MACHINIC RELATIONS IN THE PRODUCTION OF SIGNS

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Abstract

Semiotics (or semiology) is a philosophically interesting approach to language that looks at the production and characteristics of linguistic units called signs in order to arrive at an understanding of language in the broadest sense. By exploring such issues as the composition, boundaries, relations and even production of signs, insights may be gained into the nature of meaning and thought, and, beyond this, into the nature of being in general.

The following discussion begins by identifying a problem with the "naïve" way of thinking about signs (as labels for things) and shows how the early structuralists attempted to solve it with a model of significations in a system of values. The limitations of such an approach are examined and the requirements for a more complete rethinking are explicated. While the seeds for this reevaluation are shown to be present in the work of Roland Barthes, particularly with his model of myth, and in the Pragmatic approach of Charles Peirce, it is in the claims of Gilles Deleuze that the most comprehensive reassessment is articulated.

Deleuze's position is examined in terms of two important themes: series and sense. The former is compared with Barthes' model of myth as a solution to the inadequacies of signification, while the latter is interpreted as a corrective to the notion of value. The result is a conception of signs as "partial objects" in a series of relations. The relations are construed as "machinic" and the signs as machined products.

The paper concludes with a proposal for how such a "machine" might be characterised and how related notions such as sensation, perception, recognition and meaning are to be understood in terms of their place and function in the series that constitutes the machine.

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~In memory of Eric~

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Introduction

It is possible to understand the following discussion as a critique of identities. But it is not so much a critique as an application of a view that rejects identities. The critique is made, primarily in the second chapter, but it is the application in a model of sign-function that drives the discussion. The problem is thus better expressed as the search for an alternative to the notion that signs are merely labels for things. In introducing the approach that has been taken to this problem, the trajectory of the argument will be laid out in terms of two main themes, "series" and "sense". The following passage from *Difference & Repetition* will help clarify the what is meant by these terms. Gilles Deleuze writes: "myth tells us that [grounding] always involves a further task to be performed, an enigma to be resolved. The oracle is questioned, but the oracle's response is itself a problem". Deleuze adds: "Problematic structure is part of objects themselves" (DR 63). We are to take from this that the solution to a problem is itself a problem that requires a solution. The inevitable result is a series of solutions conditioned by an irrepressible field of problems identifiable as sense.

The discussion begins with the problem of signs as labels for things. Ferdinand de Saussure offers an innovative solution with model of "significations" in a system of "values". But Saussure's solution is problematic, for among other things the notion of signification fails to adequately account for connotation. The solution to this modified problem is found in Roland Barthes' multi-tiered model of mythical sign production, which may be seen as an early articulation of series. But Barthes' answer is also problematic. It is content to stop at second-order signs, as though the factors necessitating the higher-order structure were sufficiently accounted for by the new order. A more complete solution is found in Gilles Deleuze's work on difference and repetition. But as Deleuze argues throughout his opus, the essential question with regard to language is, "How does it work?" and Deleuze himself does not offer a satisfactory answer to the question of how series work in the production of signs. The solution to this problem is found in Charles Peirce, who developed a triadic model of sign-function around the same time Saussure developed his dyadic model. The Peircean model describes very clearly how we are to see the serial function of signs at work. But there is a problem in this

solution as well. Above all, we find an inherent tension between the sign as Peirce characterises it (as a "genuine triad") and the serial process he calls semiosis. The solution to this problem, which incorporates all the problems and solutions of the series developed throughout the discussion, is a sign-producing "machine", whose very functioning is serial.

The discussion follows a parallel trajectory with regard to the related issue of sense. Saussure's solution to the problem of signs as labels for things relies on a notion of value to organise and account for differences in significations. The problem with this solution is that it organises but does not condition the significant units, which are thus reduced to mere tokens, much like the labelled things for which we were originally seeking an alternative. The solution is found in Barthes, for whom value not only organises the system of significations, but conditions, albeit at a meta-linguistic level, entirely new ones. The problem, again, is that Barthes fails to pursue the question of value further or explore the philosophical implications of the revised order. We turn again to Deleuze, who interprets value as "sense", and provides a detailed philosophical justification in terms of "intensive difference". The problem with intensive difference, however, is that it cannot be neutralised, or, as Deleuze puts its, "rendered docile". The solution is to organise difference into a series that extends beneath the surface. The "machine" proposed in chapter three is organised according to just such a series, separate from the one that one characterises its functioning. This second series extends from the "surface" of the "extensities" that constitute its parts to the pure "noumenal" difference that grounds it at "depth". The hope is that the structure of the machine can accommodate the problematic nature of series and sense, and provide a credible model for the production of signs as more than mere labels for things.

Claire Colebrook explains how a similar problem motivates Gilles Deleuze's work: "We usually begin our thinking by assuming that there is some separate or differentiated object that is there to be viewed by some subject. Against this acceptance of differences being already given (or transcendent), all Deleuze's work was geared towards understanding how differences emerge" (UD 67). The same suspicion, of the relationship between subject and object, between object and object, motivates the present discussion. Language seems to encourage the notion, introduced by simple sense perception, that the

boundaries between perceived objects are fixed in accordance with a very restricted number of internalised properties or relations privileged over other, externalised, ones. The glass of beer on the bar, for instance, is a glass regardless of what it contains or where it sits or any of the other relations in which it necessarily exists. There is a thing, an identity: a glass. Included within this identity are certain attributes: colour, shape, capacity, &c.; but the rest—an infinite number of relationships—are externalised, subordinated to the identities that participate in them. It might be argued that as long as the relations are accounted for it should not matter whether or not they are included in the identity of a particular thing. But it seems that to fully account for the relations in which a thing exists at any moment, is to alter the identity of the thing itself. As Bruno Latour writes in a provocative exploration of the human and non-human: "You are different with a gun in your hand; the gun is different with you holding it. You are another subject because you hold the gun; the gun is another object because it has entered into a relationship with you" (CH 179).[1] To use a term that will become important later in this paper, it might be said that the gun becomes a part of the context that determines the nature of the subject, while the subject simultaneously becomes part of the context that determines the nature of the gun.[2]

In a chapter of *Erewhon* called "The Book of the Machines", Samuel Butler touches on many aspects of this question of identity.[3] Butler explores the sort of being that results when the non-human—when machines, for instance—are regarded as a part of man's own physical nature, as nothing but extra-corporeal limbs (ER 203). Butler's example of red clover[4] illustrates how a plant may include a detached, "extra-corporeal" organ of reproduction in the form of an insect and demonstrates that such phenomena are not restricted to the 'relations' between humans and their machines (ER 192). But if we were to focus on the example of machines—and it is instructive to do so—we may follow Butler and describe the composite that escapes the usual 'corporeal' boundary of 'this individual' and 'that machine' as a machinate animal (ER 203). As Butler explains: "The lower animals keep all their limbs at home in their own bodies, but many of man's are loose, and lie about detached, now here and now there, in various parts of the world". He adds—in a comment intended to underline the fundamental lack of distinction between the organic and inorganic, between the natural and artificial, between the boundaries of

my body and those of the implements with which I may choose to augment my capacities: "a leg is only a much better wooden leg than any one can manufacture" (ER 203). He might have said, without any change in emphasis, that (in many respects) a car is a much better leg than any one can grow.

Butler is not offering metaphor or analogy. A machine is not merely like a limb; it is a limb: an element, a component of a broadly inclusive composite no longer confined to the naive boundaries of traditional objects. Butler's example of a man digging with a spade[5] anticipates Merleau-Ponty's comments about how the blind can learn to get around with a stick:

> Once the stick has become a familiar instrument, the world of feelable things recedes and now begins, not at the outer skin of the hand, but at the end of the stick. ... The pressures on the hand and the stick are no longer given; the stick is no longer an object perceived by the blind man, but an instrument *with* which he perceives. It is a bodily auxiliary, an extension of the bodily synthesis (PP 152).

As "the world of feelable things" recedes, the stick becomes integrated into the blind man's bodily space; it becomes a limb, or rather a sense organ, and is literally experienced as such. But this phenomenological experience of the blurring of boundaries, while indicative of the reality of the composite—the machinate animal that perceives its terrain with a stick—is unnecessary for the reality of the composite itself. The President need not feel the rumbling of his military forces—the fist with which he may smash his enemies—in order to be transformed by the power, in order to be that great and terrible creature that commands a nation. His limbs are too vast, too distant, too numerous to offer a phenomenological experience of the sort provided to the blind man by his stick. But he is no less a composite. He does not merely represent the capacities of his nation, he is the contracted presence of those capacities in the sense of Louis XIV's celebrated pronouncement: "*L'État c'est Moi*".[6] Butler says as much when he claims that only those at the "summit of opulence"—at the pinnacle of wealth—are in possession of the full complement of the limbs available to mankind:

> rich and subtle souls can defy all material impediment, whereas the souls of the poor are clogged and hampered by matter, which sticks fast about them... their dull ears must take days or weeks to hear what another would tell them from a

> distance... That old philosophic enemy, matter... still hangs about the neck of the poor and strangles him: but to the rich, matter is immaterial; the elaborate organisation of his extra-corporeal system has freed his soul (ER 204).

While it is beyond the scope of this paper to pursue the matter, one might observe a number of curious moral implications in Butler's claim. We must return, instead, to the question, alluded to in the example of bees and clover—of the nature of reproduction—which Butler poses in support of the thesis that machines, while rudimentary in comparison with even the simplest life forms, are not of a different order of being. Butler makes an issue out of extra-corporeal reproductive organs because reproduction is often cited as a capacity that distinguishes the living from machines. Butler writes: "we look at our limbs, and know that the combination forms an individual which springs from a single centre of reproductive action; we therefore assume that there can be no reproductive action which does not arise from a single centre". But, he says,

> the bare fact that no vapour-engine was ever made entirely by another, or two others, of its own kind, is not sufficient to warrant us in saying that vapour-engines have no reproductive system. The truth is that each part of every vapour-engine is bred by its own special breeders, whose function is to breed that part, and that only, while the combination of the parts into a whole forms another department of the mechanical reproductive system, which is at present exceedingly complex and difficult to see in its entirety (ER 193).

The present discussion is not primarily concerned with the distinction between organisms and machines but Butler's argument is interesting in its insistence that extra-corporeal entities ("partial-objects" as we might call them in the Deleuzean parlance)—be they elements of a system of reproduction or locomotion (or whatever)—stand not merely in relation to an object in question, but are parts of that object more completely understood, and that the object in fact has no absolute identity independent of the context that determines its complete nature.[7] The object itself is thus on the one hand a component of a larger composite (or composites) disguised to some extent by the spatial and temporal gaps between its parts.

But even as a component of larger and various composites, it is at the same time a composite in its own right of smaller, more or less apparent components.[8] This has been

long recognized in biology, where individuals, as composites, are known to function in cooperation with hundreds of as-yet distinct bacterial colonies ('alien' entities that comprise and regulate a crucial internal 'environment' and out-number their 'host' cells by an order of magnitude).[9] Straddling the divide between host and symbiont are others, such as mitochondrial DNA, whose boundaries are no longer clear, but which science can show were once as sovereign and alien as any other ostensibly independent and self-identical entity.[10] As Butler explains, man "is such a hive and swarm of parasites that it is doubtful whether his body in not more theirs than his, and whether he is anything but another kind of ant-heap after all" (ER 188).[11]

In a description that anticipates the Asimov classic, *Fantastic Voyage*, Butler offers what was probably already a literary cliché when he wrote it more than a century ago:

> It is said by some that our blood is composed of infinite living agents which go up and down the highways and byways of our bodies as people in the streets of a city. When we look down from a high place upon crowded thoroughfares, is it possible not to think of corpuscles of blood travelling through veins and nourishing the heart of the town? (ER 189).[12]

In *The Eiffel Tower*, Roland Barthes makes similar use of distance, through what he calls "panorama", to expose the "functional groups" that may be seen where, at another level, only disparate elements can be discerned. He suggests, moreover, that it is not merely space, but also duration that is compressed when we look down from a high place: "it is duration itself which becomes panoramic" (ET 11). He believes that the "fantasy" of panoramic vision is an ancient one, though he cites the relatively recent example of Victor Hugo's chapter in *The Hunchback of Notre Dame*—where a "bird's-eye view" of Paris is described some fifty years before the Eiffel Tower's construction made such a view widely accessible in France (ET 8). Barthes attaches to the "bird's-eye view" even more importance than Butler does. For Barthes, it marks the advent of a "new perception", an "intellectualist mode" by means of which elements as scattered and diverse as the contents of a city like Paris form intelligible objects without losing anything of their materiality. It is the resulting category of "concrete abstraction" that Barthes identifies as structure: "a corpus of intelligent forms" (ET 9), and it is through such concrete

abstractions that Barthes, in the structuralist tradition, proposes that we move beyond the limits of partial objects:

> every visitor to the Tower makes structuralism without knowing it... in Paris spread out beneath him, he spontaneously distinguishes separate—because known—points—and yet does not stop linking them, perceiving them within a great functional space; in short, he separates and groups; Paris offers itself to him as an object virtually *prepared*, exposed to the intelligence, but which he must himself construct by a final activity of the mind (ET 10).[13]

When speaking of a city like Paris seen from the Eiffel Tower, where the composite structure may be exposed for the first time to perception (though every part was perhaps known in intimate detail from the ground), one might agree that the whole is constructed by a final activity of the mind. Moreover, as we shall see with Deleuze, the whole is not only constructed as a final activity (though it has the curious power of appearing as the origin of that which clings to it) but exists in addition to its parts.

But if the whole is constructed, what of its elements? Does something different occur on the macro scale than on the micro level? As Barthes says of the Tower itself, when seen up close for the first time, something of the reverse seems to take place:

> there is the enlarged spectacle of all the details, plates, beams, bolts, which *make* the Tower, the surprise of seeing how this rectilinear form, which is consumed in every corner of Paris as a pure line, is composed of countless segments, interlinked, crossed, divergent: an operation of reducing an appearance (the straight line) to its contrary reality (a lacework of broken substances), a kind of demystification provided by simple enlargement of the level of perception, as in those photographs in which the curve of a face, by enlargement, appears to be formed of a thousand tiny squares variously illuminated (ET 15).

If the tower itself is simply another sort of composite whole, like the city in which it was built, and it is a function of its upright design that we are given a "panoramic" view of it as a monument before we can approach near enough to become acquainted with the elements of its construction, then there is nothing unusual in "discovering" the whole before its parts—any more than there is anything surprising in discovering, in the panoramic view afforded by the tower, that something on the scale of a city, despite the apparent independence of its familiar elements, comprises a monumental object in its own

right. If the whole is constructed by a final activity of the mind, this is true not only for the object revealed in panoramic vision, but for every object we encounter.

