Deleuze and Guattari's Semiorhythmology: A Sketch for a Rhythmic Theory of Signs

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Abstract

I propose in this text a rhythmic theory of signs drawn from the thought of Gilles Deleuze and Félix Guattari. I name this theory a *semiorhythmology*. I suggest that the theory of rhythm developed in *A Thousand Plateaus* (1980) can be understood, in part, as the culmination of the diverse set of inquiries into signs that both Deleuze and Guattari undertook, individually and together, beginning in the 1960s. I first outline Deleuze's theory of signs as a theory of encounter as developed in *Proust and Signs* (1964) and *Difference and Repetition* (1968), following which I sketch Guattari's engagements with signs and semiotics throughout the 1960s and 1970s, particularly through his notion of «a-signifying semiotics» and the concept of the «diagram» he adapts from the semiotics of Charles Sanders Peirce. I close by showing how these heterogeneous theories of the sign are drawn together in *A Thousand Plateaus* through the Spinozist reading of the ethology of Jakob von Uexküll and the theorisation of rhythm in the form of the refrain.

Introduction

I am going to propose here that the account of rhythm that Gilles Deleuze and Félix Guattari develop in 1980's *A Thousand Plateaus* (1987) can be understood, in part, as a rhythmic theory of signs, and that it marks the culmination of the diverse set of inquiries into signs they both, together and individually, undertook beginning in the early 1960s. By considering how these heterogeneous engagements are brought together in *A Thousand Plateaus* I hope to evoke something of the character of the complex assemblage that is «Deleuze-Guattari», while suggesting that their theory of rhythm could provide a distinctive, heterodox contribution to semiotics. I will develop this with reference to a proposed plurality of sign behaviours, and especially to sign behaviours occluded by standard accounts of signs. Following Anne Sauvagnargues's description of the action of a «critical» Deleuzo-Guattarian rhythm¹ as a «rhythmology» (Sauvagnargues 2016b: 134), I name the rhythmic theory of signs I will provisionally outline here a *semiorhythmology*.

But there are immediate hurdles to developing a theory of signs through Deleuze and Guattari's thought. What could these two profound critics of representation have to say

A rhythm which is «not meter or cadence» but rather concerns «the Unequal or the Incommensurable» (Deleuze and Guattari 1987: 313).

about the exemplary representational notion that is the sign?² For Michel Foucault representation is the key feature of the classical account of the sign (Foucault 2002: 72), and, from Aristotle treating words as conventionally determined signs of affections of the soul (*De interpretatione*, 16a1-29)³ through to Charles Sanders Peirce's account of signs as representations (Peirce 1998a: 5) and Ludwig Wittgenstein's suggestion that signs may only be alive in their use (Wittgenstein 2009: §432), there seems to be little in the way of resources in the history of philosophy for detaching signs from a dependent role of representing something beyond themselves.⁴ Moreover, the dominant theory of signs that Deleuze and Guattari faced in their time was that of Ferdinand de Saussure, for whom «sign» named an inseparable coupling of signifier and signified (Saussure 2011: 67). This makes Deleuze and Guattari's notion of «a-signifying semiotics» seem like an oxymoron: how could semiotics, the study of signs, proceed without a concern for how these signs signify? What is a sign if it does not signify?

Equally, sign and rhythm may seem an unlikely pairing. Take, for instance, the work of Henri Meschonnic. Meschonnic is a theorist who at first glance seems closely aligned with Deleuze and Guattari, not only through developing his own critique of representation (Meschonnic 2011: 43), but furthermore in aligning this critique with a theory of rhythm that challenges and exceeds traditional definitions: against the common association of rhythm with meter, order, and proportion, Meschonnic aims to revive a Heraclitean notion of rhythm as continuous flow (Meschonnic 2011: 140), an affective, transformative, pluralistic rhythm (Meschonnic 2011: 54).⁵ But not only is Meschonnic's understanding of rhythm «irreducible to the sign» (Meschonnic 1981: 705), there is moreover a «conflict», even «war» (Meschonnic 2011: 81), between rhythm and sign, between «continuum and discontinuum, against the unthought and commonplace ideas» (Meschonnic 2011: 62). For Meschonnic the sign is the *representation* of language, and a representation that presents itself not as a representation but as the «nature and truth» of language (Meschonnic 2011: 66). This is enacted through a dualism that assumes and asserts a split - of signifier and signified, form and content, mind and body (Meschonnic 2011: 43) where the representation of language stands over and above language itself. The sign names everything that is dead in language (Meschonnic 2011: 83), everything that puts a stop to movement, and to pay heed to rhythm, for Meschonnic, is to undermine this split

Deleuze's declaration in the preface to *Difference and Repetition* that «[w]e propose to think difference in itself independently of the forms of representation which reduce it to the Same» (Deleuze 1994: ix) could stand as a slogan for his work as a whole, while on Guattari's account the ultimate function of representation is to cut us off from reality (Guattari 1984b: 92). These references could be supplemented with countless others spanning everything the two wrote.

I have referred here to the standard English edition of Aristotle edited by Jonathan Barnes (Aristotle 1984).

⁴ See Cassin & *al.* (2014a) for a philosophical history of the word and concept «sign».

Meschonnic draws here from Émile Benveniste's important genealogical and etymological account of the term «rhythm» (Benveniste 1971: 281-88).

that the sign marks, to recover the continuity beneath discontinuity and with it the life of language.

Meschonnic's critique of the sign is familiar across French thought in the second half of the twentieth-century, where a rejection of the Saussurean sign accompanies the widespread break with structuralism at the end of the 1960s.⁶ But it highlights the question of why Deleuze and Guattari seem to find in the sign a significant spur to thought, as well as the problem of how the seemingly conflicting notions of sign and rhythm are to be drawn together. If their theory of rhythm is a theory of signs, by common conceptions of the sign it is scarcely recognisable as such. Indeed, James Williams has suggested that Deleuze «never develops a full philosophy of the sign» (Williams 2016: 120), and moreover that «it is hard to argue that the concept of the sign is crucial to his metaphysics» (Williams 2016: 121). While I will dispute Williams's latter claim, I agree that we cannot say that either Deleuze or Guattari has a «philosophy of the sign», and that we rather find across their work a set of diverse inquiries that do not have any immediately cohesive character. But I take this plurality to be a positive characteristic of their engagement with signs, and believe that the figure of rhythm provides a means to accommodate such a semiotic pluralism.

