr: 1828). The French translation from 1831 is accessible at <<https://archive.org/details/leonssurlespris00juligoog/page/n11>> [accessed 04 Apr. 2019].



Deleuze's book on Foucault is to a large part concerned with specifying the relation between the two forms of the visible and the sayable, which is termed a "non-relation"³: a gap or disjunction opens up between the two forms. The emphasis on this disjunctive relation is important for Deleuze in order to avoid misleading preconceptions: the relationship between the sayable and the visible is not the one between signifier and signified (the statement does not designate a state of affairs or visible object), nor a phenomenological relationship (the visible as mute meaning is expressed in language) (Deleuze 1988: 64). These conceptions remain too close to a hylomorphic model in which form determines matter or matter is realised in form.⁴ In fact, Deleuze likens the problem of the relation to that of the Kantian duality between the faculties of intelligibility and sensibility. Kant had great difficulties in explaining the coadaptation between these two faculties, as Salomon Maimon demonstrated in his *Essay on Transcendental Philosophy*. Kant's enigmatic solution was the introduction of a third agency, the schematism of imagination that was supposed to gather the manifold of intuitions in images (or schemas), which can be brought under concepts. According to Deleuze, "even Foucault needs a third agency to coadapt the determinable and determination, the visible and the articulable, the receptivity of light and the spontaneity of language, operating either beyond or this side of the two forms" (1988: 68). As Deleuze puts it, this third agency will be a *diagram* of forces, or the abstract machine, as "a non-unifying immanent cause" (1988: 37) of the concrete historical formations. In other words, there is something that produces and permeates the concrete assemblages (scientific discourses on the one hand and buildings, bodies and behaviours on the other): relations of power.

The relational conception of power is Foucault's veritable achievement. Power is not a quantity that can be accumulated, nor an attribute that can be assigned to a particular person, position or institution. Rather it pervades the concrete assemblages and is present in their operative mechanisms, such as disciplinary functions. It "passes through the dominated forces no less than through the dominating" (Deleuze 1988: 38). It is not added on from the outside but instead can be characterised as an immanent field of relations between forces where force acts upon force:

power is a relation between forces, or rather every relation between forces is a "power relation". [...] [F]orce is never singular but essentially exists in relation

³ This is an expression that Foucault borrows from Blanchot and uses in his essay on Magritte, "This is not a pipe" (1973, English translation 1981). In this text, Foucault shows that the drawing of the pipe and the statement, e.g. "This is a pipe", cannot find a place to meet. It is a "non-place" that opens up between them; their relation is one of "non-relation" (see Deleuze 1988: 38 and 62).

⁴ In particular in *The Archaeology of Knowledge*, Foucault conceives a determining relation between discursive formations (statements) and non-discursive formations (Deleuze 1988: 61 and 83-84). Deleuze seems to be intent on overcoming the duality of these formations by replacing it with the aforementioned fourfold distinction (form, substance, content, expression), connecting statements and visibilities through a non-relation or disjunction, and claiming a third instance: the diagram or abstract machine as an immanent cause that produces historical formations.



with other forces, such that any force is already a relation, that is to say power: force has no other object or subject than force. (Deleuze 1988: 70)

Foucault himself calls his conception of power a “micro-physics” (1979: 28, 29, 139, 149, 160) or “a physics of a relational and multiple power” (1979: 208). For Deleuze, it is the level of the abstract machine or diagram, where the visible and the sayable are abstracted from their form: the spontaneity of language becomes a power to affect and the receptivity of light a power to be affected: “each force has the power to affect (others) and to be affected (by others again), such that each force implies power relations: and every field of forces distributes forces according to these relations and their variations. Spontaneity and receptivity now take on a new meaning: to affect or to be affected” (Deleuze 1988: 71).

For Deleuze, the diagram or abstract machine is a “virtual” dimension of reality, proceeding from a field of forces that is always in continuous variation, whereas concrete assemblages are “sedimentary beds”: they make up the actual world characterised by a certain rigid segmentarity. Deleuze claims that “emergence, change and mutation affect composing forces, not composed forms” (1988: 87). This is important: the shift from disciplinary to control society, according to Deleuze, is not brought about by technical evolution. On the contrary, he emphasises that “[t]echnology is [...] social before it is technical” (1988: 40):

The concrete machines are the two-form assemblages or mechanisms, whereas the abstract machine is the informal diagram. In other words, the machines are social before being technical. Or, rather, there is human technology which exists before a material technology. (1988: 39)

For this reason, it would be necessary to analyse the organisation of the whole socio-economic field and the power relations that co-exist with it, in order to explain the shift from disciplinary to control societies. It would not suffice to look solely at the technical system and technical innovations; it would require an analysis of the logic of capitalism.