Barthes' phrase, "virtually prepared", is especially apropos in that it points to something with real, if only virtual, existence distinct from what is objectified, or actualised, in its encounter with the perceiving subject. Both "virtual" and "actual" are terms that play a fundamental role in the Deleuzean metaphysics/ontology that will be cited in Chapter 2 in support of claims made about the nature of objects and language. These claims, however, have their origin in the structural linguistics of Ferdinand de Saussure, whose theory offers a response to at least part of the problem of the relations between identities and the formation of linguistic objects known as signs. Referring to the traditional approach to linguistic analysis, Saussure observes that "Some people regard language, when reduced to its elements, as a naming-process only—a list of words, each corresponding to the thing that it names" (CGL 65). One of the grounds on which he criticizes "this rather naive approach" is its assumption that "ready-made ideas exist before words" (CGL 65). Saussure is not speaking specifically about the things like horses and trees—or people and guns—which we have already found to be problematic, but, rather, about our concepts of them. In this way he is able to bypass our entrenched sense of things as already given, and thereby rediscover what he calls the pure values of things, as defined by their relationships in a system from which their delimitation as things is not pre-ordained.[14]

But Saussure does not go far enough. His account of the relation between the signifier and the signified retains something of the associationism that his project seeks to eliminate; moreover, the resulting signification seems to be a holdout to the traditional way of characterizing language and opposed to an understanding of meaning in terms of pure values. Following Louis Helmslev, however, Barthes extends Saussure's linguistic model to account for the distinction between connotation and denotation in what Barthes calls meta-language or mythical signification, and his approach opens the way to addressing some of the limitations of Saussure's innovation. Crucially, Barthes argues that a sign need not remain the final element in a communication. Instead, the signifier and signified may be compressed into a single element, a meta-signifier, which, in conjunction with an implicit signified, results in a sign that communicates at a level

removed from the original, thereby drawing in relations that would otherwise remain external.

In extending the Saussurean model this way, Barthes seems to have turned what was a dyadic composite of a signifier and a signified into something comparable to the triadic model proposed by the American pragmatist Charles Sanders Peirce. This is not to say that the two approaches (Saussurean and Peircean) are the same or can be "made equal". But neither is it to accept the conclusion of Gerard Deledalle, who rejects out of hand the possibility that the two theories can be brought together in any useful way on the grounds that their underlying philosophies and logics (one dualistic, the other dialectic) are incompatible (PPS 55). The observation that Barthes' innovation makes Saussurean sign-function comparable to some aspects of the Peircean one does not rely on any forced equivalences. Rather, it suggests that the two may, in some sense, be "bridged".

The problem with the Saussurean approach stems from Saussure's insistence that *signification* must not only be distinguished from *value* but that a rigid separation must be maintained. If this were true then it would be unnecessary to explain how signs are adapted to their contexts, for the signification would have been fixed at the semiotic beginning and change (albeit in the synchronic sense) would be restricted to the soft notion of value. But as it will be argued in Chapter One, the division is a zero-sum process and signification is always incomplete and variable—"a net of aggregations and disintegrations constantly open to further combinations" (SPL 21). A mechanism is thus required to affect change from one configuration to another. Charles Peirce's "semiosic" model comes with a built-in solution. Peirce's interpretant operates as a unique perception that justifies every signification. There is no sign without a corresponding interpretant. It will be argued that the Saussurean sign is a perceptible, concrete thing, but as with Peirce's overtly triadic sign, it must be defined (delimited, filtered) by the perception that differentiates it.

Perception as a semiotic filter is central to the functioning of the sign once it has been liberated from the artificial constraints of a signification-value dichotomy. Nevertheless, a distinction between the sign and the perceptual process is fruitful: the sign may thus be characterized as a perceptible object, not just the concrete entity of the type that forms, as Saussure believes, the objects of inquiry in most other sciences, but a fully

constituted segment of a univocal plane of being. This notion of "univocity" will be adopted from ideas developed in the work of Gilles Deleuze.[15] It will be argued that not only is it meaning that must be understood as the product of a cultural (or even subjective) delimitation of relations, but being in general—that the "shapeless and indistinct mass" described by Saussure, which characterizes thought prior to its segmentation into linguistic units, characterizes as well the univocal plane of being prior to its division into the partial objects and full bodies that we perceive and communicate through language.[16] The sign will thus be understood as a fully constituted object that conveys meaning by acting on the body rather than representing something absent.[17]

The framework described at the end of this paper is proposed as a means of integrating the Saussurean and Peircean descriptions of the semiotic process in a way that broadly accords with the ontological/metaphysical claims that Deleuze makes in *Difference & Repetition* and later develops and applies in subsequent work, alone and with frequent collaborator Félix Guattari. It places Saussure's vision of a concrete dyadic sign in the stream of partial objects flowing through the perceptual system. Barthes' offset "mythical" extension to the Saussurean sign is enlisted as a way to illustrate the complex relationships that characterize partial objects (including the interrelated ideas of composite, component, context and synthesis), relationships that bind the object in ever broader and more comprehensive structures, much as signs are bound from interpretant to interpretant in the Peircean notion of indefinite semiosis.

It should be emphasised that the claim is not to speak for Saussure, neither to promote an authentic Saussurean agenda nor to distort Saussurean doctrine for separate ends. What is proposed is a framework of relationships in which the function of a dyadic sign can be discerned. Many of its characteristics are unmistakably Saussurean, and accord in relevant ways with Saussure's description of sign function. They are acknowledged as such, and often retain Saussurean labels. But that is the extent of the alliance with Saussure. Where his views do not coincide with those offered here, there is no need to pretend otherwise. Much has been rejected outright. But Saussure remains a useful place to begin. Citing Mounin, Deledalle speculates about whether "'if Saussure had lived longer, his theory of signs would have been the point of departure and of the organization of his entire doctrine" at which time "the question of its logical foundation

would have arisen and could not have been eluded. Would he have renounced dyadic logic? Would he have introduced a third dimension into his theory of signs, as Barthes did?" (PPS 104, citing Mounin). Simply put, what this paper describes as Saussurean are ideas from which Saussure was the point of departure and whose recognizable heritage they retain.

It might be added that while a third dimension has been introduced, there has been no renunciation of dyadic logic.[18] In fact, the proposed framework introduces another, historically unSaussurean dichotomy—for it is surprising that Saussure, who identified so many dichotomies in his description of language, failed to argue more strongly for an object of speech (*parole*) that would complement the sign in the realm language (*langue*). As it is, the only potential correlate—"syntagm"—is deeply unsatisfying. That the syntagm is even intended as a correlate is unlikely. Saussure makes no attempt to characterize it as a "fundamental" speech unit the way he treats the sign as a fundamental unit of language. On the contrary, though explicitly an object of speech rather than language, Saussure's syntagm is no less psychological and certainly not fundamental, being a wilfully constructed composite of signs. Barthes, however, offers a glimpse at an objective-perceptual dichotomy in his *Mythologies*, where he demonstrates that beyond the concrete signification of a broad (and not merely linguistic) semiotic there lurks a subordinate signification that he characterizes as myth.

This paper embraces such a dichotomy, and while the sign is pushed to the objective end of a univocal spectrum where it may be identified more closely with *parole* than Saussure would permit, the framework that manifests this spectrum is, at bottom, perceptual, and the sign remains always, to some degree, a "psychological" composite of a signifying "image" and its associated meaning, consistent with Saussure's descriptions. And even if one rejects, as semiological heresy, the notion that the sign can, in any Saussurean sense, function as a unit of speech (*parole*), the complaint remains one mostly of terminology—for the machine, a true dichotomic structure, retains the Saussurean unit of language in the guise of a signification.

The "bridge" or "framework" is—to use the Deleuzean terminology that will be employed in explicating its structure—the blueprint for a sort of ontological/metaphysical/semiosic machine. It is the explication of such a machine, its

composition and function, whose relevance extends far beyond the mere bridging of the two semiotic traditions, that ultimately motivates this discussion. Saussure is invoked both as an inflection point in the turn from a world of fixed concepts to one of pure difference, and as an avowed influence on the shape and design of the machine that this paper will describe. Peirce contributes to its essential tripartite structure and dialectical logic. Both provide the occasion for making the description of semiotic function the machine's primary application. While substantial use will be made of Deleuzean ideas and terminology, this is not to say that the machine is a precise reflection of Deleuzean philosophy either. But its structure and function nevertheless accord with the various principles that Deleuze himself identifies, and so the use of Deleuzean terminology along with an account of various aspects of Deleuze's philosophy offers a practical way to describe the machine and justify its construction.

Chapter One: The Dyadic Sign

Ferdinand de Saussure begins his first chapter on the general principles of linguistics with the observation that "some people regard language, when reduced to its elements, as a naming-process only—a list of words, each corresponding to the thing that it names" (CGL 65). His elaboration of an alternative to this "rather naive" approach to language may be seen as an overriding theme of his *Course in General Linguistics*. Saussure's alternative to the "naive" assumptions comprises a set of linguistic units defined not only by their signification (the association of a concept and its signifier), but, more importantly, by the nature of the entirely relative portion of value each gains through its function as a member of a complete value-driven linguistic system. This notion of value as distinct from signification is crucial to Saussure's linguistic model.

Saussure's dyadic model finds the genesis of signs in a primordial swamp of chaotic thoughts and sounds—where "nothing is distinct before the appearance of language" and where nothing yields to a method as simple as a "naming-process" (CGL 112). He describes two related regions, what he calls the "indefinite plane of jumbled ideas" and the "equally vague plane of sounds". He describes them as interdependent wholes. Pre-articulated thought is "a shapeless and indistinct mass" or a "vague, uncharted nebula" and "phonic substance", the stuff of speech, is "neither more fixed nor more rigid than thought" (CGL 111). Language, he argues, serves as a link between these two regions; and, in doing so, necessarily brings about "the reciprocal delimitations of units" (CGL 112). That is to say, not only were the sounds segmented but so were the ideas, at the historical moment that an association between the two was happened upon.

A parallel can be seen between two movements in the development of Saussure's argument: from the jumbled planes of thought and sound toward the individual units of "thought-sound"; and from the "confused mass" of sounds that constitute the signifying chain of a discourse, to the linguistic units or "concrete entities" that are the building blocks of language. Saussure seems to have taken the observation that a spoken chain is "a continuous ribbon along which the ear perceives no self-sufficient and clear-cut division" and applied it to the primordial "realm of thought" (CGL 103). In both cases, Saussure claims, a meaningful analysis is impossible until the binary units of

"thought-sound" are delimited. This is consistent with his insistence that, "it is from the interdependent whole that one must start and through analysis obtain its elements" (CGL 115).

But Saussure's theory may be predicated on a similar though even more basic analogy, namely, of the relationship between a restricted number of phonemes and the vast quantity of monemes (or significant units) that they can produce in combination. The "double articulation" of the moneme/phoneme can produce an entire set of significant units from a mere handful of distinctive units. Barthes gives as an example, American Spanish, whose 100,000 monemes are composed of only 21 distinctive units (ES 39). Like the double articulation of moneme/phoneme, Saussure's model allows a vast number of distinct elements (syntagms) to be produced from the combinations of a restricted number of fundamental units (signs). Barthes argues that it was Martinet who first demonstrated the importance of the double articulation "to the extent that he made it the criterion which defines language" (ES 39), but it is surely no coincidence that Saussure describes language as "a system based entirely on the opposition of its concrete units" (CGL 107), by which he means the differences between its terms, since this is the sole, sufficient function of the phoneme.

Saussure argues that the linguistic unit, the sign, is "a double entity" consisting of two psychological "terms" united by "an associative bond" (CGL 66). He identifies the terms as concept and sound-image[19] though he soon replaces these with the more euphonic signified and signifier (*signifié* and *signifiant* in the original French). Saussure's model of the sign is represented by a circular boundary divided into two hemispheres by a partition and flanked by two opposing arrows (CGL 114). The circular boundary illustrates the self-contained nature of the "concrete unit" that is the sign. The hemispheres correspond to the two "intimately united" elements, signified and signifier, that comprise the sign. The horizontal bar reinforces the notion implied by the labels (signified/signifier) that these elements are fundamentally opposed—to each other and to the sign as a whole (CGL 67). The arrows suggest a dynamic interplay in which each element "recalls the other" (CGL 66).

But it is not only the sign that has a dyadic structure; Saussure's theory is filled with dichotomies. One in particular, speech versus language, plays a prominent role and

was a novel divergence from previous attempts to characterize language. In principle, the division is clear. *Langue* is the complete, finite, rigid system of signs bequeathed to a linguistic community and which "exists perfectly only within a collectivity" (CGL 14). It is, in short, "a social institution". *Parole*, on the other hand, is an individual act, wilful and intellectual. Signs, the building blocks of language (which individual speakers may never modify), may be combined only through speech into aggregates (called syntagms) in order to express ideas.

These categories, *parole* and *langue*, may be distinguished through another dichotomy as well: the individual versus the collective. This dichotomy plays itself out on a number of levels. It can be seen in the categories of *parole/langue*, where the ability of the individual to apply language differs from the ability of a linguistic community to facilitate language. It is also present in the categories of syntagm/sign, though even Saussure concedes, "in the syntagm there is no clear-cut boundary between the language fact, which is a sign of collective usage, and the fact that belongs to speaking and depends on individual freedom" (CGL 125). The opposition of the individual versus the collective is also manifest in the most important dichotomy of all: signification versus value.

Value

Signs are independent and self-contained, and, as the vertical arrows in Saussure's schema indicate, any movement related to signification is within the sign, between the signified and its signifier (CGL 114). On the other hand, horizontal interaction, from sign to sign, is a matter not merely of the individual signs involved, but of the entire system of signs. Here again we find the collective playing a role that impinges on the meaning of every sign. Saussure offers a number of ways to conceive of value. One is that of currency. This notion of value retains its monetary resonance: one might ask, for instance, "What is a French franc worth?" or, "What is the value of a franc?". The answer depends not merely on the franc itself but on the relationship between the franc and the many elements of the system with which it can be compared or exchanged. There are two ways to answer the question. It can be explained, for instance, that a franc is worth about 15 Japanese Yen, 400 Zambian Kwachas, or a fixed amount of any other currency. Saussure terms this

comparison. It can also be measured against something entirely different. like a consumer item, a process Saussure calls exchange. One might then say that a franc has about the same value as a stick of chewing gum or maybe a small baguette. What is important is that the value of the currency depends on the state of the economy (the system as a whole). In short, a key feature of a value-based system is that it has measurable equivalencies permitting comparison or exchange between members of the system. Outside the relative system of exchanges and comparisons that keeps a currency in balance (on an uninhabited island for instance), there is no meaningful way to describe its value.

The value system also shares many traits with the structure that organizes something like a game of chess. In a game of chess, none of the pieces (as pieces) has any value beyond the scope of the game, and any object endowed with the same value can be used as a replacement—even one lacking all resemblance to the original (CGL 110). Value is not intrinsic to the entity but exists only within the unchangeable conventions that constitute the rules of the system, adjusted, during the game, by the current state of that system—that is, by the relative position of each piece in its opposition to all other pieces (CGL 88). /Knight/ signifies a uniquely shaped piece in a game of chess, but "outside its square and the other conditions of the game—it means nothing to the player" (CGL 110). A "semiology" of chess might describe the signification of a knight as: /horse-shaped piece/ signifies «moves in "L" shape; can hop over obstacles». Anything else we might say about it reflects its value.