To lay the groundwork for the Deleuzo-Guattarian semiorhythmology I propose I will begin with Deleuze and Guattari's earlier inquiries into signs, and work forward towards exploring how these are manifest in A Thousand Plateaus. I will start by considering how Deleuze, first in 1964's Proust and Signs (2008) and then elaborated in 1968's Difference and Repetition (1994), conceives of the sign as something like a site or source of encounter.⁷ Following this I will track Guattari's thought on signs from his early elaborations on Lacanian thought through to his progressive development, following the 1972 publication of Anti-Oedipus (1983), of a «mixed semiotic», proposed as an alternative to the Saussurean theory of the sign. I will show that the most theoretically profound outcome of this is a radically revised version of Charles Sanders Peirce's notion of the diagram, which motivates much of both Guattari's and Deleuze's thought to come. I will suggest that in A Thousand Plateaus these two strands of inquiry are drawn into conjunction with a biosemiotics outlined through a Spinozist reading of the early twentieth-century ethologist Jakob von Uexküll, all of which together allow for the construction of the concept of the refrain, the modulating, rhythmic assemblage which draws diverse semiotic practices into consistency. What I set out here is only a sketch of a set of engagements with signs each of

Though Meschonnic contends that Saussure was widely misread within structuralism (Meschonnic 2011: 48), and the recent discovery of Saussure's manuscripts has complicated the widespread break with his thought. See, for example, Maniglier (2018) on Derrida's critique of Saussure in light of what is now known of Saussure's theory.

For now I will leave aside another unorthodox line of inquiry into signs that could be extrapolated from 1969's *The Logic of Sense* (1990). Here Deleuze implies an alternative to, or at least an expansion of, the preeminent signified-signifier conception of the sign by turning to the logical theory of the Stoics. For the Stoics the incorporeal *lekton*, the utterable, gives signification an explicitly temporal and heterogeneous character. (See Cassin & *al.* 2014b).

which is immensely rich in its own right, but I hope to suggest why further inquiry into these, individually and in relation, could serve to open many fruitful lines of research.

Deleuze's pre-Guattari theory of signs

Deleuze's most sustained and direct engagement with signs prior to *A Thousand Plateaus* comes in his *Proust and Signs*, published in 1964 and expanded, but not revised, in 1970 and again in 1976. The first version of this text has the remarkable feature of seeming to construct a concept of the sign *sui generis*, bearing little apparent relation to the dominant Saussurean conception. Deleuze starts *Proust and Signs* with a rejection of a common opinion: the «search» of Proust's *In Search of Lost Time* is not, says Deleuze, a matter of recollection, of the involuntary memory with which Proust is most associated, but rather what Deleuze calls an «apprenticeship» (Deleuze 2008: 3). The time in focus is not the time of the past but of the present and future, of what Jean-Jacques Lecercle calls when the time necessary for learning» (Lecercle 2010: 77). And for Deleuze what this involves in Proust's work is when exploration of different worlds of signs» (Deleuze 2008: 4), elaborating on what he terms the worldly sign» (Deleuze 2008: 5), signs of love, sensuous impressions or qualities, or, «material signs» (Deleuze 2008: 9), and, finally, the signs of art.

Like the signs of representation, these are still signs of something. But it seems that this something is not defined referentially. It is not a case of a given signifier referring to its signified. More important than what these signs are signs of is who or what «emits» them. This means that not only is the notion of signs at work here contrary to its commonplace sense; so too is that of learning. The accumulation of facts, of the appropriate forms that conventional signs take, would not, for Deleuze, constitute learning properly speaking. Learning rather always constitutes a challenge to common sense, to «stock notions» (Deleuze 2008: 18) and «habitual» (Deleuze 2008: 19) ways of understanding the world.

Learning, undergoing the apprenticeship in signs, is then a process of interpretation and explication, of rethinking and renewing how one perceives, understands, and engages with the world. Lecercle considers this perhaps the most important aspect of the theory of signs Deleuze develops here: that signs are not conceived objectively, or rather, in terms of an objectivism where the object emitting the sign holds the secret to it, nor subjectively, where the work of signs would be merely subjective association, but are rather «deeper» than both object and subject (Lecercle 2010: 83). Deleuze puts forward a conception of signs where the interpreter and their world are co-implicated. Signs do not merely tell us about what they signify but directly impinge on thought, force thought into a constructive act of interpretation that changes the form that thought itself takes.

How does Deleuze produce such an unorthodox account of signs? There is a hint to the philosophical grounding of this account at the beginning of his *Nietzsche and Philosophy*

(2006a), from two years earlier. Following Nietzsche, Deleuze states that «[t]he whole of philosophy is a symptomatology, and a semiology» (Deleuze 2006a: 3).8 On this account a phenomenon «is not an appearance or even an apparition but a sign, a symptom which finds its meaning in an existing force», and to engage with signs is to interpret forces. The impact of such a Nietzscheanism can be heard in several ways throughout Proust and Signs, as in the echo of Nietzsche's discussion in The Gay Science of a «sign-world» «debased to its lowest common denominator» (Nietzsche 2001: §354) when Deleuze describes the «stupid» and «stereotyped» worldly signs of high society, characterised by their «vacuity» (Deleuze 2006: 5). Pierre Klossowski likewise took Nietzsche's philosophy, especially in its early years, to be a «combat against culture», that is, the world of signs, and argues that in opposition to this culture of signs Nietzsche ultimately proposed a «culture of affects» (Klossowski 1997: 14). With Klossowski's thought on Nietzsche developing in parallel and in dialogue with Deleuze's own, Klossowski's suggestion that this «culture of affects» concerns a «semiotic of impulses» (Klossowski 1997: 15) is suggestive of how Deleuze can take Nietzsche as the source for a radically non-Saussurean theory of signs.9

Four years later, *Difference and Repetition* seems to confirm this reading, with the opening pages announcing Nietzsche as a thinker concerned with «put[ting] metaphysics in motion, in action ... producing within the work a movement capable of affecting the mind outside of all representation ... of *substituting direct signs for mediate representations*» (Deleuze 1994: 8, my emphasis). Again, as in *Proust and Signs*, signs are associated with learning, and learning, as before, is not conceived of simply as the passage from non-knowledge to knowledge, the discovery of solutions, laws, and generalities that then dissolve the problems they pertained to (Deleuze 1994: 164). Learning rather names «the subjective acts carried out when one is confronted with the objecticity of a problem (Idea)», not an act of recognition but rather the explication of an internal difference that no given solution can eliminate. And again learning is associated with signs, where it is said that learning «takes place not in the relation between a representation and an action (reproduction of the Same) but in the relation between a sign and a response (encounter with the Other)» (Deleuze 1994: 22).

Here Deleuze outlines a more thorough, metaphysical account of signs, remarking that they involve heterogeneity «in at least three ways»:

Guillaume Collett has recently, in the pages of this journal, mapped the development of what he terms a «symptomontology» in Deleuze and Guattari's thought, beginning with this text (2018).