The old sovereign societies worked with simple machines, levers, pulleys, clocks; but recent disciplinary societies were equipped with thermodynamic machines presenting the passive danger of entropy and the active danger of sabotage; control societies function with a third generation of machines, with information technology and computers, where the passive danger is noise and the active, piracy and viral contamination. This technological development is more deeply rooted in a mutation of capitalism. (Deleuze 1990a: 180)



2. Cyberneticism

A comprehensive study of the contemporary transmutation of capitalism continues to be one of the fundamental tasks today. The contribution of this article is quite specific: in what follows I will focus on Deleuze's criteria of analogical vs digital language, molds or moldings vs modulations. He writes that in disciplinary societies,

the various placements or sites of confinement through which individuals pass are independent variables: we're supposed to start all over again each time, and although all these sites have a common language, it's *analogical*. The various forms of control [...] are inseparable variations, forming a system of varying geometry whose language is *digital* (though not necessarily binary). Confinements are *molds*, different moldings, while controls are a *modulation*, like a self-transmuting molding continually changing from one moment to the next, or like a sieve whose mesh varies from one point to another. (1990a: 178-79)

Why are sites of confinement characterised as molds or moldings? Molds suggest an inflexible, rigid form that imposes a geometrical figure upon some malleable material. One could argue that disciplinary mechanisms create rigid spatio-temporal molds that are imposed on a human multiplicity. In the case of the panoptic prison, there is a fixed arrangement of spatial unities oriented toward a privileged central point of observation. Each prisoner is alone in his cell, completely separated from the others, perfectly individualised and constantly visible; the prisoners are not only distributed in this rigidly segmented space but also serialised in time; they cannot act together for a common purpose or future effect, as the action of each prisoner is constrained and reduced to his immediate present. Such procedures of partitioning and serialisation characterise practices of surveillance in general: Foucault compares the disciplinary mechanisms that operate in a panoptic regime of power with the procedures set in place in the plague-ridden city in the late 17th century with its partitioned spaces, curfew, constant inspections and documentation.

While this idea of disciplinary molds imposing a rigid grid of separate space-times on malleable human material may have some justification, it is still a simplification. In his book *L'Individuation à la lumière des notions de forme et d'information*, Gilbert Simondon criticises a simplistic hylomorphic schema according to which form is an active principle and matter is entirely inert and passive.⁵ Deleuze refers to Simondon's alterna-

⁵ For instance, in the fabrication of bricks, the mold does not simply impose a geometrical figure on passive lumps of clay. The clay already contains "implicit forms" (Simondon 2013: 53), that is, organic and inorganic particles (gravel, fine roots and other plant material), which have an active role in the process of taking shape. The mold itself must have a certain flexibility and allow for minimal bending. The encounter between both, when the clay is pressed into the mold, constitutes a dynamic system of forces: the mold becomes effective, not as a whole, but point by point in each molecular collision as a reactive force. The microparticles and macromolecules of the clay equally act as a centre of force. Instead of a simple process of molding, which is nothing but an abstraction of thought, what occurs is a complex process of modula-



tive notion of modulation explicitly in several places, most notably in *Francis Bacon: The Logic of Sensation* and *Cinema 1: The Movement Image*.⁶ While there is no explicit reference in “Postscript on Control Societies”, Simondon’s theme of dynamic systems corresponds well with the Foucauldian and Deleuzian models of the microphysics of power. Power is considered as a relation of forces that operate on the underside of concrete assemblages or places of confinement: an implicit structuration continuously varying the configuration of forces, those forces that affect and those that are affected. Although Foucault defines panopticism as a “technique, universally widespread, of coercion” (1979: 222), the coercion not only comes from the outside as a form but is also internalised by the prisoner: so many “implicit forms” that act within the prisoner, modulate his behaviour and individuate a certain habitus.

What, then, is the distinction between disciplinary and control societies, if modulation occurs in both? In disciplinary societies, modulation appears to cease when a state of equilibrium is reached, that is, when the sites of confinement and disciplinary mechanisms have successfully produced docile subjects. Sites of confinement may be characterised as analogical machines that *measure* rather than count: subjects and their behaviour are measured against a standard they are supposed to resemble. There is a certain allowance for imprecision in these measurements: the criterion of resemblance belongs to an *analogical* language of perceived similarities. Through modulation, each individual becomes a measured quantity, which can be identified within the mass of individuals according to certain given standards. Proper markers such as signature or a numerical quantity (e.g. an identification number) can be taken as representing this quantity (Deleuze 1990a: 180).