This comparison with chess brings up an issue that was touched on earlier. Saussure argues strongly that signification occurs in one direction, namely from the undifferentiated toward the articulations that comprise the units of language. The process, which he calls "the reciprocal delimitation of units", is crucial to his model of a pure value-based system, which in turn supports his contention that language is not a simple naming-process. But in what respect is the signification of a chess piece similarly delimited? Granted its meaning is a function of its relative position in the system of value that holds it in "equilibrium in accordance with fixed rules"; but the system is itself a product of the significations that characterize the units. Saussure contends, "a figure shorn of any resemblance to a knight can be declared identical provided the same value is

attributed to it" (CGL 68). But when a missing piece is replaced, for instance, with a bottle cap, it is not the value of the knight that is substituted; on the contrary, it is the signification. By declaring that the bottle cap is a black knight, an equivalence is noted, not just between the missing piece and its substitute, but also between the bottle cap and the remaining knight. This equivalence does not refer to value (their complete values do not actually correspond) but, rather, to their (common) defining characteristics: the rules that govern their movement. If such rules do not constitute the signification, it is unclear what else could. On the other hand, if signification is characterized in such a way, then value is derivative of the rules governing signification, rules that are imposed independently of the system.

Unchangeable Conventions

Saussure's belief in the immutability of linguistic conventions has been subject to misinterpretation and criticism. He writes, "No individual, even if he willed it, could modify, in any way at all the choice [of conventions] that has been made" (CGL 71). This strongly worded statement seems to defy common sense. The power to change language, surely, resides nowhere else but within the individual. Does he simply mean that authority is vested in the community of individual speakers rather than in individuals *per se*? Saussure is unambiguous: "...the community cannot control so much as a single word" (CGL 71).

Saussure's uncompromising stance hints at the importance of this matter, the solution to which, moreover, he clearly regards as self-evident. If Saussure is responding to the implications of his signification/value dichotomy—in this case through the intermediary dichotomy of *parole* and *langue*—then the question of who or what controls language is subordinate to the issue of how language changes, indeed, how language functions. Saussure refuses to even entertain the notion that individuals or communities can effect linguistic change because their power does not extend beyond speech (*parole*), and *parole* is not the mechanism through which changes in *langue* occur. Where speech is implicated, it is only incidentally, as a medium through which change is manifest and, furthermore, is inevitably diachronic, outside the scope of Saussure's argument.

To maintain that individuals invent (indeed, sanction and sustain) the linguistic system is to miss the point. If, by way of analogy, *parole* were represented by a particular instance of driving behaviours and *langue* by the set of all permissible behaviours, then the notion that *parole* can affect *langue* would be akin to drivers effecting change in traffic regulations through their driving behaviour—which is absurd: any individual who mistakenly believed he could unilaterally change the rules of the road and, say, drive through red lights would soon be proved tragically misguided. Furthermore, any changes to what is deemed permissible behaviour (as a result, say, of perpetual disregard for red lights at intersections) would be diachronic rather than synchronic. This is the only sense in which Saussure's argument is coherent even at the level of the community. Just as there is no possible move in a chess match that can affect "so much as a single" rule of the game, and no driving manoeuvre that can change the traffic code, nothing can be said, by however many people, that would thus alter the linguistic system.

Signification and Concrete Entities

Saussure's dualism seeks to purge the sign of all but its most tangible elements in order to isolate the concrete entities or fundamental units of the type that form the objects of inquiry in most other sciences. More crucially, however, without the clear separation of signification and value he risks the charge that concepts are ready-made and merely in need of labels. If he can demonstrate both that value is separate from signification and that it proceeds from the oppositions inherent to the linguistic system then it would follow that value cannot precede the system and that therefore concepts, shaped by their linguistic value, cannot be pre-existent. However, the distinction between value and signification is comprehensible only if signification produces concrete entities— those that do not have the internal capacity to reflect the infinite diversity of possible meaning—since it is the internal rigidity of these concrete entities that entails a flexible external system like value. The passive, almost denatured quality of the sign is a consequence of a regulating mechanism that is diffused throughout the system. Meaning is distributed primarily through the opposition of these signs within the linguistic system: "the idea or phonic substance that a sign contains is of less importance than the other

signs that surround it" (CGL 120).

Concrete entity must refer to the combination of signifier and signified (that is, the signification) apart from the value that the composite derives from the system of opposition. Saussure sometimes equivocates, arguing, for instance with his analogy of the chess piece, that "it becomes a real, concrete element only when endowed with value and wedded to it" (CGL 110); and, even more confusingly, that "the notion of value envelopes the notions of unit, concrete entity, and reality" so that "there is no fundamental difference between these diverse notions" (CGL 110). Nevertheless, the separation of the two is implicit. Since language is "only a system of pure values" (CGL 111) and "based entirely on the opposition of its concrete units" (CGL 107) the opposition of those units determines value and not the reverse. It is curious that Saussure has such difficulty finding the units.

The most serious obstacle is what he perceives as the incompatibility of words as concrete units. Take, for instance, "horse" and "horses". Saussure argues that although many people would describe them as two forms of the same word "they are certainly two distinct things with respect to both meaning and sound" (CGL 105). There are also examples where a particular word or expression, repeated in different contexts and thus with varying intonations, maintains, from one utterance to the next, a unique meaning despite phonic differences "as appreciable as those that elsewhere separate different words" (CGL 108). Even more telling are the cases where a particular expression brings different semantic values each time it is spoken. Sub-units such as prefixes or suffixes, and compound forms, phrases and locutions bring their own problems. They "resist delimitation as strongly as do words proper" (CGL 106). Likening concrete units to words thus leads to a dilemma: "we must either ignore the relation...and say they are different words, or instead of concrete units be satisfied with the abstraction that links the different forms of the same word" (CGL 105). Saussure ends chapter two confident in the validity of his model of signification/value, despite his inability to produce a concrete example of the constituent entities. He observes, "language has the strange, striking characteristic of not having entities that are perceptible at the outset and yet of not permitting us to doubt that they exist and that their functioning constitutes it" (CGL 107). He later concedes that, "While the word does not conform exactly to the definition of the linguistic unit... it at

least bears a rough resemblance to the unit and has the advantage of being concrete" and thus words must suffice as "specimens equivalent to real terms in a synchronic system" (CGL 113).

Arbitrariness

Signification is the relationship between distinct concepts and their associated sound-images. Saussure argues not only that there is no natural connection between the signifier and signified, but that this arbitrariness is the dominant feature of all 'linguistics of language'. Moreover, he argues, "its consequences are numberless" (CGL 68). Certainly one consequence cannot be ignored: the impact on his theory of value. Saussure himself observes that the notion of value would be compromised if the principle of arbitrariness were not true (CGL 113). The arbitrariness of the association may seem rather obvious; Saussure claims that "no one disputes" it at all (CGL 68). Indeed, what could possibly necessitate a specific choice of signifier? One would appear to be as good as another—a point clearly demonstrated by the abundant variety of equally valid signifiers, in diverse languages, for any given concept. In fact, it is a hotly contested point.

Not only do the signifier and signified lack a natural connection, argues Saussure, but even their delimitation—their extraction from the complete context—is fundamentally arbitrary. The role of language is not to create a "phonic material means" of expressing ideas—because there are no pre-existing ideas (CGL 112); rather, language serves as a link through which the signifier and signified simultaneously come into being and coexist as inseparably as two sides of a sheet of paper: "one cannot cut the front without cutting the back at the same time" (CGL 113). The notion that the concept is fixed only through signification thus precludes the possibility of predefined meaning.

As Roman Jakobson observes, the notion that meaning varies from one language to another is "the most valuable and the most fertile" aspect of Saussurean linguistics (LSM 137). This, however, is a feature of arbitrariness. Meaning is not necessary in the sense of a Platonic Ideal; rather, it is an arbitrarily defined portion of pre-thought, segmented by perception. At the same time, however, Saussure almost certainly regards

the arbitrariness of the signifier as a crucial (i.e., necessary) counterpoise to the arbitrariness of the signified: the two are defined or concretised in the same way, at the same time, through a process that does not discriminate between them. This is, arguably, an even more profound insight than that for which Jakobson credits Saussure. Certainly it accords with Benveniste's, and later Jakobson's own, view that "the connection between the signifier and the signified...is necessary"—but only in the sense that "there is neither signified without signifier nor signifier without signified" (LSM 137). As long as Saussure's own strictures are adhered to (and the sign is left intact) the connection can, without contradiction, be both necessary and arbitrary.

It is not the idea of arbitrariness itself, then, that raises hackles, but the peculiar inconsistency with which Saussure applies the term. Here is the source of tension. On the one hand Saussure claims that signified and signifier—arbitrary in composition as well as in conjugation —arise together, inseparably; on the other, he ignores the inseparability and casts suspicion on the whole notion of arbitrariness by attempting to play off one term against the other, in order to bolster a doomed signification/value distinction. Critics of Saussure's principle of arbitrariness, including Jakobson and Benveniste, who nonetheless embrace the notion of an arbitrary signified, are perhaps confounding the principle itself with Saussure's ill-conceived notion of comparison and exchange.

Comparison and Exchange

Saussure uses the principles of comparison and exchange in an attempt to disprove the notion that words stand for pre-existing concepts (and thus demonstrate that language is not a simple naming-process). He observes, "if words stood for pre-existing concepts, they would all have exact equivalents in meaning from one language to the next" (CGL 116). He demonstrates that this is not the case by comparing "equivalent" words from different languages and finding differences in the values of their terms. A shared signification should indicate that two signs correspond to the same "concept"; a difference in value would suggest that their systems of language have segmented or defined the concepts differently, proving that they were not predefined. However, Saussure must also demonstrate that the "equivalent" significations do in fact correspond

or be forced to admit that the differences between the terms may be due to differences in signification rather than value.

Jakobson argues that there is no meaning "in and by itself, but only in conjunction with signs" (LSM 193). Saussure, on the other hand, must be basing his theory on the premise that meaning does have a sort of independent existence, namely, as a perceptible heterogeneity in the "realm of thought". Otherwise, what would be the source of the objectively comparable and exchangeable substance that he wants to distil into a signification? The correspondence between significations can thus be described as the portion of thought shared by the signifieds; that is, their commonality. Value, in contrast, is the unique portion of the signified, comprising perceptions that are more ambiguous and consequently more variable.

Here is where Saussure's argument comes unstuck: value is simply a signification that is not common to the signs being compared. Value is composed of the same stuff as the signification; the distinction is merely functional. Saussure cites, for instance, the difference between the words *mouton* and sheep. These, he claims, have the same signification but not value—since English distinguishes between the animal and the meat (sheep as opposed to mutton) while French does not (CGL 114). It is tempting, at first, to agree that they share the same signification. But on closer inspection, signification merges with what Saussure characterizes as value. If /sheep/ signifies «domesticated, wool-bearing ruminant of the family, *Bovidae*» and /*mouton*/ signifies «domesticated wool-bearing ruminant of the family *Bovidae* or its flesh as used for food» do they in fact share the same signification? Saussure says, rather unhelpfully, that they "can", implying that it is not always or necessarily the case.

By comparing *mouton* with sheep, sheep acts as the intended signification while mutton is dismissed as value. Thus, the comparison itself produces the signified: the commonality, sheep. An alternative comparison of *mouton* with mutton would reverse the signification, leaving the concept of sheep as a value. If sheep and *mouton* correspond simply because *mouton* contains the concept of sheep, then *mouton* and mutton must have similarly corresponding significations. In fact, any concept contained by *mouton* would have a corresponding signification; not only that, but any concept that contained *mouton* would as well. Another example is subject to the same criticism: /*louer* (*une maison*)/

meaning both «to pay for the use of (a house)» and «receive payment for the use of (a house)» is comparable to the English /rent/. German, however, distinguishes between */mieten/* and */vermieten/* (CGL 116). Again it is unclear in what sense */louer/* and */mieten/* or */vermieten/* could be said to share the same signification. Indeed, a hypothetical, composite sign, /X/, signifying «*mieten* or *vermeiten*» would be a more plausible analogue to */louer/* than either of the components on their own. Of course, then there would be no difference in value.

Curiously, confusion over the identity of "comparable" significations does not contradict Saussure's primary point, that words do not represent pre-existing concepts, since the differences between the terms (whether they stem from variations in signification or value) should be absent from terms whose character preceded signification. It merely brings to light his assumptions about the relationship between signification and value. Saussure's use of value in these examples seems to correspond in some way to a "quantity" of signified content—the relative reach of the sign. "The difference in value between sheep and *mouton* is due to the fact that sheep has beside it a second term while the French word does not" (CGL 116). But it is this two-for-one equivalency that highlights the problem. There is no obviously central aspect that can be promoted as the signified: *mouton* signifies both. In fact, to frame the argument in terms of whether the signification is one of animal or meat or a combination is already a gross over-simplification of the signified concepts. The differences are innumerable and it is precisely in the differing significations that differences in value are perceived.

The same holds with more subtle examples where, rather than shared or divided significations, we find only partial correlations between expressions. Take the terms, "dread", "fear" and "be afraid" (*redouter*, *craindre* and *avoir peur* respectively in Saussure) whose values depend on the fact that meaning has been divided in a certain way between them. If one of the terms did not exist, its content would be distributed among the remaining signs, with a subsequent impact on their value. Saussure would have to argue that if a term such as /dread/ were to disappear, so too would the signified concept. Its value could be shifted between the remaining terms, but not the signification, for the lack of a particular signifier is evidence for Saussure that the previously significant ideas are no longer perceptible (CGL 121).

As the volume of a term shrinks, the content spills over to adjacent signs. Of course, the content does not really go anywhere (a fact that shall be considered in greater detail later). The boundaries of a sign may be rewritten or the names changed, but the content stays where it always has: in a continuum of relations where it is no more distributed between this sign or that than is a territory transferred from one military power to another. But, if it is true that the differences between signs are in the boundaries, then signification and value are not distinct.

The value of a term is determined by the nature of the segmentation; that is, the signification. Only when unwarranted assumptions are made about the boundaries of signification there appear to be an equivalency between terms in different language systems despite obvious variations in "value". Notwithstanding his own caution about the "naive" assumptions that lead people to regard language as a naming process, Saussure seems to be making the same error with regard to signification. In the case of /sheep/ it is essential to determine what is being signified and where its boundaries are. If it is the "complete" concept, including its manifold external relationships, then value is already implied. If on the other hand some relationships are externalised (as are those covered by the separate term /mutton/) then the segmentation is different from that of /*mouton*/.

Lacan recognizes this issue of boundaries and resolves it in dramatic fashion by transferring all vestigial value away from the signified. Value becomes a separate variable only at the expense of the signified. It is a zero-sum relationship. The perfect expression of a system of value entails a complete deflation of the signified and the ascension of an unencumbered signifier. Ultimately, sterilization of the "concept" is both necessary to Saussure's theory of value and fatal to his notion of signification. Saussure's model of the sign becomes reduced to a black ring signifying little more than a perceived division between the signifier of a concept and the value system that sustains it. Nothing else is differentiated. Internal conceptual differences must be suppressed or else independently signified—and consequently externalised. The sign is hollowed out. In what must be regarded as a strange turn of events, the concept itself is no longer seen as linguistically relevant. All that remains is an empty ring, the signifier, denoting, like a zero, the relative place of the sign in the system of value.