Daniel W. Smith has also noted that the signs of love of *Proust and Signs* have much in common with a Nietzschean notion of the phantasm (or simulacrum), key to Klossowski's reading of Nietzsche (Smith 2005: 13-14).

Furthermore, a footnote credits Klossowski with having demonstrated a link «between eternal return and pure intensities functioning as 'signs'» (Deleuze 1994: 331n16), and Klossowski receives several more important references throughout the text.

first, in the object which bears or emits them, and is necessarily on a different level, as though there were two orders of size or disparate realities between which the sign flashes; secondly, in themselves, since a sign envelops another «object» within the limits of the object which bears it, and incarnates a natural or spiritual power (an Idea); finally, in the response they elicit, since the movement of the response does not «resemble» that of the sign. (Deleuze 1994: 22-23)

Again the sign is not reducible to either object or subject, not only working across them but producing the terms that are retroactively named as a subject-object relation. Learning is not imitation but rather practical engagement, and teachers are not those who say «do as I do» but rather those who say «do with me». Deleuze uses the example of swimming, where learning to swim is not primarily a case of imitating an instructor, nor of imitating the movement of the water, but rather involves staging an encounter with the movement of the water around us, of «grasping» it «in practice as signs». To learn is «to constitute this space of an encounter with signs»; in other words, to open ourselves to a disorienting, alien outside, to immerse ourselves in a problem (such as the swimmer with the problem of the sea), to place the relations that constitute our bodies into relation with the relations that constitute the problem, and to give consistency to the new field this then constitutes.¹¹

Where the account of signs in *Difference and Repetition* seems to expand on that of *Proust and Signs* is in extensively accounting for the ontological and epistemological level at which encounters with signs take place, and this is thematised through the notion of sensation. Deleuze takes the concern of the «transcendental empiricism» he affirms to be «apprehend[ing] directly in the sensible that which can only be sensed, the very being *of* the sensible» (Deleuze 1994: 57-58). «That which can only be sensed» names the primary characteristic of the *encounter*, an encounter not of something recognised and readily understood but of «[s]omething in the world» that «forces us to think» (Deleuze 1994: 139). The object of this encounter is the sign (Deleuze 1994: 140): it is the sign that forces us to think, that «cause[s] problems» (Deleuze 1994: 164).

In outlining this conception of the encounter Deleuze begins with Plato, who for Deleuze is an exception in the history of philosophy in not subordinating apprenticeship to knowledge (Deleuze 1994: 166) and in establishing a temporal notion of thought (Deleuze 1994: 142). But Plato, on Deleuze's account, does not yet capture the «being of the sensible». For this Deleuze must turn to biology, and it is in linking signs and habituation that the primacy of sensation becomes clear. Deleuze remarks on how «[e]very organism, in its receptive and perceptual elements, but also its viscera, is a sum of contractions, of retentions and expectations» (Deleuze 1994: 73), a «primary vital sensibility» through which behaviour is developed and enacted in relation to a domain of encountered

Ronald Bogue elegantly details some aspects of Deleuze's account of learning (Bogue 2004).

signs. On Deleuze's account of the organism, «[t]he whole domain of behaviour, the intertwining of artificial and natural signs, the intervention of instinct and learning, memory and intelligence, shows how the questions involved in contemplation are developed in the form of active problematic fields» (Deleuze 1994: 78). But while in this account Deleuze refers primarily to the purely historical and philosophical resources of Bergson and Hume, in fact the importance of the physical sciences to Deleuze's thinking of signs is manifest here in his reliance, at this point often unacknowledged, on the philosophy of modern science developed by Gilbert Simondon.

Deleuze does credit Simondon for showing «that individuation presupposes a prior metastable state» (Deleuze 1994: 246), and cites here the significance of Simondon's concept of «disparateness», or disparation, the notion that it is a disparity between two orders brought into relation that motivates the process of individuation. But Deleuze's regular mentions of disparity across Difference and Repetition should all be read with Simondon in mind, as when he defines «signal» as a «system with orders of disparate size» and «sign» as «what happens within such a system, what flashes across the intervals when communication takes place between disparates» (Deleuze 1994: 20).12 With these definitions Deleuze seems to name as his «sign» what Simondon calls a «signal» (Simondon 2005: 257), and what the sign does when it is forcing thought is expose thought to the «coexistence of contraries» (Deleuze 1994: 141). For Deleuze, as for Simondon, «[e]very phenomenon refers to an inequality by which it is conditioned. Every diversity and every change refers to a difference which is its sufficient reason» (Deleuze 1994: 222). The condition for anything appearing, being actualised or presented as a solution to a problem, is disparity, and the sign spans this disparity, the shock to thought that it forces, and the solutions produced.

That Simondon allows Deleuze to elaborate and expand the Nietzschean theory of signs of *Proust and Signs* through a (perhaps still fledgling) materialist account of sensation then sets the conditions for Deleuze to ultimately be able to bring this theory of signs into contact with the semiotics that Guattari had at the same time made tentative steps towards, and that he continued to develop across the 1970s. I will now turn to that work.

Guattari's semiotic inquiries

Prior to Deleuze and Guattari's *Anti-Oedipus*, Guattari's most significant attempt to theorise signs was «From One Sign to the Other», originally a letter to Lacan written in 1961 and published in article form in 1966. Guattari takes the autonomy and priority that Lacan assigns to the signifier over the signified (Lacan 2006: 415) as permission to develop a wildly creative and expansive approach to signs, a move that Guattari only later realised

My account of Deleuze's debt to Simondon here owes much to the writings of Anne Sauvagnargues. (Sauvagnargues 2016a).

marked a significant departure from Lacan (Guattari 2006: 34). In this text Guattari set himself the ambitious task of discovering a «prototype of the sign that would be able to account for all creation on its own» (Guattari 2015: 185). Among the diverse lines of thought Guattari develops, the notion that most persists in his work is that of the «point-sign», at this time a functionally undividable entity engendered by two «splotches» which by themselves do not yet constitute signifying material. Three of these point-signs make up a «basic sign», which can be enchained and encoded into complex semiotic systems (Guattari 2015: 184).¹³

The notion of the point-sign drops out of Guattari's writings until it is reformulated, in his preparatory texts for *Anti-Oedipus*, as the Nietzschean «power-sign» (Guattari 2006: 224), which itself does not appear in *Anti-Oedipus*, where «points-signs» receive occasional reference but little elaboration. For the remainder of the 1970s, however, Guattari devotes a large part of his work to re-theorising signs and semiotics. This direction had been hinted at early in his preparations for *Anti-Oedipus* when he remarks that «I think it's with Hjelmslev, maybe Peirce» (Guattari 2006: 38) that the key to departing from structuralism lies. A concern with Peirce's notions of the diagram and diagrammatization appears throughout these writings, where the power-sign is equated with a «diagrammatization of the sign» (Guattari: 46) and associated with a «deterritorialized polyvocality» (Guattari 2006: 72). This signals that, unlike Deleuze up to this point, Guattari is keen to develop his inquiries into signs with some traditional semiotic theories in mind.