The case is different with the cybernetic machine in control societies: the procedure of control is more sophisticated because in many cases sites of confinement have given way to open spaces in which we are able to act “freely”. Surveillance now is exercised by digital machines: these no longer measure but *count* every bit of information, e.g. every move and click that we make online. They not only count the digital data that we feed

tion within the dynamic “system mold-hand-clay” (Simondon 2013: 42). “The relation between matter and form is therefore not between inert matter and form coming from outside: there is a common operation at the same level of existence between matter and form; this common level of existence is that of force” (Simondon 2013: 43).

⁶ In *Francis Bacon: The Logic of Sensation*, Deleuze says that “colorism is the analogical language of painting: if there is still molding by color, it is no longer even an interior mold, but a temporal, variable, and continuous mold, to which alone the name of *modulation* belongs, strictly speaking. There is neither an inside nor an outside, but only a continuous creation of space, the spatializing energy of color” (2003: 108). And in the footnote to this passage Deleuze refers to Simondon for “the technical difference between molding and modulation” (2003: 164-65). In *Cinema 1: The Movement-Image*, Deleuze claims that “photography is a kind of ‘moulding’: the mould organises the internal forces of the thing in such a way that they reach a state of equilibrium at a certain instant (immobile section). However, modulation does not stop when equilibrium is reached, and constantly modifies the mould, constitutes a variable, continuous, temporal mould” (1991: 24). Footnote 21 refers to Simondon “on the difference between moulding and modulation in general” (1991: 221).



directly into the machine; so-called analogical sensory data – whether sounds or images – are put into digital form as well, synthesised, compressed and reproduced (such as the coverage of surveillance cameras).

The aim of control society is not merely to produce masses of obedient individuals (workers, schoolchildren, patients, delinquents), but to gather “dividual datasets” that provide a statistical view of group individuations and behaviours, useful for commercial valorisation and government monitoring. As Deleuze argues, “individuals become ‘*dividuals*,’ and masses become samples, data, markets, or ‘*banks*” (1990a: 180). The new “dividuals” are permanently coupled with machines (smart phones, tablet computers, and so forth) that allow them to connect to the Internet and, to an extent, tap into the vast data storages of the cloud; but what this coupling amounts to in practical terms is also the production of a ceaseless flood of data. The market for this information is massive and growing: data is sought after by businesses, government, military agencies, secret services, credit rating agencies, health insurances, and so forth. As the volume of information grows, its commercialisation becomes more serious and concerning; to take just one example of this process, we can no longer rely on a separation between corporations and governments. As Robert McChesney demonstrates, the reasons for their collaboration are many,⁷ but in simple terms: providing data services for the government is a lucrative business. Governments, for their part, support corporations through subsidies, monopoly licences, tax deductions, a lax handling of antitrust violations and privacy infringements. The US government, according to McChesney, actually turns the monopolisation of the market to its advantage: “The domination of the Internet by a handful of monopolists, as well as the emerging cloud structure of the Internet, is perfect for the government. It need deal with only a handful of giants to effectively control the Internet.” (2013: 164) At least since the revelations by Edward Snowden, no one is in any doubt anymore about the constant and far-reaching collecting of intelligence (including about a country’s own citizens) without public accountability. The Internet “is a surveillance tool made in heaven”, John Naughton writes, “because much of the surveillance can be done, not by expensive and fallible human beings, but by computers.” (qtd. in McChesney 2013: 161) For effective surveillance, it is no longer necessary to enclose a multiplicity of individuals in sites of confinement.

The coupling of humans and digital machines is made possible through the creation of a common language: information is exchanged, data circulated. As Lyotard writes:

Contemporary machines can accomplish operations which used to be called mental operations: taking in of data in terms of information, and storing it (memorization), regulation of access to the information (what was known as “recall”), calculations of possible effects according to different programmes, taking account of vari-

⁷ For a detailed list, see McChesney 2013: 162.



ables and choices (strategy). Any piece of data becomes useful (exploitable, operational) once it can be translated into information. (1991: 49-50)

In terms of the digital, space and time seem to pose no hurdles to communication. Data flows instantly overcome spatial and temporal distances; in this way, a realised cybernetic capitalism perhaps supersedes even the “late capitalism” identified (by theorists such as Fredric Jameson) with postmodernity, for which coexistence or simultaneity in *space* was highly important in the wake of a dwindling of modernity’s obsession with succession in time. Cyberspace, in this sense, presents space without location, space that is topologically undifferentiated: although terms such as “database” may suggest otherwise, data flows in fact have no privileged place.⁸

Even the image of the database still suggests far too much a clearly-defined territory, a memory space managed, ordered, and determined by humans. The reality of today’s dividual datasets, vast accumulations of data that can be shared, recomposed, and valued in infinite ways, is one of global flows, deterritorialisation and machinic extension, put briefly: big data. (Raunig 2015: 160; my translation).