Lacan embraces this outcome. He finds it "easy to see that only the correlations

between signifier and signifier provide the standard for all research into signification" (AL 153). His notation for the Saussurean sign, S/s (a reversal in which the signifier is represented as *over* the signified) says nothing of the signified; it reveals only the structure of the signifier (AL 152). He relegates consideration of the signified to philosophy, abandoning it with the observation that "we fail to pursue the question [of signification] further as long as we cling to the illusion that the signifier answers to the function of representing the signified, or better, that the signifier has to answer for its existence in the name of any signification whatever" (AL 150). The signifier itself can sustain the whole process of signification.

Having abandoned the signified and reduced the sign to a hollow ring, it seems appropriate that Lacan uses the image of a necklace rather than a chess game to describe the relationships between signs. He describes these relationships as "reciprocal encroachments and increasing inclusions" that combine like "rings of a necklace that is a ring in another necklace made of rings" (AL 153). This image, of elements that are both components of larger elements and composites of smaller ones, stands in sharp contrast to Saussure's portrayal of linguistic units as "a series of contiguous subdivisions" (CGL 112), which suggests the idea of a jigsaw puzzle, the sum of its pieces correlating with a complete image.

Eco strikes a note similar to Lacan's "rings within rings", but describes a web of relationships even more convoluted when he observes, "a specific civilization organizes the content in the shape of fields, axes, subsystems, and partial systems which are often not coherent with each other" (SPL 44). The sign becomes "the manifest and recognizable end of a net of aggregations and disintegrations constantly open to further combinations" (SPL 23). It is as though the rings of the necklace were, at the same time, also the rings of other necklaces. Interpreting (or, perhaps, rationalizing) one sign through the articulation of other segments of the system may even "cast doubt on the content determined at the beginning, and even the global criterion of segmentation" (SPL 23). Whatever the criteria of segmentation may be, they act as filters that suppress incoherencies and give the illusion of contiguity. If the continuum has "become ordered in the process of its decomposition" (CGL 112), it is only because the contradictory aspects are filtered out.

The Sign as a Filter

It is a filtering activity—initially a mechanical separation of raw data by sensory organs capable of registering only specific categories of relationships—that conceptually decomposes the chaos of nature; and it does this long before language "works out its units". If one imagines that perceptual filters work out the divisions, it explains not only the method of separation, but also the nagging sense that concepts are somehow prior to language. "This first movement, from the sensation to the perception invested with meaning, is so immediate that we tend to consider it semiotically irrelevant" (SPL 32). The raw data that comprises our initially "jumbled ideas" is strained through a perceptual sifter even before it reaches our thoughts. The very organs that bring the mind in contact with the external world impose many of these boundaries. The resulting content-segments—including physical entities, abstract concepts, actions, genera, directions and relations (SPL 44)—are categories of units ordered not by Saussure's "process of decomposition" but by a method whereby filters are selectively and systematically employed in order to expose latent heterogeneity, and thus suggest the borders of potential content-segments.

If filtering is indeed the mode whereby categories and content-segments are isolated, we might expect to find an analogue in speech—a linguistic approach to isolating the intended content of communication by stripping away the noise of potential yet unintended meaning. Saussure's process of linguistic delimitation, itself, proceeds in this way, by filtering out all but a narrow band of relationships. Barthes describes this filtering process as one of "carving out" (ES 48, 58) and argues that "it is in fact the very definition of the syntagm, to be made of a substance which must be carved up" (ES 65). Following Saussure's caution to extract rather than construct significant elements (CGL 113), Barthes is of course describing the delimitation of significant units and not necessarily the process whereby meaning is gained from the syntagm. But it nonetheless calls to mind the image of a sculptor liberating form from a shapeless block. Meaning is built up, but only as the excess is carved away; it is never created. It exists, with infinite potentiality (virtuality), even before it is released. The actualisation of form is thus a revelation of a pre-existing set of relationships, or what Deleuze calls "virtual

multiplicities". Latent form is perceived as it is extracted. The sculptor knows as he swings the chisel which relationships will be revealed and which discarded. The activity, though not positively creative, is nonetheless intentional in the same way that Saussure characterizes *parole*. But the form that emerges is neither a "concrete entity" nor composed of them. Perhaps this is because, as Lacan claims, "meaning 'insists' but... none of its elements 'consists' in the signification of which it is at the moment capable" (AL 153). Perhaps, on the contrary, meaning consists of all its possible significations, each (to varying degrees) relevant until carved away.

If "the sign function exists by a dialectic of presence and absence, a mutual exchange" (SPL 23) then why not imagine a sign that is as much absence as presence, which acts not as a concrete element, but as a chisel, a *sign-as-filter*? Barthes writes of Jules Verne's Nautilus, "it is possible to watch, through a large window-pane the outside vagueness of the waters, and thus define, in a single act, the inside by means of the opposite" (MY 67). Perhaps the sign, in the same way, communicates what it is by signifying what it is not. Here the sign is no longer an empty ring linked to other empty rings, but has a real connection to independent meaning. Enclosed within the porous border of its signifying element the sign carries an assemblage of meaning: a vast web of relationships between elements that constitute the sign as perceived in a particular context. The form of the content extending from the centre of the sign is in no way fixed or objectively defined; it is always a product of shifting physical and conceptual filters. In fact, it is not possible to imagine a content-web independent of context—a hypothetical default archetype—since such a project would entail filtering out the filters, which include the signifier in its capacity as the limit of the sign, and consequently the sign itself. Context thus refers to the primary array of filters, dominated by perspective and perception, which always precedes signification.[20]

The content radiating beyond the signifier (and thus beyond the limits of the sign), follows the web of relationships that branch from the centre and fade—even within the borders of the sign—to eventual obscurity. The contextual web is darkest at the centre of the sign (the contextual centre), where the concepts and their signifier are most strongly associated. These constitutive relationships do not end abruptly at the border; rather, a share is internalised—given implied and tentative significance through an arbitrary

partition established by the signifier.[21] The externalised relationships have fundamentally the same connection with the signifier as those enclosed within the sign. Excluded by the signifier, however, they are not properly denoted elements; nevertheless, if their connection is perceptible, however faint, they maintain a connotative presence, like a shroud around the sign. Furthermore, the volume of denoted content is not absolutely fixed. The border between signified and unsignified concepts is porous: new meaning is constantly added as previously unperceived relationships work their way into the denotative range of the signifier. This movement is not qualitatively different from that brought by shifts of perspective or the application of varying filters. Because of the subjective and inconclusive nature of the border and because the relationships between the signified and unsignified elements are never really severed, the signifier must be considered 'semi-permeable'.

But we must keep in mind Lacan's conclusion that despite references to meaning, to the signified, it is only in the "correlations between signifier and signifier" that we find the activity of the sign (AL 153). Any talk of filtering or otherwise manipulating the content of the sign is purely figurative; the activity invariably takes place in the signifier. Nevertheless, it is convenient to imagine the signifiers as constant boundaries, and to imagine that the volatility, the movement, takes place in the web of relations at the level of the signified. As a result, the sign is depicted, not as an empty ring, but against the backdrop of the relationships it is meant to encompass, and which reflect the changes that actually take place purely at the level of the signifier. Perhaps, then, instead of a ring, we should imagine the sign as a sort of eye focusing on this or that image: the reflection on the retina flickers and dances around, not because the room is spinning but in response to the movements of the eye, which appears stable only because it is taken as the point of reference.[22]

Signifier and Signified United

Ironically, to discuss the nature of perceived relationships independent of the signifier is already to imply a filtering of the signified: almost without noticing, the very relationships that bind the signifier to the signified have been dismissed and the two terms

spoken of as separate entities. But there are reasons to consider the relationship between the two as more than a merely functional association. There are, of course, categories of "natural" signs in which the signifying element is a notable aspect of the signified phenomena and not qualitatively distinct.[23] Eco observes: "we find a cluster of linguistic usages according to which the sign is a manifest indication from which inferences can be made about something latent" (SPL 15). In such cases, signs are the visible aspect of the implied phenomena. What signifies is a portion of the signified itself. In the case of natural signs at least, it is not at all odd to speak of the signified as including its own signifier. The only question might be whether the arbitrary relationship between the linguistic signifier and signified can be legitimately compared to the relationships that exist between the components of the signified, and thus whether it is misleading to describe these potentially very different phenomena in the same terms. Such a view gains little support from Saussure who not only compares the relationship with the bond that unites the two sides of a single sheet of paper—as convincing a description of unity as any one is likely to encounter—but reminds us with the arrows flanking his diagram of the sign that the signified has the power at least to "recall" the signifier. It might also be argued that since there is no limit to the variety of relationships that may comprise and sustain the significant elements (unless particular relationships have been filtered out) the nature of the association that binds the signifier, and even the form of the signifier itself, is unimportant (provided that it is perceptible).[24]

If it is true that there is no objective boundary between the signifier and the rest of the signified then various aspects of the signified should be virtually interchangeable with the signifier proper.[25] That is to say, it should be possible to replace a term's usual signifier with a different portion of the signified without otherwise modifying the sign. Though this is far beyond what Saussure would accept, it is hardly implausible. Not only can the image of a cat (including highly stylised and/or incomplete renderings) be used to signify the typical concept («domestic feline quadruped; likes fish, mice, etc.») and its standard linguistic signifier, /cat/, but the same effect can also be obtained through mime (charade), or through descriptions of the content (as with various puzzles, like crosswords). Indeed, the actual cat itself may signify any and all of the associated concepts including the linguistic signifier.[26] Given that the signifier is not only part of the

sign, but part of the signified as well, the sign functions through metonymy, "the part taken for the whole" or synecdoche: "as if the sign were a part, an aspect, a peripheral manifestation of something which does not appear in its entirety" (SPL 15).

Peirce demonstrates that the function, and thus the context in which a term is likely to be applied, rather than obscuring the meaning, tells you what the word denotes "by prescribing what you are to do in order to gain a perceptual acquaintance with the object of the world" (CP 2.330). His definition of lithium, for instance, suggests:

> If you search among minerals that are vitreous, translucent, gray or white, very hard, brittle, and insoluble for one which...can be partly dissolved in muriatic acid; and if... evaporated, and the residue extracted with sulphuric acid, and duly purified... can be converted... into a chloride, which being obtained in the solid state, fused and electrolysed...will yield a globule of pinkish silvery metal that will float on gasoline... the material of that is a specimen of lithium (CP 2.330).

It is a definition, intentionally prolix, that includes the relationships between the object and external phenomena. In this case the object under scrutiny is a materiel of science and when it is described in such functional terms we do not experience the same moral outrage that Barthes does in his explication of myth, despite the fact that meaning (whatever it is) is being "put at a distance" in favour of a functional/contextual depiction. The point is to demonstrate that the signified is, to a very real extent, defined by overtly "external", perhaps subjective, relationships; and thus call into question the ostensibly objective division between what Barthes describes as meaning and signification.[27]

As with Eco's "aggregations and disintegrations" and Lacan's "reciprocal encroachments and increasing inclusions" the sign is, at the same time, a composite and a component. It is also an aggregate. It derives its form from all three aspects. Its value, which Saussure describes as emanating from the system, arises more immediately from its simultaneous role as a component of other signifiable entities. As an aggregate, it presents a multitude of readings—significations—that can only be reduced by the filtering action of context and syntagmatic elaboration. As a composite, the sign is the dynamic, multi-layered entity that we actually experience.

The difference between such a fully constituted sign and the stylised, relational vehicle described by Saussure mirrors precisely what Barthes observes as the divergence

between classical writing and modern poetry. "In classical speech, connections lead the word on, and at once carry it towards a meaning which is an ever-deferred project; in modern poetry, connections are only an extension of the word, it is the Word which is the 'dwelling place'" (WDZ 47). Barthes' description of classical language might serve equally well to illustrate the character of Saussure's linguistic system where meaning, value, is externalised and divided, and thus accessible only through the combination of its virtually inert elements: "the economy of classical language...is relational, which means that in it words are abstracted as much as possible in the interest of relationships. In it, no word has a density by itself, it is hardly the sign of a thing, but rather the means of conveying a connection" (WDZ 44). Such describes Saussure's attempt to establish the relative values of sheep and *mouton*; without their own internal spark or density, Saussure's signs are indeed like the pieces of a chess game: generic tokens animated only by their essentially mathematical connection with similar tokens, manipulated in concert in an attempt to communicate a rationale for a favourable outcome.

> Overworked, classical words are on the way to becoming an algebra where rhetorical figures of speech, clichés, function as virtual linking devices; they have lost their density and gained a more interrelated state of speech; they operate in the manner of chemical valencies, outlining a verbal area full of symmetrical connections, junctions and networks from which arise, without the respite afforded by wonder, fresh intentions towards signification. Hardly have the fragments...yielded their meaning than they become messengers or harbingers, carrying ever further a meaning which refuses to settle within the depths of a word, but tries instead to spread widely enough to become a total gesture...of communication (WDZ 46).

A sign that carries its own complete identity "gratifies and fulfils like the sudden revelation of a truth...[which] can never be untrue, because it is a whole" (WDZ 47.[28] Such a sign is identified with a new poetic language:

> ...under each Word in modern poetry there lies a sort of existential geology, in which is gathered the total content of the Name, instead of a chosen content as in classical prose and poetry. The Word is no longer guided in advance by the general intention of a socialized discourse; the consumer of poetry, deprived of...selective connections, encounters the Word frontally, and receives it as an absolute quantity, accompanied by all its possible associations. The Word here is encyclopaedic (WDZ 48).

It has achieved a "zero degree" where relations are not imposed on it, but on the contrary flow with such abundance from it—despite the sign's basic function as a filter—that they can hardly be contained within its embrace.

Such is the volume of meaning contained within a sign that its limits may be equally well understood by an examination of the relationships that have failed to work their way inside. Thus, it is only partially in jest that one may interpret a sign with an observation of what it does not signify. A multiplicity of meanings within a single sign would be inimical to communication were it not for the most fundamental aspect of signs, namely, that they function as filters. When signs are combined into syntagms, they implode. The result is not a synthesis of meaning but the revelation of an existing, though potentially obscure, relationship (or web of relationships). To apply a sign is to communicate meaning by carving out, in effect disavowing, relationships that have extended too far from the centre of context. These bastard relationships nonetheless play a substantial role in the action of syntagms. Denied paternity by one sign or another, a lowly, forgotten relation and its siblings may be the only elements to survive the merging of the original signs. The vast majority of relationships that comprise the significant elements of individual signs are pushed into insignificance when those signs combine to form syntagms. The significant centre of the new entity takes the form of the relationships common to the original signs, however insignificant they may have been. In effect, signs combine to filter out most of the meaning they signify individually; the longer the syntagm, the finer and more precise the form.