Peirce, despite his founding role in semiotics, is nevertheless a somewhat unconventional figure in that field. His tripartite division of signs into icons, indexes, and symbols (Peirce 1998a: 5) contrasts with the binaries that operate across structuralist accounts, and his minimal definition of a sign as being «something which stands to somebody for something in some respect or capacity» (Peirce 1931-35: 2.228) offers a flexibility and open-endedness that few other accounts do. But here already Guattari suggests a distinction from Peirce by speaking of «a passage from iconization to diagrammatization» (Guattari 2006: 77), a formulation that could make little sense to a Peirce for whom the diagram is a type of icon. For Peirce each of the types of icon – image, metaphor, and diagram (Peirce 1931-35: 2.277) – operate through a relation of resemblance. Guattari would agree with regards to the image and the metaphor, but he finds something different at work in the diagram. That Guattari then turns the diagram to political ends, in a passage entitled «Icons and Class Struggle» (Guattari 2006: 188), begins to suggest why.

For Guattari, signification has an immediately political character. Against standard understandings of the signifier-signified relation as «arbitrary» (Saussure 2011: 67) or «conventional» (Peirce 1998a: 9), Guattari argues that this relation is «at root merely the expression of authority by means of signs» (Guattari 1984b: 88). Guattari contends that

Janell Watson offers an illuminating reading of the importance of this moment of Guattari's thought (Watson 2009: 32-39).

meaning does not come from language itself, but rather from «very real social power formations» (Guattari 1984c: 169), and he speaks of a «linguistic machine» that serves to systematise and structure these power formations. To remain at the level of language is to avoid questioning the operations of power that underlie it (Guattari 1984b: 82). At issue for Guattari, then, is that approaches that make signification, language, or the symbolic primary do not and cannot adequately account for the real diversity of semiotic systems, and he suggests that «[o]ne type of meaning is produced by the semiotics of the body, another by the semiotics of power (of which there are many), yet another by machine semiotics» (Guattari 1984c: 164). In short, Guattari is challenging methods that suppose the adequacy of a single semiotic – specifically that of signification – and raising the question of by what means a single semiotic can be seen to unify diverse semiotic systems, «where all other poly-centred semiotic substances can become dependent on a single special stratum of the signifier» (Guattari 1984a: 75).

The new role of analysis then becomes a matter of mapping «the non-signifying semiotic dimensions underling, illuminating, and deconstructing every discourse» (Guattari 1984b: 104). But the question remains of what it could mean for a semiotics to be nonsignifying or a-signifying.¹⁴ Considering Peirce's division of signs will be useful here, and will suggest why and how Guattari turns to the diagram. Peirce distinguishes between three kinds of signs: first, likenesses, or icons; second, indications, or indices; and third, symbols, or general signs (Peirce 1998a: 5). Icons «serve to convey ideas of the things they represent simply by imitating them», indices «show something about things, on account of their being physically connected with them», and symbols «have become associated with their meanings by usage». It is perhaps not quite right to say that these are classes of signs so much as they are aspects or functions of the sign: for Peirce semiosis involves accounting for how each of these functions is a part of any given sign we encounter. What Guattari's positions suggests, on these definitions, is that the semiotic of signification operates solely at the level of the symbol, and what Guattari is doing is trying to accommodate the icon and the index. Among many semioticians, linguists, and philosophers, signs that are «only» icons, indices, or mixes of the two are often not considered to be signs and are rather named as signals, and, as Guattari scholar Gary Genosko puts it, Guattari is aiming to «rethink and regain the lowly status of signals» (Genosko 2009: 89).

Guattari does this across the 1970s through a continually refined, but generally tripartite, distinction of semiotics. In 1973's «The Role of the Signifier in the Institution», for example, Guattari demarcates 1. non-semiotic encodings, 2. signifying semiologies (symbolic and signification), and 3. a-signifying semiologies, while 1976's «Meaning and

As far as I can discern Guattari uses these terms interchangeably.

Power» distinguishes 1. natural encodings, 2. icons, and 3. signifying and a-signifying semiotics. That his categorial distinctions undergo subtle shifts is indicative of the care Guattari takes to avoid making distinctions that are too final or absolute, anticipating his and Deleuze's claim that every semiotic is ultimately a mixed semiotic, though it is also evidence of the terminological fluidity – and sometimes looseness – that poses a hurdle to the interpretation of his thought. I will not detail these categories here – excellent accounts exist elsewhere, such as across the writings of Gary Genosko (2009) and in the work of the cultural theorists Lawrence Grossberg and Bryan Behrenshausen (2016) – and for now will limit myself to picking out some key aspects for my argument going ahead.

When discussing natural encodings, or non-semiotic encodings, Guattari stresses that even the most minimal discursive rendering of the natural realm involves a translation into signs (Guattari 1984c: 167). Natural encodings themselves are not yet a semiotic substance, and as such no direct translation from this system to another system can take place. This is suggestive of one of the most prominent themes of Guattari's work in the 1970s, namely his view the sciences are not concerned with the «discovery» of external realities as such, but are rather always creative and constructive in themselves, producing something new when they make models of the natural world (Guattari 1984b: 90). This kind of scientific procedure with regards to natural encodings, alongside what he names the «sign machines» of economic, musical, or artistic «technico-semiotic complexus», are instances of what Guattari will call «a-signifying semiotics» (Guattari 1984a: 75).

But care should be taken to resist any too-hasty distinction between a negatively construed, repressive signifying semiotic and a positively construed, liberatory a-signifying semiotics – that in «Meaning and Power» it seems that the exemplary «a-signifying machine» is capitalism is enough to suggest a more complex relation (Guattari 1984b: 85). These «a-signifying semiotics» are also named «post-signifying semiotics» (Guattari 1984a: 75), and should not be understood as being wholly distinct from signification: they are still «based on» signifying semiotics and «cannot do without props of this kind». From a practical perspective we could envision this through how, for example, the work of science takes place in state or even corporate institutions. Despite this, Guattari says that a-signifying machines use signifying semiotics only as a tool, «an instrument of semiotic deterritorialization, making it possible for the semiotic fluxes to form new connections with the most deterritorialized material fluxes». The intention with a-signifying semiotics is thus to produce a new relation between the world of signs and the world of things (that is, the material world, though the term «material» will require further interrogation), or to reinvest in this relation that is sidelined and obscured by signifying semiotics.