For big data, it seems, individuals play a less important role, but in fact individual profiles increase in value: the data traces we leave online, our various data-selves, are assembled by big tech companies and less known tracking firms. We remain anonymous in name only. On the data market, our behaviour has become commodified; every piece of information can be sold and put to use. Control societies naturally want to nurture the impression that we are free (freedom of choice, freedom of consumption, leisure time): we may search for anything online, download or upload information, buy or sell products, communicate via email and chat on social platforms that have become an integral part of our lives. But as we all know, “while Gmail and Facebook may be helpful, free tools, they are also extremely effective and voracious extraction engines into which we pour the most intimate details of our lives” (Pariser 2011: 9). If we want to use free services online, we must give our consent to data extraction, storage and analysis, and tech companies have no other business plan than monetising their users’ data.

This means that we are no longer simply users or consumers, but we have become a commodity ourselves by way of the digital traces that we produce and leave behind. As Deleuze and Guattari explain in relation to television (something that is even more true with regard to the Internet): we have become

intrinsic component pieces, “input” and “output”, feedback or recurrences that are no longer connected to the machine in such a way as to produce or use it. In ma-

⁸ This gives another resonance to the imagery of “the cloud”: clouds are fractals in which topological features are reproduced across scales, making them look the same from near and far (evident from a plane window), thereby troubling the stable reference to spatial distance. The data cloud effects a similar dislocation of the “human scale”.



chonic enslavement, there is nothing but transformations and exchanges of information, some of which are mechanical, others human. (1988: 458)

Deleuze and Guattari distinguish what they call “machinic enslavement” from classical subjection, which relied on a binary organisation in classes (bourgeoisie–proletariat) and was centred on labour. With machinic enslavement the work regime changes: there is a machinic surplus, based on machinic components rather than on human labour. In our highly technicised information environment, labour has taken two new forms: on the one hand, the labour that we perform unwittingly in our leisure time as data producers, and on the other hand, the labour that has become floating and “erratic work (subcontracting, temporary work, or work in the underground economy)” (Deleuze/Guattari 1988: 469).

It is true that data production in our “leisure time” seems to fit awkwardly into the category of labour. Most people certainly do not perceive their online activities as work. Some communities of users – those who indulge in practices of self-tracking and “life-logging” through wearable technologies or mobile devices such as webcams – show hardly any concern for data protection or privacy. These practices (similar to practices of Christian confession and avowal that Foucault investigated) actually demonstrate a *desire* to share information about one’s life or family, which is expressive of something akin to the internalisation of the demands of power. Invisibility has even become a kind of threat and incites anxiety because it creates feelings of inexistence: *I am seen, therefore I exist*. Thus, Gerald Raunig argues that visibility is the new imperative of our culture (2015: 153). In other words, a perverse desire for panopticism, which has become lighter, more rapid, more effective, has reinforced the regime of cyberneticism.

Frequently surveillance capabilities are already built into technological design; they are part of the communication infrastructure. Tracking devices such as cookies, i.e. small text files stored on a user’s computer, or applications that emit geo-localisation points are just some examples. They allow for targeted advertising and also behavioural retargeting, i.e. personalised advertising that follows the user online on almost every site he or she chooses to visit. Google searches, news feeds, and of course advertising are fine-tuned according to one’s geographical position, language, search history and personal profile. Web personalisation, extolled to us as a boon, does not fail to serve the commercial interests of the provider. Slowly, our life is managed for us: suggestions for restaurants on Yelp, books on Amazon, movies on Netflix, video clips on YouTube, shoes, clothes, travel destinations. Convenience tends to obscure the fact that this amounts to a real-time modulation of behaviour.

Cybernetic machines never stop modulating. Digital machines provide a continuous temporal mold, or as Deleuze puts it in “Postscript on Control Societies”: there is “a self-transmuting molding continually changing from one moment to the next, [...] like a sieve



whose mesh varies from one point to another” (1990a: 179).⁹ While in disciplinary society it seems that modulation stops at a certain point, precisely when sufficiently docile subjects are produced that conform to a pre-determined standard of behaviour, it is the flexibility of the mold in control society, that is, the way it adapts its standard in agreement with the requirements of political and market pressures, which accounts for the rapidly changing, free-floating and yet continuous character of control (Deleuze 1990a: 178).