Chapter Two: The Deleuzean Metaphysics

This chapter lays out the metaphysical underpinnings of the post-structural semiotic framework that will be advanced in Chapter 3. It begins by drawing a connection between Gilles Deleuze's notion of series and what Roland Barthes promotes as 'meta-linguistic' or 'mythical' sign production. Of course, Barthes does not describe the process as a serial proliferation, and his notion of meta-language is limited to a single movement beyond what he calls "first-order" language; moreover, the very word, 'myth', reveals his suspicion about the nature of the process. But the affinities between Barthes' characterization of meta-linguistic sign production and Deleuze's notion of series are striking nevertheless and give a clear sense of what Deleuze means by 'serial proliferation'. They also indicate how the Deleuzean project can be understood relative to its structuralist predecessor, particularly where the latter has been relieved of the problematic distinction between signification and value.

We find in both Deleuze and Barthes' claim that the elements of series, the repetitions, are never independent of one another, that series are syntheses in which entire histories are contracted. Deleuze argues that the mind itself operates through just such series, making thought or 'contemplation' a bodily synthesis on par with the sorts of organic and inorganic syntheses that constitute 'things' in general. The serial form also characterizes our experience of time, which Deleuze describes in terms of three distinct syntheses. Crucially, such series result from the impossibility of fully embracing what Deleuze calls intensive difference—or what is manifested in language as sense or the event, and in time as the 'pure past'. In conveying what he means by intensity and the impossibility of doing more than cancelling it on the surface, an attempt will be made to shed light on a difficult passage from *Difference & Repetition*, in which Deleuze interprets Plato's creation myth as an articulation of his own position on series and irresolvable difference. This is followed by a brief explication of the complex process—itself a series—whereby intensive difference is actualised in extended quantities and qualities. The process, which relies on what Deleuze calls "dramatisation", cannot be reconciled with the notion of language as representation, and justifies Deleuze's claims (cited at the beginning of the chapter) about the relationship between truth and sense. We

thus come full circle and arrive at a view of language as a serial process, where series is understood in terms of syntheses derived from fundamental encounters rather than logical relations.

Sense

Deleuze begins a discussion on the nature of "sense" in *Difference & Repetition* by observing something he claims teachers already know: it is not error and falsehood that are most frequently found in homework, but non-sense—propositions that are neither true nor false. The red ink often points to what Deleuze considers much more serious issues: "remarks without interest or importance, banalities mistaken for profundities, ordinary points confused with singular points, badly posed or distorted problems" (DR 153).[29] Deleuze argues that the designated only avoids the risk of being exposed as non-sense when a fixed result must be produced, one that stands alone and remains external to sense—as in "puerile and artificial textbook examples" that employ singular propositions arbitrarily detached from their context (DR 154).[30] Textbook examples reflect a common misconception about the nature of sense: that it forms an extrinsic condition, determining truth without affecting it. Deleuze objects to the notion that truth (as a matter of designation) can remain unaffected by and indifferent to the sense that ostensibly grounds it (DR 154).[31] On the contrary, he insists that to ground is to metamorphose. In every respect, he argues, truth is a matter of production, and as such, cannot result from a purely logical or psychological conditioning of the possible; it is conditioned by real experience.[32] Where a proposition is understood in the context of living thought, he says, "it has exactly the truth it deserves according to its sense"—for sense is the production of the true. Sense "points beyond itself" toward the object designated so that the latter cannot be posited as exterior to sense, but merely at its limits.[33] In other words, truth is only the empirical result of sense: "Designation, in so far as it is achieved in the case of a true proposition, would never be grounded unless it were understood as the limit of the genetic series or the ideal connections which constitute sense" (DR 154).

Deleuze's claim has much in common with the argument that signification cannot

be understood as distinct from the value that conditions it.[34] Indeed, Deleuze specifically distinguishes between his notion of sense and the sterile notion of signification.[35] By comparing the "signified" with the designation and the "signifier" with the expression, we may see in the type of proposition that Deleuze rejects, something akin to the orthodox Saussurean model of a sign.[36] On such a reading, an indifferent sense is comparable to Saussure's mistaken notion of value, which is likewise indifferent to what it founds. If truth (of the object designated by the proposition) is understood as something responsive to sense (or the context that the expression implies), the rejection of a rigid signification or rigid notion of sense is unavoidable.

If we illustrate the relationships as Barthes does in modelling myth,[37] we can see what Deleuze means by the rather opaque claim that we can take "the sense of a proposition—in other words, the expressed, as the designated of another proposition—of which in turn we cannot express the sense, and so on to infinity"[38] According to Deleuze, myth tells us that grounding always involves a deferred task, a further problem to be resolved: "The oracle is questioned, but the oracle's response is itself a problem" (DR 63). The response to one problem introduces another whose solution introduces yet another in an indefinite regress that ends only with object = x, a "dark precursor", which structures experience but always incompletely—leaving, for instance in the case of language, a "perpetual, invisible and silent displacement of linguistic sense" (DR 123). In most cases, Deleuze claims, the sense of one word can be stated only by another, which takes the first as its object; the linguistic precursor is the lone exception: incarnated as a strange and esoteric word, it can carry its own sense, avoiding the usual fate, but at the cost of representing itself and its sense as non-sense.[39]

Deleuze describes the linguistic precursor as "a kind of metalanguage" (DR 123). This characterization and Deleuze's description of the indefinite proliferation of sense[40] echo precisely what Barthes says of myth.[41] Of course, Barthes does not take myth down an infinite—or even indefinite—regress. But Deleuze acknowledges that even a basic two-term series contains the conditions required for indefinite proliferation.[42] For Barthes, the value or sense embraced by the second-order sign is the connotation excluded from first-order denotation. His model is intended to illustrate the way the sign can drift from the simple denotation of its core meaning to communicate the often 'subversive'

connotations of a new concept. We might say of Barthes' model that it offers a way of denoting (on a meta-linguistic/mythical level) what is merely connoted at the level of first-order signification. The sign (the expressed) becomes the signifier (the expression) of that which is not otherwise denoted by language. Deleuze, on the other hand, inspired by Lewis Carroll, structures his description of proliferation as though *through the looking glass*, a reversal in which a higher-order sign designates what cannot otherwise be expressed.

Barthes' Metalinguistic Sign

Barthes begins by following Saussure in characterizing first-order language (see Figure 1): the *signifier* (1) denotes the *signified* (2) to produce the *sign* (3). However, here the sign is not necessarily the final product, but may act as a 'language-object' available for subsequent use at the meta-linguistic level (MY 115). The *sign* (3), a product of first-order language, occupies the same space as the second-order (i.e. mythical) signifier (3 *as* I). This is to illustrate its dual function in the denotation of a language concept and in the connotation of a meta-linguistic (i.e., mythical) concept. In its second-order role as mythical *signifier* (I) it acts in the same way as a first-order signifier, combining with the *signified* (II) to produce the *sign* (III). Myth is thus a peculiar system "in that it is constructed from a semiological chain which existed before it: it is a second-order semiological system" (MY 114).

To distinguish between such terms as signifier, signified and sign at different levels of analysis, Barthes suggests the terms indicated in Figure 1. Those in parentheses are from Saussure; the numbered words are the primary terms from Barthes' original schema (MY 115); the underlined words are the terms Barthes recommends in order to avoid ambiguity. When he speaks of the concept, he is not referring to the denoted concept of language as in Saussure (i.e., the first-order signified), but, rather, to that implied by the mythical (second-order) signified. Curiously, this revised lexicon abandons the term sign altogether. As the final term of the first system, it has been replaced with meaning and as the third term of myth, with signification. Looked at from the point of view of myth, the signifier has two roles: as the final term of the linguistic system and as

the first term of the mythical system; as a function of the linguistic system, Barthes uses the term meaning; as a function of myth, he calls it form (MY 117).[43]

For Barthes, the entire sign is transformed into a signifier (the form)—not just the signified but "the associative total" of signifier and signified—and by means of this junction (midway between the linguistic signifier and the mythical signification) takes in relationships that were once beyond the reach of the original linguistic signifier alone. A notable, if perhaps unintended, aspect of Barthes' schema is the continuity it evinces among different bands of the signifying web—between internalised meaning and externalised signification—which are seamlessly connected by the form. At question, as with Saussure, is the extent of the primary signification, the rules that distinguish whether the content is in fact meaning or form.

In line with his interest in non-linguistic semiotic processes and social/political criticism, Barthes illustrates his idea by describing a photograph from the cover of a French magazine. The image corresponds not to a sign but to a visual "syntagm", in a semiological system equivalent to the linguistic one.[44] He describes the meaning of the picture: "a young Negro in a French uniform is saluting, with his eyes uplifted, probably fixed on a fold of the tricolor". But this is not the signification. As the form of a concept, the image declares (or so Barthes asserts) that "France is a great Empire, that all her sons, without any color discrimination, faithfully serve under her flag, and that there is no better answer to the detractors of an alleged colonialism than the zeal shown by this Negro in serving his so-called oppressors" (MY 116).

We can find other extra-linguistic examples of second-order signs that seem to inject a similarly insidious subtext into the communication and justify Barthes' use of "myth" to describe the process. A television advertisement, for instance, may employ an actor to signify a customer. The resulting sign, meaning "customer", or even "satisfied customer", has an inherent relationship with a latent concept. The customer is young, confident and well-dressed. The signification (in the mind of the viewer) is one perhaps of success, beauty, and vigour. But this is myth. Even if confidence and careful grooming do actually signify success or a certain achievement, in such an advertisement, the content is largely confined to the signifier: that (apparently) beautiful, successful individual who was paid to signify a certain company's customer. The ostensible signified offers nothing

of that. The notion of customer is parasitic, insinuating itself into a relationship (with a concept) sustained almost entirely by the signifier. If a genuine relationship with the concept (of success &c.) exists, it is between the concept and the signifier (the actor) and not the form (the customer)—but such a composite (young, confident actor signifying beauty and success) would no longer be myth. It is myth because the relationship is distorted, not because the initial sign (that is, the meaning) is acting as the form of another concept. Indeed, we can discover any number of genuine relationships that follow the same pattern of meta-sign production while avoiding such distortion. The sound of a can-opener, to take a rather mundane example, may signify that a can is being opened, while the meaning, can-opening, in its turn takes the role of form and signifies dinner preparation.[45]

But Barthes also observes a qualitative distinction at each level. Meaning, he claims, has a "sensory reality" and a "richness"; it is a credible whole with "a sufficient rationality" at its disposal. It is "already complete, it postulates a kind of knowledge, a past, a memory, a comparative order of facts, ideas, decisions" (MY 117). The Negro soldier thus appears as a "rich, fully experienced, spontaneous, innocent, indisputable, image" (MY 118). Beyond this, he declares, (at the level of the mythical concept) is "a formless, unstable, nebulous condensation, whose unity and coherence are above all due to its function" (MY 119). The contrast is meant to be decisive, but such a characterization of the mythical concept actually resonates with Saussure's image of unsignified thought, which, despite a similar nebulousness, takes on a richness and coherence of its own as a result of signification. The question, then, still unresolved by Barthes, and related to Saussure's search for the "concrete unit", is to what degree the content of the sign is intensional as opposed to extensional (that is, where meaning separates from signification).

Series and the Proliferation of Sense

While for Barthes it is the lower-order sign that acts as the higher-order signifier, for Deleuze it is the higher-order designation that acts as the lower-order sense.[46] He exemplifies the proliferation of sense with a passage from *Through the Looking Glass*, in

which Alice engages in conversation with a Knight about a song he has offered to sing:

> The name of the song is called '*Haddock's Eyes*'"—"Oh, that's the name of the song, is it?" Alice said, trying to feel interested.—"No, you don't understand," the Knight said, looking a little vexed. "That's what the name of the song is *called.* The name really is '*The Aged Aged Man,*'"—"Then I ought to have said 'That's what the *song* is called'?" Alice corrected herself.—"No, you oughtn't: that's quite another thing! The song is called '*Ways and Means*': but that's only what it's *called*, you know!"—"Well, what *is* the song then?" said Alice, who was by this time completely bewildered.—"I was coming to that," the Knight said. "The song really *is* '*A-sitting on a Gate*'!..." (TLG 33).

The song is described on four levels (rather than the two that Barthes describes), but can otherwise be mapped in the same way as Barthes does myth (See Figure 2). Deleuze writes:

> There are indeed in Carroll's classification four names: there is the name [N1] of what the song really is [D1]; the name denoting this reality [N2], which thus denotes the song [S1] or represents what the song is called [D2]; the sense of the name [S2], which forms a new name [N3] or a new reality [D3]; and the name which denotes this reality [N4], which thus denotes the sense of the name of the song [S3], or represents what the name of the song is called [D4] (LS 35, labels in parentheses added).

We can see in this example what Deleuze was talking about in the passage cited earlier from *Difference & Repetition*, where he claims that we can take the sense of a proposition (that is, the expressed, [S2]) as the designated of another proposition [D3]. The expressed *is* the designated of the subsequent proposition—in the same way that, for Barthes, the sign *is* the signifier of a higher-order signification.[47] Each proposition designates a certain object, but only derives its sense from a subsequent proposition, which denotes the sense of the preceding proposition in the designation of its own object, but likewise derives its own sense from a subsequent proposition, and so on, in an indefinite regress.[48] We may generalize this by saying: N1 *is* D1; but *as* D2, S1 is *called* (or 'is *represented by*') N2, which *is* D2; as D3, S2 is in turn *called* N3, which in turn *is* D3; as D4, S3 in its turn is *called* N4, which *is* D4, &c. *ad infinitum.*[49]

The model for every series of this sort is what Deleuze identifies as *Frege's Paradox*—or, in light of Lewis Carroll's famous use of the idea, "Carroll's Paradox".

Carroll's Paradox asks whether 'Z' is true, given the truth of its conditions ('A' and 'B'). As it turns out, 'Z' cannot be determined as true because another proposition always intervenes: first, proposition 'C' (that is to say, <the truth of 'A' and 'B' implies the truth of 'Z'>) is necessary to establish the relationship between the truth of the conditions ('A' and 'B') and the truth of 'Z'; then proposition 'D' is necessary to establish the relationship between the truth of the new set of conditions ('A' and 'B' *and* 'C') and the truth of Z, and so on *ad infinitum* (see TA 278-80).[50] These relationships can be plotted in the same way as the propositions in the Knight's song (see Figure 3).[51]

Deleuze's critique of Descartes (whose determination, "I think", is intended to establish the undetermined, "I am") is founded on the same sort of paradox and consequent series.[52] Deleuze argues that the 'I' is not determined, but always represented by a passive subject to itself: 'I' is like the sense of a proposition in that we can only *say* 'I' and designate <the self> without embracing the expressed as such. "*I* is an other, or the paradox of inner sense".[53] Deleuze explains: "It is as though the *I* were fractured from one end to the other: fractured by the pure and empty form of time" (DR 86). This fracture, or 'caesura', is crucial to Deleuze's conception of time. The 'I', with which Descartes hoped to banish uncertainty, becomes a repetition in a series that converges on pure time. In order to reconstitute the identity of the 'I', time must be introduced into thought as such.[54] This will be examined in greater detail below, in the discussion on temporal series.