Both Deleuze and Guattari later decide to use «semiology» to refer to linguistic approaches and «semiotics» to a more general and inclusive study of signs of which semiology is only one part, though earlier in his work on signs Guattari seems still to use the terms interchangeably.

As with Deleuze's thinking of signs, this takes the form of a critique of representation. Guattari suggests that representation is the operative form that signification takes, and that it takes the form of a «snapshot» of «the totality of intensive reality» or «the totality of fluxes» (Guattari 1984b: 87), immobilised and formalised to conform to «the world of dominant significations and received ideas». What is key to representation is that «the sign never refers directly to reality» (Guattari 1984b: 92), and that instead of the diverse connections that make up «reality» it is «cut up» into a «denoted» reality and «world of images». With this comes a reduction of the polyvocality of expression into the «bi-univocal mode» of subject and object (Guattari 1984b: 92-93). With regards to representation, Guattari states his desire:

What I want to recover are the indices, the residual traces, the escapes into transversality, of a collective arrangement of utterance [collective assemblage of enunciation] which, under whatever circumstances, constitutes the real productive agency of every semiotic machinism. (Guattari 1984b: 93)

Guattari speaks of this as «foster[ing] a semiotic polycentrism» (Guattari 1984a: 77-78), and, semiotically speaking, the goal is to recognise that «signs work on things prior to representation» (Guattari 1984a: 76, translation modified; Guattari 2012: 454), that is, that signs and things come together in ways that are independent of any ideal conception of their relation.

These are not goals that Guattari leaves behind, but there is a tension here that seems unresolved, a tension between a-signifying semiotics as relying on signifying semiotics and a-signifying semiotics as championing pre-linguistic expression. Moreover, the apparent proximity between the flows of capitalist markets and «the most deterritorialized material fluxes» that Guattari seems to conceive as having liberatory potential is suggestive of the tendency in Deleuze and Guattari that has led Slavoj Žižek to hyperbolically summarise one common critique by naming Deleuze as «the ideologist of late capitalism» (Žižek 2012: 163). As such it is important that Guattari later clarifies what it means to say that a-signifying semiotics are post-signifying semiotics, when specifying that they do not involve a simple reversion to a pre-linguistic, pre-signifying state:

this does not therefore mean a return to the myth of a «natural» semiotic. On the contrary, it means getting beyond semiotics centring upon human beings and moving irreversibly towards semiotics involving technological and theoretical systems that are ever more differentiated, more artificial, and further from primitive values. The problem is no longer one of trying to straddle de-territorialized fluxes, but of getting ahead of them. (Guattari 1984b: 98)

While it is not yet clear what it would mean to «get ahead of» deterritorialized fluxes, what is nevertheless stressed here is that post-signifying semiotics has an important critical element. It remains the case that there is a certain proximity between the flows of capital and the flows of pre-linguistic desire and expression, but now we hear that while «there is ... no meaning in the ups and downs of the stock market», capitalist power nevertheless «seeks to control the non-signifying semiotic machines» (Guattari 1984c: 171): describing capital as the «model of models», Guattari argues that the function of capitalism consists in «reducing the multiplicities of desire to a single undifferentiated flux – of workers, consumers, etc.» (Guattari 1984b: 85).

As such there is an aspect of a-signifying semiotics that resists the notion that what this term implies is a simple immersion into the flows that underlie signification, chief among them the flows of capital. The image here is of a-signifying semiotics as a critical and constructive procedure, one that aims to disarticulate semiotics from both a reliance on signification and any faith in a pre-signifying state. To articulate this complex, polyvalent character of a-signifying semiotics, Guattari turns to Peirce's notion of the diagram.

As noted, for Peirce the diagram is a type of icon. When explaining what an icon is, Peirce notes that photography is in some respects instructive insofar as a photograph can be seen to imitate exactly that which it represents, but on the other hand photographs are «physically forced to correspond point by point to nature», a characteristic of the index (Peirce 1998a: 6). More apt when speaking of icons are the sketches of sculptors or painters, or the reasoning of mathematics, with likenesses being «the very hinges of the gates of their science». In this context, the diagram is a particular type of icon, one that suppresses certain features of the object it refers to so as to allow the mind «more easily to think of the important features» (Guattari 1998b: 13). This suppression can be to the extent that the diagram can resemble its object «not at all in looks» but only in respect to the relation of parts. In this sense for Peirce the diagram is a kind of likeness, mental or physical, that allows the path that reasoning should take to be more easily conceived.

While the icon is said by Peirce to have «no dynamical connection with the object it represents» (Guattari 1998a: 9), in the form of the diagram, such as those of *algebraic formulae*, it can be said to have the «capacity of revealing unexpected truth» (Peirce 1931-35: 2.279). Guattari is not as concerned with reasoning and a search for truth as Peirce is, but it is nevertheless something like this aspect of the diagram that interests him. Compared to the image, the diagram «far more efficiently and precisely» includes «the articulations whereby a system operates» (Guattari 1984c: 170), but, more than this, Guattari suggests that this capacity for revealing, or, rather, *producing* the unexpected necessitates separating the diagram from the still-representational figure that is the icon. ¹⁶

There is not the space in this article to go into why this break with Peirce is necessary in Peirce's terms, but in short I take it to be a result of how Peirce's conception of reasoning, of interpreting signs, is ultimately not open-ended but is always said to be moving towards a «true interpretation» or «final opinion» (Peirce 1998c: 496).

Guattari refers to Peirce's assertion that algebraic equations are diagrams, suggesting that they function as signs «in place of the objects they relate to, independently of any effects of signification that may exist alongside them» (Guattari 1984c: 170-71). But how he is differentiating himself from Peirce is reflected more clearly in how there is something not entirely satisfying in Peirce using the example of a sketch for a painting or sculpture when describing icons. We can readily affirm that a certain likeness holds between a painting and its preparatory sketch. But it would not be right to say that a sketch imitates a painting, or even vice-versa. In the first case this is simply because the sketch precedes the painting, and in the second it is because, while the painting in one respect imitates the sketch, this far from exhausts the relation between them. It seems rather that the sketch, as diagram, is taken as a guide or catalyst to creating something that was not present in the diagram itself, something unexpected.

As such, when Guattari is conceiving of diagrams he does not understand them to be presenting a likeness of an object that can in theory be fully comprehended by the mind. They should rather be seen to be bringing about a process that has no necessary direction or goal, but which rather takes as its premise only to make «signs work flush to material flows» (Guattari 1984b: 88, translation modified; Guattari 2012: 419; see Alliez 2015: 145), to use the relational detail and refinement of the diagram to set into motion sign-behaviours that evade signification and modulate material flows themselves. By losing «aboutness» as a criterion for the diagram and giving it a kind of ontological primacy as the sign closest to the real, Guattari can bring the diagram into line with his critique of representation (Genosko 2009: 102). Moreover, the diagram can be utilised in departing from representation insofar as it can be deployed to extract signs from their representational and signifying uses, and put them into contact with material fluxes. As he describes this in the final version of his semiotics before *A Thousand Plateaus*, in *The Machinic Unconscious*, the role of the diagram is not to «denote» a fully constituted referent, but to produce it (Guattari 2011: 216).