3. Strategies of Counter-Effectuation

Cybernetic control societies have led to a new and problematic relationship between forms of knowledge and power. This “new” path was already laid out in the 1940s with the emergence of cybernetics in the US. Already Norbert Wiener, one of the founders of the cybernetic group, reflected on “the incidental contribution we are making to the concentration of power” (1985: 29) in his 1948 book *Cybernetics*, in which he popularised his ideas and those of his fellow group members. He considered that “it is a very slight hope” that “the good of a better understanding of man and society”, i.e. an understanding of the functioning of organised information-processing systems, can “anticipate and outweigh” (1985: 29) the incidental bad effects: the concentration of power and knowledge “in the hands of the very limited class of wealthy men” (1985: 161) that will undoubtedly make the means of communication work for them. The so-called “secondary aspects of means of communication”, their use in favour of monetary gain, the stabilisation of personal and political power, “tend to encroach further and further on the primary ones” (Wiener 1985: 161). Wiener wrote these lines of caution long before he could have known about the powerful forms of knowledge associated with “big data” and data mining techniques. He could not have anticipated the degree of dominance of those with access to databases and the appropriate tools to enable them to observe, to influence and predict, and ultimately to modulate current and future human behaviour. Mark Andrejevic sums up the problematic aspects of this new relationship between forms of knowledge and power as follows:

Two aspects of this relationship are of particular concern: first, the increasing asymmetry between those who are able to capture, store, access, and process the tremendous amounts of data produced by the proliferation of digital, interactive sensors of all kinds; and, second, ways of understanding and using information that are uniquely available to those with access to the database. The dystopian ver-

⁹ Deleuze takes this conception of a continuous temporal mold most likely from Simondon, who argues that in modulation “there is never time to turn something out, to remove it from the mold [*démoulage*], because the circulation of the support of energy is equivalent to a permanent turning out; a modulator is a continuous, temporal mold [...] To mold is to modulate in a definitive manner, to modulate is to mold in a continuous and perpetually variable manner” (2013: 47).



sion of information glut anticipates a world in which control over the tremendous amount of information generated by interactive devices is concentrated in the hands of the few who use it to sort, manage, and manipulate. (2013: 42)

Naturally, there exist a range of popular and academic discourses that are concerned with possible counterstrategies to this asymmetry of power and control. One prominent idea that circulates among the postmodern left emerged from the critique of cybernetics as neglecting the materiality of systems: the conception of informational patterns and circuitry tends to erase materiality and embodiment from view (see Hayles 1999).¹⁰ These preconceptions of disembodied data patterns or an efficient circuitry of information transmission are then countered with an emphasis on noise and pollution. Most famously, Donna Haraway in *A Cyborg Manifesto* warns against a notion of information that “is just that kind of quantifiable element (unit, basis of unity) that allows universal translation, and so unhindered instrumental power (called effective communication)” (2016: 34):

[C]ommunications sciences and modern biologies are constructed by a common move – the translation of the world into a problem of coding, a search for a common language in which all resistance to instrumental control disappears and all heterogeneity can be submitted to disassembly, reassembly, investment, and exchange. (2016: 34)

On the level of language and textual bodies she recommends as a counterstrategy a “cyborg heteroglossia” (2016: 70), that is, “cyborg politics [that] insist on noise and advocate pollution, rejoicing in the illegitimate fusions of animal and machine” (2016: 57).

Similarly, Tiziana Terranova criticises the ideal of the establishment of a controlled and efficient flow of information such that the message can be conveyed “between sender and receiver by excluding all interference – by holding off the transformative potential of noise: communication is a signal sent to a receptive partner in a hostile environment” (2004: 57). Holding to such an ideal of perfect communication, marketing professionals and policy makers search for ways to get their message across to the target audience. It is no surprise, writes Terranova, that “the social engineering of communication favours repetition and the short slogan or even the iconic power of the logo as an effective way to open a channel and get the message through – short-cutting their way to the receiver by using the shortest possible route in the shortest possible time” (2004: 58). One could say that the forms of communication sustained by the cybernetic regime are asocial or corrupted: their purposive, efficiency-oriented character is without concern