Alvin Lucier's fantastic acoustic composition, "I am sitting in a room", exemplifies the sort of series that Deleuze wants to consider. The piece comprises a paragraph of text, which Lucier reads with a calm, almost hypnotic, voice marred only by the occasional irregularity introduced by a speech defect.[55] It is tempting to see these irregularities as surface effects—characteristics that distinguish the expression from the designation. But Lucier has been careful to enfold one within the other. As he explains: "I regard this activity not so much as a demonstration of a physical fact, but, more as a way to smooth out any irregularities my speech might have". The word "smooth" is spoken with a stutter that manifests the very irregularity of which it speaks. As with the Knight's song, which really *is* "A-sitting on a Gate", Lucier's composition really *is* the paragraph of text that begins "I am sitting in a room...".[56]

Lucier's technique is to play a recording of the text (Output 1) in a particular environment (the "room") and record the results (Input 1). The new recording (Input 1) then becomes the output (Output 2) for the subsequent repetition. Output 1 and input 1 differ according to the acoustic qualities of the space in which the recording is played, and as the series progresses, the repetitions are systematically transformed into a "pure sound" corresponding to the harmonics of the room (see Figure 4). If we grant that the "song" really *is* the output (that is, literally 'Output 1' as N1 designating 'Output 1' as D1), then it is clear that the sense of the song—what is actually expressed (Input 1)—is not designated by the original proposition, but only by a subsequent proposition (Output 2). With every repetition, the name and the designation change in lock step, but the sense is always deferred. The piece ends (somewhat arbitrarily) after 32 repetitions, by which time the proposition has approached object = x and become a truly esoteric 'word' for the "dark precursor" that causes the series (and other potential series) to resonate.

Common to all these series is an evolving structure. The repetitions do not simply follow one after the other; each adds something to the already-constituted series, which thus forms an evolving whole. In the series formed by Carroll's Paradox, each repetition provides the logical rationale for the proposition as it has evolved up to that point; in Deleuze's series, exemplified by Alice's dialogue with the Knight, each repetition provides the sense of the prior proposition; in Lucier's composition, each repetition expresses the actual acoustic quality of the prior output. Barthes' abbreviated series is the inverse of these others, but in it too the single repetition adds something (connotation) that furthers the evolution of the series. The idea of a serial progression in an "evolving" structure is central to the machine proposed in Chapter 3, which functions in the present by anticipating a future on the basis of a preserved past.

Temporal Syntheses

Deleuze says of series that they contain an "entire history" of the events (or, "singularities") that are constituted in their relations with other series (LS 60). The history is a "contraction" of retentions and expectations. It is the culmination of the series in the present. Deleuze calls the "contractile power" imagination, of which he says:

> like a sensitive plate, it retains one case when the other appears. It contracts cases, elements, agitations or homogenous instants and grounds these in an internal qualitative impression endowed with a certain weight. When A appears, we expect B with a force corresponding to the qualitative impression of all the contracted Abs (DR 70).

The expectation that B will follow A is the result of syntheses—and not merely sensible or perceptual syntheses—he calls habit.[57] Deleuze criticizes Hume and Bergson for not following the series of contractions all the way to organic level and beyond:

> perceptual syntheses refer back to organic syntheses which are like the sensibility of the senses; they refer back to a primary sensibility that we *are*. We are made of contracted water, earth, light and air—not merely prior to recognition or representation of these, but prior to their being sensed. Every organism, in its receptive and perceptual elements, but also in its viscera, is a sum of contractions, of retentions and expectations (DR 73).[58]

The inspiration is Plotinus' third *Ennead*, from which Deleuze draws the claim that all things are contemplations, not only people and animals but plants, the earth, and rocks (see DR 75). The notion of contemplation and sensation are closely tied to that of contraction:

> sensation is formed by contracting that which composes it, and by composing itself with other sensations that contract it in turn. Sensation is pure contemplation, for it is through contemplation that one contracts, contemplating oneself to the extent that one contemplates the elements from which one originates (WP 212).

Deleuze and Guattari cite the eighth tractate, perhaps alluding to where Plotinus identifies the living process itself as contemplation: "If, then, the truest life is such by virtue of an intellection and is identical with the truest intellection, then the truest intellection is a living being; contemplation and its object constitute a living thing, a life, two inextricably one" (PE 3.8).[59] Contemplation is a key aspect of Deleuze's metaphysics and will have crucial implications for the functioning of the machine. Not only is contemplation a univocal notion that encompasses all of being from minerals to thoughts, we are to understand that contemplations are inseparable from the actualisation (or differenciation) of the virtual. We will see later in this chapter how contemplation (or

perception in the broadest sense) determines the things to be actualised, but first we shall see how Deleuze makes use of the 'histories' contracted in a contemplation to explicate the production of time as a series.

Deleuze uses the notion of habit and contraction not only to explain sensation and 'intellection', but also to characterize the first of three syntheses that he identifies with the production of temporal series. The "lived present" is the "contraction" of successive independent instants at all levels, right down to the organic (DR 70).[60] Previous instants are retained to the extent that the series is taken back in its regress by the "contemplating" soul. A "perpetual present"—a lived present extending infinitely into the past and future and thus coextensive with time—would require infinite contemplation. But every thing has a "contractile range", at which fatigue or satiety sets in and the contraction comes apart.[61] So even though time is constituted as a living present ("the present alone exists"), fatigue marks a point where the present gives way to the past and the future—which are thus merely dimensions of the present.[62]

But the lived present passes; it passes in a series of presents. To understand this second temporal synthesis, we must look more closely at what we have been calling a *series*. We find that there are in fact two heterogeneous series involved in our "serial form". As Deleuze explains: "*the serial form is necessarily realized in the simultaneity of at least two series*" (LS 44), which we may distinguish in general as the signifier and the signified.[63] Thus Deleuze speaks of any particular former present as represented—in which the signifying series (N) and the signified series (D) are connected by (S).[64] Previous presents are represented in the present present—reproduced in memory. He explains that the former present finds itself 'represented' in the present one but not without the present one itself being represented in that representation (DR 80). Deleuze's claim recalls Merleau-Ponty's criticism in *Phenomenology of Perception* of the notion of physiological or psychic 'traces'. Merleau-Ponty says: "This table bears traces of my past life, for I have carved my initials on it and spilt ink on it. But these traces in themselves do not refer to the past: they are present; and, in so far as I find in them signs of some 'previous' event it is because I carry this particular significance within myself" (PP 413). There are two important points here. The first is that signs of the past are always present[65]—representing the past in the present—which is why Deleuze claims that former

and present presents are not like two successive instants on a line but, rather, that the present present contains an extra dimension in which it represents the former while "reflecting" itself (DR 80). The second point is that significance is carried within the individual. What Merleau-Ponty criticizes in the notion of 'recognition' is the very same phenomenon that Deleuze embraces in his understanding of series. Merleau-Ponty writes:

> it is not the past which is compelling recognition; recognition, when we try to derive it from any content whatever, always precedes itself. Reproduction presupposes re-cognition, and cannot be understood as such unless I have in the first place a sort of direct contact with the past in its own domain (PP 413).

Recognition, like sense, *is* always presupposed. But this 'always presupposed' past is a repetition of a sort that we have seen Carroll's Paradox, which Deleuze deploys in the various series he constructs. Deleuze does not conclude that the missing term must ultimately be found within the self, but that the series it forms converge on that term as their object = x. Nevertheless, Deleuze is in agreement with Merleau-Ponty in recognizing the necessity of a direct contact with the past. As Deleuze explains, "what we live empirically as a succession of different presents from the point of view of active synthesis is also *the ever-increasing coexistence of levels of the past within passive synthesis*" (DR 83).

The present is a passing present, and any particular past event is merely a dimension of the present—a past present. But what of the past "in general": that into which the present passes? Deleuze says of the past not only that it is not merely a dimension of time, but that it is the synthesis of *all* time of which the present and the future are themselves only dimensions; it is, he says, a pure, general, *a priori* element of all time (DR 82). *But it does not exist.*[66] It *is*, but only to the extent that it "insists" or "consists": *insisting* with the former present, *consisting* with the present present (DR 82). This recalls what Lacan says of meaning: that it *insists* while none of its elements *consists* in the signification of which it is capable (AL 153). It also reflects what Deleuze says of sense: that it "inheres" or "subsists" but does not exist outside its expression (LS 24). Nevertheless, the "pure element" of the past in general exists (or 'inheres') in some way prior to the passing present (DR 82). It does so in the same way that sense pre-exists (or

"pre-inheres") the proposition of which it *is* the sense: the "pure element" of the past in general is the dark precursor that grounds time. It is not itself represented, for it is never the past but rather the former (or present) present that can be represented; the past in general is always already there, presupposed by the passing present and causing the present to pass (DR 82). Deleuze argues that the past must be presupposed for "No present would ever pass were it not past 'at the same time' as it is present; no past would ever be constituted unless it were constituted 'at the same time' as it was present" (DR 81).[67] This difficult notion of a pure, *a priori* past is best understood as an analogue of the virtual. Deleuze writes:

> What we call the empirical character of the presents which make us up is constituted by the relations of succession, causality, resemblance and even opposition. What we call the noumenal character is constituted by the relations of virtual coexistence between the levels of a pure past, each present being no more than the actualisation or representation of one of these levels (DR 83).

Just as extensities are actualised elements of an implicated virtual multiplicity that contains every relation in varying degrees of 'clarity', present presents are actualised elements (and past presents are represented elements) of a pure past that is an implicated virtual multiplicity of every moment.

We have seen how former presents can be contracted into a series that culminates in the lived present—which alone exists: a reality of which past and future are only dimensions. We have seen how the lived present passes in a series grounded on the past in general—which insists or consists: a reality of which present and future are only dimensions. Deleuze argues for a final temporal series, in which it is time itself that unfolds instead of things unfolding within it (DR 88). Unlike the previous series, it is a static synthesis that, in characterizing the unfolding of time, is no longer subordinated to movement.[68] Instead, time as a whole is designated by a sign, a symbol of a decisive act.[69] This "pure order" of time is defined by the formal distribution of elements in the function of a *caesura*—a break or a fracture determined in the image or symbol of an event that is sufficient to encompass time as a whole. The break divides time into two unequal parts, which are subsumed by the symbol. The distribution is carried out "within inequality". The two parts can never be made equal, just as Plato's God could never make

equal the divisible and the indivisible.[70] But just as Plato's God was able to 'tame' inequality by distributing the divisible and indivisible into series of quantities, the distribution of inequality brought together by the symbol of the caesura creates the possibility of temporal series (DR 89). The inequality gives time an apparent direction as the break ordains "once and for all" the distribution of a before and an after, a past and a future. In explaining this difficult notion, James Williams offers some nice examples of the binding of past and future in the event that symbolizes the whole; he writes: "*All of Russia's past and all her future is at those gates...All of America's past and future is in that Declaration*" (DDR 103). We see here the sort of event that Deleuze considers necessary to define the past and future. All of America's history is directed toward one world-shaking declaration and all its future follows from it.

The caesura is the present—"the present of metamorphosis",[71] the moment of "becoming-equal" to the imagined act. But this "becoming equal" is the becoming equal to "the unequal in itself", and as such is incompatible with the persistence of an identity. Deleuze writes: it is "as though the bearer of the new world were carried away and dispersed by the shock of the multiplicity to which it gives birth" (DR 89). It is this dissolution of the self that grounds repetition in the eternal return. What returns is the Same, but the Same is not the identical, it is the same becoming, the becoming of difference in itself.[72]

Intensity and Difference

The first characteristic of what Deleuze calls intensity or intensive quantity is that it includes the unequal in itself; intensity includes difference. This difference can be cancelled, but only in extension. Deleuze expresses it as "the process by which intensive difference is turned inside out and distributed in such a way as to be dispelled, compensated, equalised and suppressed in the extensity which it creates" (DR 233). An example early in the section is crucial to the understanding of what later becomes an extremely opaque discussion, even by Deleuze's standards.[73] He explains the problem of difference or inequality in terms of mathematical expressions, noting:

> a given type of number does not retain an inequality in its essence without banishing or cancelling it within the new order that it installs. Thus fractional numbers compensate for their characteristic inequality by the equality of an aliquot part; irrational numbers subordinate their inequality to an equality of purely geometric relations—or, better still, arithmetically speaking, to a limit-equality indicated by a convergent series of rational numbers (DR 232).

Among the three 'orders' that Deleuze describes (natural, fractional, and irrational), irrational numbers cling most strongly to their original intensity.[74] The first level of intensive difference is cancelled in its explication as natural number. But inequality—intensive difference—still remains. Some of it is cancelled in its explication as fractional number; which is to say, difference that cannot be expressed by a natural number is tamed by putting two natural numbers into a ratio. But even this does not suffice to include all of difference, as more remains in a form that cannot be expressed even as a ratio. Intensity is only captured by these irrational numbers in terms, for instance, of the relationship among geometric parts (like the ratio of a circumference to its diameter). The intensity is never truly abolished; as Deleuze explains: "if a type of number cancels its difference, it does so only by explicating it within the extension that it installs. Nevertheless, it maintains this difference in itself in the implicated order by which it is grounded" (DR 232). Deleuze interprets Plato's creation story in the *Timaeus*, both as an expression of God's effort to cancel difference and as an example of serial proliferation.

Plato himself describes the creation of body and soul in terms of the mixture and separation of certain elements (see PT 35-37). According to Plato, God first combined the divisible and indivisible of Being into a third, "intermediate", kind of being (mixture A). He did the same to the divisible and indivisible of the Same (mixture B) and of the Different (mixture C). Next, he combined the three mixtures into one: "a compound of the same, the different, and being" (PT 35-35b). He then portioned out various quantities of the final compound. He began with one part of the compound (1), then took another that was double the first (2), then one triple (3), then one double the second part (4), then triple the third part (9), then double the fourth part (8), and finally triple the fifth part (27). The various portions fell into two categories: those with "double intervals" (1, 2, 4, 8) and

those with "triple intervals" (1, 3, 9, 27). According to Plato, God filled the intervals with the equalities provided by two sorts of (arithmetic) means: one "exceeding and exceeded by equal parts of its extremes" and the other "exceeding and exceeded by an equal number". This resulted in the intervals between 1 and 2, for instance, being filled by 4/3 (which is one-third of 1 more than 1 and one-third of 2 less than 2) and 3/2 (which is the standard mean of 1 and 2). Another interval was filled by 9/8 (the ratio of 3/2 to 4/3); yet another by 32/27 (the ratio of 4/3 to 9/8); and the final one by 243/256 (the ratio of 9/8 to 32/27).[75] God then took the portions he had laid out and cut them down the middle, producing two strips, one of which contained "the being of the Same" and the other, "the being of the Different". By joining their ends together, he produced two circles, which he laid one inside the other. The motion of the outer circle he called "the motion of the same" and the motion of the inner circle he called "the motion of the other or diverse" (PT 35-37).