This conception of the diagram allows Guattari to finally give a complete account of the «point-signs» he first formulated in the early 1960s, now also referred to by the names «part-signs» and «particle-signs». As he will later put it, these point-signs do not «simply secrete significations» but constitute a «bringing into being» (Guattari 1995: 49). This creative power can be assigned to the part-sign due to it, in Guattari's words, «elud[ing] the coordinates of time, space and existence» (Guattari 1984b: 84) – which I take to mean that they precede any specific signifying regime which would organise spaces and times in particular ways, that is, that the spaces and times that part-signs work within are not predetermined. This itself is possible, using a term that takes us back to Simondon and that is used by both Guattari and by Deleuze in his later explication of the signs of cinema, because these signs consist of «signaletic matter» (Guattari 2013: 40; Deleuze 1989: 29). ¹⁷ In this conception signs are not neutral and static, with no role awaiting them but their

¹⁷ Or «signaletic material».

referential use. They rather maintain something intensive and plastic to them, being reducible to identifiable individuals only temporarily and arbitrarily.

Where Deleuze and Guattari's two extremely different accounts of signs meet is that they are both intensive theories of signs, and both thinkers put extensive work into freeing the intensive qualities of the sign from its static articulation in the representations of signifying semiotics. Peirce is useful again in suggesting what a combination of their thought implies. Where Guattari extracts the diagram from the icon as a non-representational motor of thought and practice, Deleuze's binding of sign, sensation, and encounter recalls Peirce's description of the index as «[a]nything which startles ... in so far as it marks the junction between two portions of experience. Thus a tremendous thunderbolt indicates that *something* considerable happened, though we may not know precisely what the event was» (Peirce 1998a: 8). They «shock» us out of our habitual ways of imagining how things are, they force us to «think otherwise than we have been thinking» (Peirce 1931-35: 1.336). The question now is of how these two aspects come to relate, and I will propose that what allows for this relation is *rhythm*.

Diagrammatism and rhythm

It is across *A Thousand Plateaus* that Deleuze and Guattari provide their richest account of signs, yet it proves difficult to extract a clear theory of signs from this text alone. This is not because of any lack of precision, but is rather attributable the vast scope of the analysis and deployment of signs in this text. Near one third of the book – from plateau 2, «10,000 B.C.: The Geology of Morals (Who Does the Earth Think It Is?)», to plateau 7, «Year Zero: Faciality» – engages with theories of semiotics and signs, with and against which Deleuze and Guattari begin to construct their key concepts. The sudden absence of these terms after plateau 7 is not a rejection of them but rather a transposition of the vocabulary of signs into the new vocabularies they develop, and bearing Deleuze and Guattari's previous analyses in mind can highlight some ways in which these theorisations of signs thread through the rest of the text.

The question of what a diagram is and what it does is one that Deleuze and Guattari continually pose and repose. In *A Thousand Plateaus* it receives perhaps its most vivid determination in plateau 5, «587 B.C.-A.D. 70: On Several Regimes of Signs». This plateau most prominently concerns an elaboration on the demarcations of semiotic forms that Guattari had developed throughout the 1970s. The immensely rich «pragmatics» of a «mixed semiotic» (Deleuze & Guattari 1987: 119, 139) they develop is an analytical framework deserving of full explication by itself, but for now I will continue to focus on the diagram. Here the «diagrammatic function» is a function of «destratifying» (Deleuze & Guattari 1987: 134), of unpicking the structures of signifying semiotics in the name of «an experimentation in life». It is a case of extracting signs from regimes of signs and bringing

them onto the «plane of consistency», comparable to what Guattari had earlier called material fluxes. Diagrams have a «piloting» role – they «[do] not function to represent, even something real, but rather construct a real that is yet to come» (Deleuze & Guattari 1987: 142), they «are constantly setting things loose» from regimes of signs, «particles-signs» that no longer correspond to given representations or Ideas – and Deleuze and Guattari strikingly speak of the diagram possibly resulting in «a patois of sensual delight, physical and semiotic systems in shreds, asubjective affects, signs without significance where syntax, semantics, and logic are in collapse» (Deleuze & Guattari 1987: 147).

How? Taking a moment to consider Deleuze's work on painting, Francis Bacon: The Logic of Sensation (2003), published shortly after A Thousand Plateaus, may help us. Here again, as in Difference and Repetition, Deleuze thematises the work of signs (though he rarely uses that word) in terms of sensation. As in the earlier text sensation is a matter of encounters that cannot be readily accommodated into our common sense ways of thinking, but here there is an additional aspect in the consideration of how sensations are made to relate, how they are organised as in works of art. This contrasts with the at times curiously nominalist account of encounters in Difference and Repetition, and the concept that Deleuze turns to in order to answer this question is that of the diagram. In Francis Bacon the diagram is concretely conceived as «the operative set of asignifying and nonrepresentative lines and zones, line-strokes and colour-patches» that underlie the figurative givens of a painting (Deleuze 2003: 101), and in this it is «indeed a chaos, a catastrophe, but also the seed of an order of rhythm» (Deleuze 2003: 67, my emphasis). Rhythm here is conceived of a diastolic-systolic expansion and contraction of self and world out of chaos (Deleuze 2003: 42), but the diagram allows this notion of rhythm to be detached from its phenomenological origin, and the movement of rhythm is no longer in the dynamic constitution of subject and world, but a movement only between milieus in permanent relation to chaos.

The diagram, then, serves to draw signs together, to articulate sensation without overdetermining it through reference to subject or Idea and while keeping it in motion. It is what Kamini Vellodi calls a «synthesizer of difference» (Vellodi 2014: 94n51). And it performs this synthesis rhythmically. This allows us to more readily link the account of signs in the first third of *A Thousand Plateaus* to the remarkable set of inquiries into rhythm and ontology that are constructed later in this text. We can hear this notion of the diagram at work, for example, in the famous account of the refrain. In *The Machinic Unconscious*, Guattari defines refrains as «basic rhythms of temporalization» (Guattari 2011: 108): the refrain produces a kind of internal cohesion, consisting in what Anne Sauvagnargues acutely describes as «the discordant set of diverse rhythms by which we configure ourselves» (Sauvagnargues 2016b: 125), but it is in this discordance that it holds within it too capacities of machinic mutation (Guattari 2011: 122).