¹⁰ A revealing passage can be found in Wiener’s *The Human Use of Human Beings*: “It is the pattern maintained by this homeostasis, which is the touchstone of our personal identity. Our tissues change as we live: the food we eat and the air we breathe become flesh of our flesh and bone of our bone, and the momentary elements of our flesh and bone pass out of our body every day with our excreta. We are but whirlpools in a river of ever-flowing water. We are not stuff that abides, but patterns that perpetuate themselves” (1989: 96).



for signification, rhetorical confrontation, conventional phrases of civility, the recognition of ethical or political truths.¹¹ Instead, advertising professionals attempt to control the markets and media with targeted communications. The result was famously lambasted by Deleuze and Guattari in their final work:

the most shameful moment came when computer science, marketing, design, and advertising, all the disciplines of communication, seized hold of the word concept itself and said: "This is our concern, we are the creative ones, we are the ideas men! We are the friends of the concept, we put it in our computers." Information and creativity, concept and enterprise: there is already an abundant bibliography. (1994: 10)

Terranova, however, argues that there is after all some hope:

the strategy of amplification, the attempt to control the scene of communication by sheer power, by seizing control and monopolizing the infosphere, might backfire because information managers do not sufficiently take into account the nonlinear powers of feedback or retroaction – cynicism and anger, the diversification of communication niches, or just a kind of social entropy that nonlinearizes the transmission of messages as such. (2004: 60)

Terranova points to a potential resistance that can be mobilised through affective, pre-subjective and non-cognitive responses (cynicism and anger), forms of interruption and boycott (what is called "culture jamming"¹²) and evasion techniques (finding alternative means of communication). Her last point on social entropy seems to hint at entropic phenomena of information proliferation that undermine the transmission of clear and distinct messages. In order to make this point, she takes recourse to a materialist understanding of information:

The concept of information captures material dynamics (including cultural dynamics) at their most fluid and discontinuous. It involves an understanding of material processes that is nondeterministic and nonreductionist. Material processes cannot be completely defined by information, because the latter can only ever express some of the former's dimensions. (2004: 66)

¹¹ The corruption of communicative action through technicisation was already lamented by Jürgen Habermas in his 1968 essay "Technology and Science as 'Ideology'". Criticising the cybernetic paradigm that has permeated society, he states that "the industrially most advanced societies seem to approximate the model of behavioral control steered by external stimuli rather than guided by norms. Indirect control through fabricated stimuli has increased, especially in areas of putative subjective freedom (such as electoral, consumer, and leisure behavior)" (1980: 107). However, Habermas believed that communication could be liberated from technicisation by encouraging communicative action, that is, symbolically mediated interaction grounded on intersubjectivity. Perhaps he underestimated the way in which forms of communication and cooperation are tainted by the cybernetic paradigm and its quest for universals of communication.

¹² By "culture jamming" Terranova understands practices such as "signal distortion, graffiti on advertising posters, hijacking of corporate events – all attempts at disrupting the smooth efficiency of the communication machine" (2004: 59).



Terranova here makes use of Simondon's dynamic notion of information (so-called "primary information"; Simondon 2013: 31n10¹³), with which he distances himself from cybernetics.

Although he was, in general, a great enthusiast of cybernetic sciences and adamant about the idea of a universal symbolism linking the human and the machine,¹⁴ Simondon criticises cybernetics for assuming that information is a given, self-identical message that can be transmitted from a sender to a receiver. In fact, according to Simondon, information propagates within a dynamic system, characterised by a tension between disparate orders. We cannot simply assume the given identities of a sender, a receiver and a message but have to look at the genetic and constitutive relations within an information-processing system (be it a physical, psychical, social or technical system). Simondon calls this metastable, dynamic field of relationality the "preindividual". Preindividual reality harbours potential energies that can be actualised and give rise to structuring processes of individuation; it is information that triggers these individuating processes and thus creates new structures.¹⁵ For instance, in the case of a living being certain changes in its associated milieu can lead to a maladaptation, an incompatibility between environmental affordances and the current intentions and capabilities of the individual. This incompatibility has to be resolved by the living being through modifying its own internal structures or the environment so as to better suit the preservation and

¹³ In fact, it is not quite accurate to reduce Simondon's complex notion of information to this "primary" sense. There are, according to Simondon, "two aspects of information" (2017: 148), at least in its technical usage: one that presents information as an unpredictable chance event, another that codes information by assigning a relative uniformisation to it. This second aspect becomes important for distinguishing information from noise. Nevertheless, there is a certain limitation to the coding of information, because the informational content would be nil if no aspect of unpredictability remained. This is why Simondon does not really distinguish two kinds of information (one dynamic and material, the other stereotypical and cybernetic) but rather two aspects of the same information: "Information is thus halfway between pure chance and absolute regularity." It is necessary "to distinguish three terms: pure chance, form, and information." Simondon warns us that "philosophical thought will not be able to grasp the sense of coupling between man and machine unless it manages to elucidate the true relation that exists between form and information" (2017: 150). Hence the title of his main doctoral thesis.