Traditionally understood simply as an early astronomical theory inspired by the proportions of the Pythagorean Tetractys and the diatonic scale, Deleuze reads this description as God's effort to equalize or "render docile" the inequality of the divisible—in the same way that mathematics seeks to equalize difference with number. Just as natural numbers fail to capture fractionals, God's efforts to bring the indivisible ("A") and divisible ("B") into a single mixture fails.[76] Recalling the proliferation that results in trying to express sense, Deleuze claims that God obtains only A+B/2=C, where C must be captured in a subsequent proposition, A+B/2+C—in other words, A+B/2+(A+B/2)—leading to a now familiar serial regression. According to Deleuze's reading, God finds a way to "avert the rebellion" implied by this endless series: he creates two finite progressions—one whose 'principle' is 2 (double interval) and one whose 'principle' is 3 (triple interval), from which may be derived the relations, and the relations between relations, that allow us to recognize the distribution of the unequal in the divisible throughout the mixture (DR 233). The important point, for Deleuze, is that in Plato's description, God fills the intervals (of intensive difference) with ratios comprising elements of the differenciated progressions.[77] Thus, difference in the form of the interval between 1 and 2 is filled by fractions like 3/2, 4/3, and 9/8—which consist of quantities (2, 3, 4, 8, 9) that God has already portioned out. Finally, and perhaps most importantly,

Deleuze observes:

> God has not defeated the unequal in itself but only separated it from the divisible and enclosed it within an outer circle, *kuklos exothen*. He has equalised the divisible in the extension which is the extension of the Soul of the world, but underneath, at the deepest layer of the divisible, the unequal still rumbles in intensity (DR 233).

Pure intensive difference has been tamed, but only at the surface.

Despite his other insights, Williams appears to misunderstand Deleuze's intention with regard to Plato's story.[78] At issue is the poorly explained problem of the indivisibles. Deleuze defines the divisible as "that which bears in itself the unequal", whereas "the indivisible (the Same or the One) seeks to impose an equality upon it" (DR 233). He clearly identifies the divisible as "B" and so, presumably, understands "A" as the indivisible. Williams agrees up to this point. But Deleuze is unclear about what sort of numbers constitute the indivisible: he writes with maddening ambiguity that one of the progressions, "whose principle is 2", refers to "the element A (1, 2, 4, 8)". This sounds like he is saying that 1, 2, 4 and 8 are examples of indivisibles. But Williams takes 'indivisibles' to mean 'prime numbers', and understands Deleuze's point to be that "new prime numbers... keep appearing however hard we try to bring all numbers to a finite set of indivisibles" (DDR 180). But of what finite set of prime numbers is he speaking? The numbers that Plato describes God using at creation are not, on the whole, prime: 1, 2, 3, 4, 8, 9, 27, nor are the numbers Williams seems to be identifying as "multiples of A": 2, 4, 6, the last of which appears in neither Deleuze nor Plato's account.

It is clear, however, that there are two movements in Deleuze's discussion: one, in which God runs into the indefinite series; and a second, in which He hits on a finite solution. Perhaps because Plato does not discuss the former, Williams assumes that Deleuze's entire explanation is about the latter. But this does not explain why he thinks prime numbers are necessary at this stage. After all, the appearance of any new number—not just a prime, but any natural number not already contained in the set—exposes the same difficulty: the series has an endless capacity to generate new numbers. Contrary to Williams' suggestion, Deleuze does not need the formula A=B/2 to produce any more such numbers. What the formula does is fill in the intervals with

numbers that capture intensive difference of another degree; that is, of the sort Plato's God used to fill the intervals between the different portions. So, where C=A+B/2, we can use the relationship between quantities that Plato's God has already laid out (1, 2, 3, 4, 8, 9, 27) to express (as 1+1/2 or 2+3/2 or 4+9/2, &c.) the intractable inequality (i.e., the intensive difference) within the mixture (3/2, 7/2, 17/2, &c.). Even this, however, is only a provisional solution, for it inevitably fails to subdue difference in its entirety; hence, God's second effort to "avert the rebellion" by organising the quantities according to a serial progression.

Deleuze is occupied with the implications of an intensity that always lingers beneath the surface, unaccountable even to God. Intensive quantity includes the unequal in itself: it *is* difference—difference in itself—comprising inequality *as such* (DR 234). But this notion of the unequal is opposed to the negative: difference is not negation (DR 235). Intensity makes difference an object of affirmation; it "*affirms* difference" (DR 234). The negative, Deleuze claims, is difference that has been inverted or "seen from below" (DR 235). When we "look up", we see difference in the opposing qualities or in the increasing or decreasing resemblances among identities. If we draw a comparison once again to a number system, we can see in terms of natural numbers what Deleuze means by this. To the extent that intensity has been distributed among such numbers, difference appears only in the opposition of its terms. But the intensity that eludes the system "still rumbles" below. If we look down, for instance, at the intensities that can only be expressed as relations—before they join the extended system as fractions or irrational numbers—we find difference yet to be subordinated to identity, difference that cannot be characterized in terms of the negative.

Indi-drama-different/ciation

Intensity, seen from above, is an implicated, enveloped or 'embryonised' quantity. But this is not to say that it is primarily implicated in quality; it *is* implicated in quality, but only secondarily so. It is primarily implicated in itself: "implicating and implicated" (DR 237).[79] Intensity *is* difference, but only when it is implicated and enveloping.[80] There are two notions (or 'orders') of implication that must be distinguished here. The

envelopment of intensities (by the qualities and extensity in which they are explicated) is only a secondary, surface, implication; there is another, deeper, level of implication, where the intensities are self-enveloping (DR 240). Because there are no individuals at depth, the envelopment or enfolding is of implicated 'multiplicities'.[81] These multiplicities or 'implexes' express with variable clarity the changing totality of Ideas: those expressed most clearly are those on which the multiplicity is focused in its enveloping role, whereas the enveloped continue to expresses the relations in every degree, but confusedly.[82] These Ideas are virtual or embryonised, like an egg before its potential has been realized in the development of actual organs.[83] The "actual" results from a complex process that Deleuze expresses in shorthand as "indi-differen*t/c*iation" or, more completely, as "indi-drama-differen*t/c*iation" (DR 246). This refers to the *indi*viduation of differential relations to be actualised; the *drama*tisation of the idea expressed by the intensity; the *differen*tiation of all the relations (with their "variations and points") that coexist as elements of the Idea; and the differen*ciation* of the idea into actualised qualities and extensities. The model for this process is the egg. Deleuze declares:

> The world is an egg. Moreover, the egg, in effect, provides us with a model for the order of reasons: (organic and species related) differentiation-individuation-dramatisation-differenciation. We think that difference of intensity, as this is implicated in the egg, expresses first the differential relations or virtual matter to be organised. This intensive field of individuation determines the relations that it expresses to be incarnated in spatio-temporal dynamisms (dramatisation), in species which correspond to the distinctive points in these relations (organic differenciation) (DR 251).

There are no individuals in the field of individuation. As Deleuze explains, individuation involves "fields of fluid intensive factors which no more take the form of an I than of a self".[84] It operates beneath all forms and is inseparable from the pure ground that it brings with it to the surface (DR 152). The field contains all the virtual objects (as differential relations) that may come to be actualised.[85] Individuation is "the act by which intensity determines differential relations to become actualised" (DR 246).[86] This may perhaps be more easily understood in terms of Plotinus' notion of contemplation that we encountered earlier. As Deleuze and Guattari explain:

> These are not Ideas that we contemplate through concepts but the elements of matter that we contemplate through sensation. The plant contemplates by contracting the elements from which it originates—light, carbon, and the salts—and it fills itself with colors and odors that in each case qualify its variety, its composition: it is sensation in itself (WP 212).

Like the act of solving a problem, potentials are actualised, disparates are put into communication and the individual emerges from an "'objective' problematic field" of distributed potentials (such as can be designated light, carbon, salts, &c.): individuation consists in integrating or coupling the elements of the disparateness in a way that ensures an internal resonance.[87] We must be careful not to take more from this example than intended. The field of individuation is heterogeneous, but the elements that are coupled in the solution are not the sort of extensities (water, minerals, &c.) that this example might suggest; they are at least two levels removed. Returning to the model of the egg, Deleuze emphasises that there is a distinction not merely between intensity and extensity (or between virtual and actual), but within the fields of the virtual itself. One must distinguish between the differen*t*iated (yet pre-individual) field of nuclear and genetic material, and the individuating field of cytoplasm that determines the actualisation (DR 251). In short, between the undifferentiated field of individuation and the actualised individual is a field of differen*t*iated (yet virtual) elements.

The differential relations that become actualised are distinguished on two levels. There are the relations between differential elements in the Idea (or the virtual multiplicity), and there are the relations among the actualised qualities and extensities. The two levels of relations are distinguished by the term "differen*t*/*c*iation", where differen*t*iation expresses the state of differential relations as such (in the Idea or virtual multiplicity)[88] and differen*c*iation expresses the state of the qualitative and extensive series in which the differential relations are actualised.[89] It is between the differen*t*iated elements (of the virtual) and the differen*c*iated qualities and extensities (of the actual) that the "implicated multiplicities" (or implexes) that constitute intensity are to be found. In this intermediate position, intensity dramatises the Idea.[90] Taking the example of an egg, Deleuze explains that cellular migration is a drama in which the roles follow from a structural theme to be actualised. He writes: "The world is an egg, but the egg itself is a

theatre: a staged theatre in which the roles dominate the actors, the spaces dominate the roles and the Ideas dominate the spaces". Although the actors are differenciated, it is through their roles that they dramatise the differentiated Ideas (or multiplicities) that form in the individuating spaces of the theatre (DR 216).

The notion of drama or theatre is central to Deleuze's ontology and, by implication, to his conception of language, the processes of which do not take the traditional form of representation and recognition. Our contact with the world is direct. We are forced to think; our thoughts are the result of a fundamental encounter (DR 139).[91] The object of this encounter is grasped by the senses—gives rise, even, to sensibility, since the encounter does not presuppose the exercise of the senses (DR 139).[92] It is in the unfolding of the drama that the contemplation is accomplished. Hence the importance Deleuze ascribes to theatre, which makes possible the achievement sought by Kierkegaard and Nietzsche—to put metaphysics in motion, to make it act and carry out acts without mediation—without representation:

> it is a question of producing within the work a movement capable of affecting the mind outside of all representation; it is a question of making movement itself a work, without interposition; of substituting direct signs for mediate representations; of inventing vibrations, rotations, whirlings, gravitations, dances or leaps which directly touch the mind (DR 8).

Deleuze's complaint about Hegel is that in substituting abstract relations for the Idea, he ends up representing concepts rather than dramatising Ideas: "he creates a false theatre, a false drama, a false movement" (DR 10).[93] Deleuze says of Nietzsche's *Zarathustra*, on the other hand, that while it is conceived entirely within philosophy, it is also a theatrical production: "Everything in it is scored and visualised, put in motion and made to walk or dance" (DR 9). He regards movement as suited, not to the despotic pronouncements of meaning or value imposed on the world through concepts, but to the directly affective forces that touch us prior to their appropriation by representational language.[94] Movement, he believes, liberates thought by implying a "plurality of centres, a superposition of perspectives, a tangle of points of view" (DR 56).

This notion of a superposition of perspectives is fascinating and important, but it is here that we shall diverge from Deleuze's project, in the interest of exploring the

concrete issue of sign production. We will see in the proposed machine that the subject—in order to remain as a subject rather than be dissolved in the schizophrenic ebb and flow of a plurality of centres—necessarily imposes (or, rather, responds to) a perspective grounded on its identification with a particular centre. Is there really such a centre? How can we establish its limits? Are they constant? These details will be clarified in the following chapter; but in brief, it can be said that this centre is to be understood as an object capable of sensation; which is to say, precisely such an object as may respond to an environment without being dissolved in it. Its limits and composition are variable, but to the extent that it changes or that its boundaries may be differently construed, it is no longer the same object, and no longer determines the same subject. Such an object, perhaps unsurprisingly, reflects the same variability, the same provisional character, as every other the object produced by the machine of which it is the centre.

Deleuze asserts, and this paper agrees, that the individual is a "larval subject" opening onto the world a multiplicity of perspectives. But the purpose here is not offer a schizoanalysis of the self any more than to offer a diachronic analysis of the linguistic sign. The machine crystallises multiplicities into signifiable objects by reducing them to composites of only two terms: a single component under examination and the 'objective problematic field' of an undifferentiated (though implicitly heterogeneous) context. Of course, the context is susceptible to the same reduction, as is the greater context in which the composite is itself situated (as the component of an even greater composite). There is no danger of the context becoming a mere background against which the false drama of identities is played out, because each context is reciprocally involved in the determination of its object and must be accounted for as a constituent of its object prior to any possible analysis of relations between objects. On the one hand, context designates one of the two components constituting the object as a composite; and, on the other, designates the component alongside of which that object is the remaining component in a larger composite. In this way, the machine responds to the subjective centre however construed—but, in so doing, establishes a perspective that will ground the semiotic process.

Chapter Three: The Machine

> The partial objects and the body without organs are the two material elements of the schizophrenic desiring-machines: the one as the immobile motor, the others as the working parts; the one as the giant molecule, the others as the micromolecules—the two together in a relationship of continuity from one end to the other of the molecular chain of desire (AO 327).[95]

In this chapter, the semiotic framework is finally presented. But as we have noted, the term 'framework' can only be provisional, for it is inadequate to convey the true movement involved in the function of signs. Indeed, even the word 'sign' must be applied with care to avoid misconstruing the elements of language as static objects.[96] In the previous chapter we saw how Deleuze dismisses the view that language works through representation, arguing instead for a dramatisation of Ideas. This dramatisation or taking on of roles is distinguished not only by the necessity of movement but also by an essential presence. For this reason Deleuze rejects the notion of metaphor, which encourages us to believe that thought proceeds by means of comparisons, by likening one thing to another, as though we merely recognized an already objectified reality (UD 70). But reality does not come already objectified;[97] it is produced moment by moment, with every experience productive of a habitat (created in the contraction of a series) in which we encase ourselves.[98] We orient ourselves in this habitat by noting our position relative to a field or system of perceived values. Each perception constitutes a repetition in a series of value-systems against which we continually redefine our positions. The space in which this occurs is actual—though at its limits it vanishes into the obscurity of an undifferentiated context: pure intensive difference, the virtual. It is in this milieu that reality is objectified and signs are generated.