Take the example, drawn from Proust, of the wasp and the orchid, used in both *The Machinic Unconscious* and *A Thousand Plateaus*. The encounter between the two produces

a «surplus value of code» (Guattari 2011: 122; Deleuze & Guattari 1987: 10), by which their specialisation of internal, territorial functions meet and produce a relation that is not merely the totalized sum of their codings, but rather a new assemblage combining elements of these codes in novel ways. This is an example that Guattari mentions as early as his *Anti-Oedipus* writings, and here it is conceived in terms of «sign-points» (Guattari 2006: 45), a detachment of signs from their organic unity as they are emitted and encountered by heterogeneous bodies (Guattari 2006: 183). This presentation of unpredictable encounters between bodies, the apprenticeships in signs they both undertake in relation to the emitter of signs that each is for the other, leads Deleuze and Guattari to the crucial Spinozist question that guides the creative impulse of their work: «What can a body do?» (Deleuze and Guattari 1987: 256).

Deleuze conjoins this question to his earlier thought in *Spinoza: Practical Philosophy* (Deleuze 1988: 17-18). Here and elsewhere Deleuze takes on the question of what a body can do by turning to the ethology of Jakob von Uexküll, an ethology that in Uexküll's own words involves a study of perceptive and effective signs (Uexküll 2010: 47). For Deleuze ethology is a «long affair of experimentation, requiring a lasting prudence, a Spinozan wisdom that implies the construction of a plane of immanence or consistency» (Deleuze 1988: 125) precisely insofar as it concerns not knowing in advance what a body can do, of what affects it is capable. Experimentation takes the form of a practice without telos. The accounts of Uexküll's thought we find in A Thousand Plateaus and Spinoza are very similar: Uexküll's animal world is defined, for Deleuze and Guattari, by looking for «the active and passive affects of which the animal is capable in the individuated assemblage of which it is part» (Deleuze & Guattari 1987: 257); that is, in Uexküll's terms, the signs it perceives and the signs it produces. It is not a matter of generic characteristics, but of relations that are not presumed or predetermined and must be experimentally forged. As such Deleuze and Guattari can draw on Uexküll's notion of the milieu (or *Umwelt*) to define doubly the singular, closed unity of any given assemblage and the manner in which this closed unity relates to other assemblages: construction and expression.

What is relevant in Uexküll's «stroll into unfamiliar worlds» (Uexküll 2010: 57) is no longer the study of the animal as an organic whole that relates to an external environment, but rather the various relationships between the elements that make up an environment as, in their entirety, a particular type of machinic assemblage. With ethology, «every point has its counterpoints: the plant and the rain, the spider and the fly. So an animal, a thing, is never separable from its relations with the world» (Deleuze 1988: 125). As Deleuze notes in *The Fold*, echoing but extending Uexküll:

[a]t its limit the material universe accedes to a unity in horizontal and collective extension, where melodies of development themselves enter into relations of counterpoint, each spilling over its frame and becoming the motif of another such that all of Nature becomes an immense melody and flow of bodies. (Deleuze 2006b: 155)

This gestures towards Uexküll's concern with conceiving of the processes of individual, enclosed milieus as part of a wider yet wholly inaccessible whole: a concern, as Sauvagnargues puts it, of a «rhythmology» (Sauvagnargues 2016b: 133), expressing time «less as it is lived than it is inhabited, as bundles of sensory signs by which we extract a territory from surrounding milieus through consolidation and habit» (Sauvagnargues 2016b: 126). To inhabit is to refuse any supremacy of the subject or Idea, to posit nature as the site of a vast and diverse set of processes of experimentation, to encounter and to express, to be implicated in the transitory, partial organisation of intensive signs: to take part in a semiorhythmology. What I have offered here is only a skeleton of this semiorhythmology – a diagram of it, perhaps, albeit an incomplete one – and I hope others will take the opportunity to explicate it.

BIBLIOGRAPHY

- Alliez, É. (2015). "Structuralism's Afters: Tracing Transdisciplinarity through Guattari and Latour". *Theory, Culture & Society*, 32 (5-6), 139-158.
- Benveniste, E. (1971). *Problems in General Linguistics*. (Trans. By M.E. Meek). Coral Gables, FL: University of Miami Press.
- Bogue, R. (2004). "Search, Swim and See: Deleuze's apprenticeship in signs and pedagogy of images". *Educational Philosophy and Theory*, 36 (3), 327-342.
- Cassin, B., Galland-Szymkowiak, M., Laugier, S., de Libera, A., Nef, F., & Rosier-Catach, I. (2014a). "Sign, Symbol". In Cassin, B. (ed.), *Dictionary of Untranslatables: A Philosophical Lexicon*. (Trans. by S. Rendall, C. Hubert, J. Mehlman, N. Stein, M. Syrotinski, trans. ed. by E. Apter, J. Lezra, M. Wood). Princeton: Princeton University Press, 974-990.
- Cassin, B., Ildefonse, F., Klippi, C., & Rosier-Catach, I. (2014b). "Signifier/Signified". In Cassin, B. (ed.), *Dictionary of Untranslatables: A Philosophical Lexicon*. (Trans. by S. Rendall, C. Hubert, J. Mehlman, N. Stein, M. Syrotinski, trans. ed. by E. Apter, J. Lezra, M. Wood). Princeton: Princeton University Press, 990-1000.
- Collett, G. (2018). "Deleuze and Guattari's Political Symptomontology: From the Psychoanalysis of Literary Symptoms to the Becoming-minor of May '68". *La Deleuziana* 8 (La pensée dix-huit), 112-129.
- Deleuze, G. (1988). *Spinoza: Practical Philosophy*. (Trans. by R. Hurley). San Francisco, CA: City Lights.
- Deleuze, G. (1989). *Cinema 2: The Time-Image*. (Trans. by H. Tomlinson & R. Galeta). London: The Athlone Press.
- Deleuze, G. (1990). *The Logic of Sens.* (Trans. by M. Lester with C. Stivale). New York: Columbia University Press.
- Deleuze, G. (1994). *Difference and Repetition*. (Trans. by P. Patton). London: The Athlone Press.