¹⁴ In *The Mode of Existence of Technical Objects*, Simondon argues that a certain liberating power shows itself "within the sciences and technics, through the tendency toward rationalisation of the machine and through the establishment of a symbolism common to the machine and of man; it is because of this symbolism that a synergy between man and machine is possible; for common action requires a means of communication. [...] it is this mix of the relation between man and machine that a new universal symbolism must emulate in order to be homogenous with a universal encyclopedism" (2017: 117).

¹⁵ As Simondon puts it in *L'Individuation à la lumière des notions de forme et d'information*: "information is never relative to a unique and homogeneous reality, but to two orders in a state of divergence [*disparation*]: information [...] is never deposited in a form that can be given; it is the tension between two divergent realities [*deux réels disparates*], it is the signification that arises when an operation of individuation discovers the dimension according to which two divergent realities can become a system; information is thus a trigger of individuation, an exigency of individuation, it is never a given thing; it presupposes the tension of a system of being; it can only be inherent to a problematic; information is that through which the incompatibility of the unresolved system becomes the organizing dimension in the resolution; the information supposes a phase change of a system because it supposes a first preindividual state, which is individuated according to the organisation discovered; information is the formula of individuation, a formula that can not pre-exist this individuation" (2013: 31; my translation).



continuation of life. Hence the initial informational input gives rise to a dynamic process of adaptation, or rather co-creation of the individual and its ecological niche.

Terranova goes along with Simondon, arguing that a reductionist theory of information that considers information as flowing “from point A to point B as if through a void” cannot capture the “potential for transformation and even divergent tendencies” (2004: 68). A politician who delivers a message to the people, a CEO reporting to shareholders, a marketing executive who releases a product – none of them, Terranova thinks, can guarantee the efficiency of communication, the successful transmission of a particular signification. She concludes:

we cannot deny that information has two sides, or that it belongs to two types of articulations (as Guattari would call them). On the one hand, it involves a physical operation on metastable material processes that it captures as probabilistic and dynamic states; on the other hand, it mobilizes a signifying articulation that inserts such description into the networks of signification that make it meaningful. This first operation is becoming increasingly central to cultural and political struggles over media and communication in twenty-first-century cultures. (2004: 70)

This seems a very slight hope, however, if all we can rely on is a sort of pre-individual, affective potential of the social body, a materialist dynamics that cannot be controlled or predicted. We would place our trust in a potential for resistance already inherent in the very nature of information (the irreducibility of noise, excess of materiality, etc.) and thus believe in a “saving power” where the danger grows – to put it in Hölderlin’s words quoted and meditated on by Heidegger in his famous essay “The Question Concerning Technology” (1977: 28–35 and 42). Would this wistful thinking not merely reinscribe a vague romantic gesture of the type that Heidegger counterposed to the loss of authentic being induced by technology?

This is already *beyond* hope insofar as this pre-individual, affective potential is today successfully put to work – as it seems to be in the cases of body language analysis and neuromarketing that seek “direct access to a pre-discursive ‘truth’ not yet caught up in the tangles of representation” (Andrejevic 2013: 36). Furthermore, the very instability or unpredictability of information transfer gives rise to its own counter-counterstrategy, in the form of practices of deliberate misinformation or “multiformation”. We have already seen the political right adopt strategies of a proliferation of information that aims to drown a particular message in a glut of narratives and counternarratives.¹⁶ Andrejevic offers the example of the Bush administration, which

¹⁶ An analysis of the resonances between the politics of the new right and the legacy of a postmodern cultural discourse can be found in the illuminating article “Post-Truth Politics: The New Right and the Postmodern Legacy” by Simon Schleusener. In this text, the author does not aim to equate postmodernism with right-wing politics, nor does he claim that right-wing thinkers seriously engage with postmodern



relied on a proliferating tangle of multiple and conflicting narratives to manage the revelation that US troops in the initial stages of the Iraq invasion had failed to secure the huge weapons cache at the Al QaQaa facility – a site that the International Atomic Energy Agency (IAEA) had repeatedly warned the administration about [...] [R]ather than providing a “dominant” narrative of what had happened, it did its best to exploit the fog of war to throw up a series of often contradictory explanations. (2013: 20-21)