- Deleuze, G. (2003). *Francis Bacon: The Logic of Sensation*. (Trans. by D.W. Smith). London: Continuum.
- Deleuze, G. (2006a). *Nietzsche and Philosophy*. (Trans. by H. Tomlinson). New York: Columbia University Press.
- Deleuze, G. (2006b). *The Fold: Leibniz and the Baroque*. (Trans. by T. Conley). London: Continuum.
- Deleuze, G. (2008). *Proust and Signs: The Complete Edition*. (Trans. by R. Howard). London: Continuum.
- Deleuze, G., & Guattari, F. (1983). *Anti-Oedipus: Capitalism and Schizophrenia*. (Trans. by R. Hurley, M. Seem & H.R. Lane). Minneapolis, MN: University of Minnesota Press.
- Deleuze, G., & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia*. (Trans. by B. Massumi). Minneapolis, MN: University of Minnesota Press.
- Foucault, M. (2002). *The Order of Things: An Archaeology of the Human Sciences*. London: Routledge Classics.
- Genosko, G. (2009). Félix Guattari: A Critical Introduction. London: Pluto Press.
- Grossberg, L., & Behrenshausen, B.G. (2016). "Cultural Studies and Deleuze-Guattari, part 2: from affect to conjunctures". *Cultural Studies* 30 (6), 1001-1028.
- Guattari, F. (1984a). "The Role of the Signifier in the Institution". In F. Guattari, *Molecular Revolution: Psychiatry and Politics*. (Trans. by R. Sheed). London: Penguin Books, 73-81.
- Guattari, F. (1984b). "Towards a Micro-Politics of Desire". In F. Guattari, *Molecular Revolution: Psychiatry and Politics.* (Trans. by R. Sheed). London: Penguin Books, 82-107.
- Guattari, F. (1984c). "Meaning and Power". In F. Guattari, *Molecular Revolution: Psychiatry and Politics.* (Trans. by R. Sheed). London: Penguin Books, 163-172.
- Guattari, F. (1995). *Chaosmosis: An Ethico-Aesthetic Paradigm* (Trans. by P. Bains & J. Pefanis). Indianapolis: Indiana University Press.
- Guattari, F. (2006). *The Anti-Œdipus Papers*. (Trans. by K. Gotman, ed. by S. Nadaud). New York: Semiotext(e).
- Guattari, F. (2011). *The Machinic Unconscious: Essays in Schizoanalysis.* (Trans. by T. Adkins). Los Angeles: Semiotext(e).
- Guattari, F. (2012). La Révolution moleculaire. Paris: Les Prairies ordinaires.
- Guattari, F. (2013). *Schizoanalytic Cartographies*. (Trans. by A. Goffey). London: Bloomsbury.
- Guattari, F. (2015). "From One Sign to the Other (excerpts)". In F. Guattari, *Psychoanalysis and Transversality: Texts and Interviews 1955-1971*. (Trans. by A. Hodges). South Pasadena, CA: Semiotext(e), 179-205.
- Klossowski, P. (1997). *Nietzsche and the Vicious Circle*. (Trans. by D.W. Smith). Chicago: The University of Chicago Press.

- Lacan, J. (2006). "The Instance of the Letter in the Unconscious, or Reason Since Freud". In J. Lacan, *Écrits: The First Complete Edition in English*. (Trans. by B. Fink). New York: W.W. Norton & Company.
- Lecercle, J.-J. (2010). *Badiou and Deleuze Read Literature*. Edinburgh: Edinburgh University Press.
- Maniglier, P. (2018). "Saussurean Terontology: What Derrida did not Read in the *Course in General Linguistics*". (Trans. by D. Maruzzella). *Parrhesia* 29, 77-99.
- Meschonnic, H. (1981). *Critique du rythme : anthropologie historique du langage*. Lagrasse: Verdier.
- Meschonnic, H. (2011). *Ethics and Politics of Translating*. (Trans. and ed. by P.-P. Boulanger). Amsterdam: John Benjamins Publishing Company.
- Nietzsche, F. (2001). *The Gay Science: With a Prelude in German Rhymes and an Appendix of Songs.* (Ed. by B. Williams, trans. by J. Nauckhoff and A. del Caro). Cambridge: Cambridge University Press.
- Peirce, C.S. (1931-35). *The Collected Papers of Charles Sanders Peirce*, vols. 1-6. (Ed. by C. Hartshorne and P. Weiss). Cambridge, MA: Harvard University Press.
- Peirce, C.S. (1998a). "What Is a Sign?". In the Peirce Edition Project (eds.), *The Essential Peirce: Selected Philosophical Writings Volume 2 (1893-1913)*. Bloomington, IN: Indiana University Press, 4-10.
- Peirce, C.S. (1998b). "Of Reasoning in General". In the Peirce Edition Project (eds.), *The Essential Peirce: Selected Philosophical Writings Volume 2 (1893-1913)*. Bloomington, IN: Indiana University Press, 11-26.
- Peirce, C.S. (1998c). "Excerpts from Letters to William James". In the Peirce Edition Project (eds.), *The Essential Peirce: Selected Philosophical Writings Volume 2 (1893-1913)*. Bloomington, IN: Indiana University Press, 492-502.
- Saussure, F. de (2011). *Course in General Linguistics*. (Ed. by P. Meisel and H. Saussy, trans. by W. Baskin). New York: Columbia University Press.
- Sauvagnargues, A. (2016a). "The Concept of Modulation in Deleuze, and the Importance of Simondon to the Deleuzian Aesthetic". In A. Sauvagnargues, *Artmachines: Deleuze, Guattari, Simondon*. (Trans. by S. Verderber with E.W. Holland). Edinburgh: Edinburgh University Press, 61-84.
- Sauvagnargues, A. (2016b). "Ritornellos of Time". In A. Sauvagnargues, *Artmachines: Deleuze, Guattari, Simondon* (Trans. by S. Verderber with E.W. Holland). Edinburgh: Edinburgh University Press, 125-137...
- Simondon, G. (2005). *L'individuation à la lumière des notions de forme et d'information*. Grenoble: Milion.
- Smith, D.W. (2005). "Klossowski's Reading of Nietzsche: Impulses, Phantasms, Simulacra, Stereotypes". *Diacritics* 35 (1): 8-21.
- Uexküll, J. von. (2010). *A Foray into the Worlds of Animals and Humans, with a Theory of Meaning*. (Trans. by J.D. O'Neil). Minneapolis, MN: University of Minnesota Press.

- Vellodi, K. (2014). "Diagrammatic Thought: Two Forms of Constructivism in C.S. Peirce and Gilles Deleuze". *Parrhesia* 19, 79-95.
- Watson, J. (2009). *Guattari's Diagrammatic Thought: Writing Between Lacan and Deleuze*. London: Continuum.
- Williams, J. (2016). *A Process Philosophy of Signs*. Edinburgh: Edinburgh University Press. Wittgenstein, L. (2009). *Philosophical Investigations* (revised 4th edition, ed. by P.M.S. Hacker and J. Schulte, trans. by G.E.M. Anscombe, P.M.S. Hacker and J. Schulte). Chichester: Wiley-Blackwell.
- Žižek, S. (2012). *Organs without Bodies: On Deleuze and Consequences*. London: Routledge Classics.