Today the Trump administration provides a paradigm case of this kind of practice, deliberately muddling responses to (political or scientific) truths. A very instructive example is the debate on climate change, the range of responses to which goes from an outright denial of the reality of climate change to an indefinite recognition of some “connectivity” between global warming and human activity. Typical claims, which are supposed to spread uncertainty and mistrust, are for instance: “Climate change is too complex for anyone to be really able to have some understanding”, or “Climate scientists disagree among themselves as to the reality of climate change” (although surveys have shown that the level of consensus regarding the human impact on climate change is as high as 97% among scientists) (Gore et al. 2016). Trump has also erroneously claimed that scientists have manipulated temperature data, that the global rise of temperature would actually have beneficial effects, that the whole story of climate change was a hoax invented by the Chinese, and that wind turbines would cause cancer (Trump 2012, 2015; Milman 2019). Only recently, in a tweet, Trump cited a climate skeptic who claims that climate science is a “fake science” (Miller 2019). It should be clear that such contradictory and erroneous statements aim to undermine the very status and reliability of scientific knowledge. As Andrejevic argues, “the charge of fake news, which originated as a way of describing demonstrably untrue stories circulated by right wing media outlets and their audiences, was so easily taken up and repurposed by the political right” (2018: 257). He speculates that “the ease with which the right has taken over the term is perhaps a function of the long-established critique of truth and objectivity originally mobilized by the political left” (2018: 257).

Nietzsche’s challenges to a conception of universal truth and his arguments that all truths are perspectival and entangled in relations of power now seem to have become commonplaces. Unfortunately, this typically postmodern attitude – all is simulacra – also has an inadvertent consequence, namely “to take any sting out of the attempt to ‘speak truth to power’” (Andrejevic 2018: 257). Perhaps, in our post-truth age, beyond the hope for some preindividual “potential” to arise, it is necessary above all to resuscitate a concept of truth – even if that means that we have to leave our vested intellectual territo-

theories: “Yet, their arguments profit from a cultural environment in which relativistic and constructivist postmodern sentiments have gained some degree of credibility over the years, so that elements of a postmodern hermeneutics of suspicion can easily be activated for neoliberal causes and extreme right-wing positions.” (2018: 360-61)



ries. “It is not a questioning of worrying or of hoping for the best”, Deleuze writes, “but of finding new weapons” (1990a: 178). In *Peut-on penser la politique?*, Alain Badiou writes: “Today, there is a lot of hype about communication. However, it is clear that it is *incommunication* that, making the impossible possible, puts truth into circulation in politics” (1985: 97; my translation). He proposes that “it is a question [...] of interrupting the communication, so that the impossible can happen in its historicity. The organised collective body is first and foremost a deafness composed in response to established facts” (1985: 110; my translation). Becoming-deaf would certainly be a strategy that Deleuze could align with as well, when he calls for creating “vacuoles of noncommunication” (1990b: 175). However, the strategy of counter-effectuation that he points to is not that of speaking truth to power, but rather practices of hijacking speech. Asked if he could imagine a role for information and communication technologies in precipitating communism, he replies:

Maybe, I don’t know. But it would be nothing to do with minorities speaking out. Maybe speech and communication have been corrupted. They’re thoroughly permeated by money – and not by accident but by their very nature. We’ve got to hijack speech. Creating has always been something different from communicating. The key thing may be to create vacuoles of noncommunication, circuit breakers, so we can elude control. (1990b: 175)

However, do these strategies of hijacking speech – of communication breakdown – go far enough? Perhaps it is time to think again about organised political and collective action; perhaps it is time to openly dispute “the ownership and control of the material resources for data storage and mining” (Andrejevic 2013: 42-43) – to defy the established so-called facts, “so that the impossible can happen in its historicity” (Badiou 1985: 110). Can “cyborg heteroglossia” (Haraway 2016: 70), noise and pollution be a real means of counter-effectuation in this process? Breaks in the flows of information would seem to be the critical pathology afflicting any cybernetic control society. As Haraway notes, “the biggest threat to such power is interruption of communication. Any system breakdown is a function of stress” (2016: 34). Yet Bartleby’s practice of withdrawal and refusal seems almost impossible, or at the very least futile, in a world so permeated with information and communication technologies – at least when it remains on an individual level of resistance or withdrawal. Becoming-deaf, being-deaf, can only be a condition of political action when it serves as the preliminary subtraction from a place of non-truth (or post-truth), so that new collective political claims can be made that will be true for all. This universality of truth must not be confused with pre-existing generalities or traditional universals, but has to be thought as a concrete production of truth in particular circumstances and struggles.¹⁷

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