Instead of a 'framework' of logical relations, the following is better understood as a blueprint—a plan or outline—of the connections between the moving parts of a functioning machine.[99] The idea of machinic relations is fundamental to Deleuze and Guattari in *Anti-Oedipus*. The two encapsulate this whole project when they reject the question 'What does it mean?' in favour of 'How does it work?'.[100] As they make clear, "No one has been able to pose the problem of language except to the extent that linguists and logicians have first eliminated meaning and the greatest force of language was only

discovered once a *work* was viewed as a machine, producing certain effects, amenable to a certain use" (AO 109).[101]

This chapter will follow the lead of Deleuze and Guattari not only in describing language in terms of a machine, but also in understanding that the machine is, at bottom, "a system of interruptions or breaks" (AO 36). These breaks are made in a continuum of material flows (what Deleuze and Guattari call "*hylè*"[102]) and actually condition the continuity of the flow, presupposing or defining what they cut into as an ideal continuity.[103] There is an apparent circularity here that must not be dismissed as a simple begging of the question.[104] With a univocal notion of being, there is no ultimate distinction to be made between the breaks and the flows; the two merge one into the other:[105]

> at the limit point of all the transverse or transfinite connections, the partial object and the continuous flux, the interruption and the connection, fuse into one: everywhere there are breaks-flows out of which desire wells up, thereby constituting its productivity and continually grafting the process of production onto the product... (AO 37).

The breaks and flows can be characterized as breaks-flows only at the ungraspable limit point, where difference is not difference between, but pure intensive difference in itself.[106] This limit point is the primary stratum out of which the machine is constructed.

The machine is built out of the virtual—out of a plane or stratum denoted (with some reservations) as the Noumenal, and distinguished from the Phenomenal and the Perceptual.[107] We may say it is the stratum or foundation on which the machine is built, but this loose way of speaking must not be misunderstood to mean that there is a hierarchy of being, but rather that there are levels of resolution, the most fundamental of which, the Noumenal, is pure intensive difference. Noumenal, Phenomenal and Perceptual designate three levels of description.

Noumenon is, by definition, beyond the horizon of perception, and as such, remains unblemished by any attribute we may attach to it. We may be precise and say that the machine rests not on noumenon itself, but on a percept, and we will see why this characterization may be appropriate and sufficient. But we need not be content to leave it at that; Deleuze's transcendental deductions convincingly demonstrate the reality of the

virtual as pure intensive difference—infinite difference—covered over in its explication as actual extensity.[108] It is on this basis that the presuppositions about the noumenal plane are justified: that it is heterogeneous (though undifferentiated)[109] and that it is real (characteristics that become meaningful only in the functioning of the machine).[110] The machine is a crystallisation of the noumenal.[111] But the pure intensive difference cannot be fully captured (as Plato's God discovered) and thus the noumenal 'level' must be accounted for (in the description of the machine) as the space in which the machine functions. It is the primary level of description, characterizing what precedes perception—with the fact that the description too is a percept (and thus a product of the machine) pushed into a separate category, enveloping described phenomena.[112] Although labelled, noumenon is necessarily without quality or property. It is the virtual whole of undifferentiated being.

Only at the phenomenal and perceptual levels can we begin to speak of being as a substance. But this substance is produced—substantiated, or as Deleuze would say: actualised—by the reactions or 'contemplations' that characterise it.[113] So, while we have substance (as a body without organs), it is not a primary unity in the Spinozist sense (though it appears as such); it is a product and a false unity, or rather a merely derived and supplemental unity.[114] The phenomenal level describes the resolution of objects in terms of the actions or events that constitute the functioning of the machine. The first is reaction (which substantiates the noumenal), followed by sensation (which differentiates the substance), perception (which objectifies the heterogeneity) and recognition (which perceptualises the object). The perceptual level describes the machine's basic products: substance, heterogeneity, object, and percept.[115]

Monadic, Dyadic and Triadic Objects

The machine incorporates three different sorts of composites:[116] the first is monadic (or 'entropic'); the second is the dyadic (or 'homeostatic'); and the third is the triadic (or 'evolving'). This notion of triadicity is inspired by Peirce's characterization of a triadic sign.[117] For Peirce 'triadic' means more than simply 'tripartite' or composed of three distinct parts and relations—though a Peircean sign *is* often characterized as triadic

in this lesser sense, comprising a Representamen (or 'sign'), an Object, and an Interpretant. But in at least one of his manuscripts, Peirce reveals a richer notion of triadic—in which the first of the three components is itself monadic, while the second component is dyadic and the third triadic:

> a sign has essentially two correlates, its object and its possible Interpretant sign. Of these three, Sign, Object, Interpretant, the sign as being the very thing under consideration is Monadic, the object is Dyadic, and the Interpretant is Triadic. We therefore look to see, whether there be not two Objects, the object as it is in itself (the Monadic Object), and the object as the sign represents it to be (the Dyadic Object). There are also three Interpretants; namely, 1-, the Interpretant considered as an independent sign of the Object, 2-, the Interpretant as it is as a fact determined by the Sign to be, and 3-, the Interpretant as it is intended by, or is represented in, the Sign to be (MS 939).

For Peirce the sign is monadic in that it is considered as a sign and nothing else; it is an independent sign in itself, a 'First', which can be second to nothing. The object is dyadic because in addition to being an independent object in itself (a First), it is an object as determined by the sign (a Second to the sign). The Interpretant is triadic, for in addition to being a sort of independent sign of the object, though mediated by the actual sign (a First), it is, like the object, what the sign in fact determines (a Second), and also, quite differently, what the sign intends (a Third).

The triadic structure of the machine diverges from the Peircean characterization of triadicity primarily in recognising the object rather than the sign as monadic (although, in another sense, the sign is an object and thus similarly monadic). The sign here is dyadic in the sense that it is both the sign of an object and an object itself. The difference in notions of triadicity follows from this. Again, consistent with a univocal conception of being, the triadic object is an object (monadic), but it is also the sign of an object (dyadic) and finally, the 'interpretant' of a sign (triadic). Not a great deal hinges on this distinction for Peirce, which perhaps explains why he does not pursue it more vigorously in his various attempts at characterizing a triadic notion of the sign (though the above description, from a manuscript dated 1905, was written at a time when he began emphasizing the synthetic over the formal relations among the sign's components). But the distinction between a monadic, dyadic and triadic composite is crucial to

understanding the construction of the machine.

These composite-objects are defined by the nature of the relations between their constituent parts.[118] The monadic composite is reactive; that is, characterized by its inability to conserve the identity of its components. Gunpowder will react in the context of a flame and cease to be gunpowder. A mountain will react in the context of wind and cease to be a mountain. An object released in the air (a ball dropped from the tower of Pisa) will react with the planet's gravity and cease to be an object with the same potential kinetic energy. Monadic objects are in this sense "entropic", as they follow a single path in their change. For the sake of simplicity, these will be referred to in general as objects.

In contrast to the entropy of monadic objects, the dyadic composite is counteractive; that is, characterized by its ability to react to a reaction and thus maintain or return to a particular state. Dyadic objects are both monadic and dyadic; it is only on a molar scale that the various reactions among the entropic components are countered, and only by exporting the entropy (as so much waste) beyond the boundaries of the object as such. Deviations are constrained; damage is repaired. Dyadic objects are thus described as "homeostatic". Living organisms are homeostatic, though not all dyadic objects are living organisms. Such objects will be referred to as bodies. A body is essential to the machine in its ability to generate a consistent context in which repetitions may be perceived.

The triadic composite does not react or counteract, it re*cognizes* or is *pro*active; that is, it counteracts the counteractions, and in doing so generates the capacity to anticipate an action and thus avoid (or embrace) a particular (homeostatic) state. It is in this sense that it is "evolving". Triadic objects are also monadic (in their substance) and dyadic (in their ability to generate a homeostatic state). Such objects will be referred to as minds and their components as percepts.[119]

It is in the action of the triadic object that we see what was earlier discussed in the section on Time: what Deleuze calls 'habit' as the first passive synthesis. In the earlier discussion we saw how Deleuze characterized repetition in the imagination as a 'contractile power':

> like a sensitive plate, it retains one case when the other appears. It contracts cases, elements, agitations or homogeneous instants and grounds these in an internal qualitative impression endowed with a certain weight. When A appears, we expect

> B with a force corresponding to the qualitative impression of all the contracted ABs. This is by no means a memory, nor indeed an operation of the understanding: contraction is not a matter of reflection (DR 70).[120]

Habit is a product of repetition, and repetition requires the capacity for a return to a particular state. The reaction between monadic objects cannot be repeated because such objects can never regain their original configurations: the gunpowder will explode only once, the mountain will never erode twice. But habit requires more than repetition. The counteractive relations in a dyadic object are insufficient to generate a habit. A fractured bone can heal and be fractured again, but the repetition will never result in a habit however many times the event is repeated. The triadic object can form habits not because its constituent relations are counteractive, but because they are proactive: in response to changes imposed by a particular stimulus, rather than simply returning the components to a prior state, the relations generate additional homeostatic components (percepts) and perpetuate the evolution of the composite. With sufficient repetition, the separate effects of A and B (in the "imagination") become a reproducible composite, AB. Colebrook articulates this crucial point in her description of Deleuze's desiring machines. She writes: "A machine operates by the connection of parts. Unlike an organism or a mechanism it has no final or bounded form; it is pure production in and for itself without governing intention" (UD 122). A monadic object has a form imposed on it in the boundaries established by perception (despite its own inherent tendency toward change). An organism is a dyadic object, and homeostasis characterizes its efforts to maintain as final its particular bounded form, and indeed any significant deviation from its established form will result in its destruction. But the triadic object is precisely what Colebrook says of machines; it has no form to maintain (hence its continual evolution) and no governing intention. It is pure production.

Phenomena and Four Functional Relationships

The relations described above (reactive, counteractive, proactive) constitute the actions that characterize the three basic components of the machine. More relevant to the functioning of the machine, however, are the relationships between these three basic

elements and their resulting phenomena.[121] One phenomenon, which must be considered first even though it is not strictly associated with the relations between the three parts of the machine, is that which arises from the relations between (monadic) objects in general. Our concern with this phenomenon is justified on two related grounds; first, since all three elements of the machine are monadic (whatever else they might be) the phenomenon is relevant; and second, there is a sense in which the phenomenon is exhibited in the relations between certain parts of the machine, namely, between object and body, though not from the perspective of the machine. Since the relationship between object and body is asymmetric, there are two perspectives of the same composite to be considered: the object as a component in the context of the body, and the body as a component in the context of the object. The former considers the effect of the relationship on the object while the latter considers the effect on the body.[122] The former relationship exhibits the same phenomenon as a relationship between two monadic objects, and is thus identified in the machine by the same term: reaction.

The distinction between the two perspectives brings us to the grounds on which the different phenomena are distinguished. Events in which the components are (monadic) objects are unrepeatable. And as the object does not repeat the event, its 'form' is lost to the object; in failing to resist change, the object cannot produce a 'measure' of the event.[123] But as the component (in the context of an object), a body *can* produce such a measure. The event is reiterated in the counteractions that bring the body back into equilibrium. It is this bodily response to an event that is characterized in the machine as sensation. Sensation is thus the measure of an event in terms of the body's response to it.[124] This is a far different notion of sensation than the one Merleau-Ponty rejects in *Phenomenology of Perception.*[125] In fact, Merleau-Ponty's rejection of the 'traditional' notion of sensation stems from the same doubts about the nature of objects that motivates this current discussion: "The traditional notion of sensation was not a concept born of reflection, but a late product of thought directed towards objects, the last element in the representation of the world, the furthest removed from its original source, and therefore the most unclear".[126] What is proposed here, as sensation, is not the transmission and reception of objective data, but the bodily response to an environment. Against the Neoplatonist sentiments expressed by Deleuze, it is argued only that a distinction is

warranted in the broad notion of contemplation—that sensation differs from reaction and from perception in relevant ways.[127]

Perception is the third of the 'functional relationships' or phenomena. It holds between body and mind. Again, as the relationship is asymmetrical, there are two perspectives on the same composite: body *as a component in the context of* mind, and mind *as a component in the context of* body. While the former seems in some way privileged over the composite of a body in the context of an object, the result—a bodily response to an event—is sufficiently like the phenomenon produced by the relationship between a body and an object that it is identified in the machine by the same term: sensation. The latter perspective, however, considers the effect *on the mind* of a change in the bodily context. The change imposed on the body in its encounter with an object has an ensuing effect on the mind as a component in the context of the body. The change in the context affects a change in the state of the mind; in other words, the bodily response constitutes the stimulus that triggers the mental response. What does it mean to say that perception is a response to changes effected in the state of a mind? The mind must be understood as a system of percepts, each one situated relative to the others, and the whole situated in the context of the body. Any change in the bodily context results in a corresponding adjustment in the system of percepts. It is this mental response to the changed bodily context that is characterized in the machine as *perception*. Perception is thus the measure of an event in terms of the mental response to *sensation*.[128]

However, as we saw earlier, the mind responds to habitual changes in the body by generating percepts that may anticipate stimuli. Thus, a new bodily context does not simply end with a systematic adjustment among the percepts; rather, the adjustment itself triggers a cascade of changes, as percepts respond to percepts triggered by the new bodily context and also to percepts triggered in anticipation of a repetition of perceptions experienced in the past (the event also results in the conditioning of new percepts, "with a force corresponding to the qualitative impression of all the contracted" repetitions of a stimulus and its response). Perception differs from sensation in this regard: the mind responds to present changes in its context by taking account of the past.[129] The conditioning of new percepts, however, is distinguished from perception as such. It results not from the relationship between body and mind (that is, the composite of mind as a

component in the context of body), but from the habitual conjunction of percept and percept (A and B), one in the context of the other within mind. This fourth and final functional relationship, which results in the production of percepts, is distinguished in the machine as *re-cognition* (see Figures 5, 6).[130]

To some, it might appear that the distinction between perception and sensation imposes an arbitrary boundary on fundamentally indistinguishable processes simply characterized at different temporal scales.[131] The processes in a tree, for instance, while ostensibly homeostatic, seem to be consistent with the above characterization of perception when they are considered over a span of hundreds of years. Merleau-Ponty rejects the notion of sensation entirely. And Deleuze does not want to distinguish among what is here called reaction, sensation, perception and recognition, referring to them equally as contemplation: "Organisms awake to the sublime words of the third *Ennead*: all is contemplation!"[132] But in drawing this distinction, we are effectively reserving the notion of contemplation to describe the state of equilibrium in a dyadic object. In this sense, every dyadic object is associated with a contemplation (though as a composite of homeostatic components, the contemplation may be seen as a multiplicity—as an ant hive is a body and also a multiplicity of bodies: a thousand "larval subjects").[133] In the case of a tree, a contemplation would be characterized by the growth of flowers or fruit (a relatively brief contemplation on an arboreal time scale) or [inclusive disjunction] the growth of the tree itself (a contemplation that occupies the full duration of the tree's existence). One might even point to something like the withering of the canopy during a period of drought as a sort of contemplation of the sun.

In associating contemplation with the dyadic object (body), contemplation is identified with the body's characteristic phenomenon: sensation. Perception is distinguished from sensation (or contemplation) in that it requires a triadic object, which is not merely contemplative (dyadic) but also contractile (triadic): it is characterized by the capacity to contract new contemplations. In contrast to the dyadic object, the triadic object (mind) is capable not only of attaining many homeostatic states or contemplations, but through contractions (recognition) generate ever more. A tree deemed capable of perception would require a similar contractile power. However, the time scale over which a tree manifests such power is not arboreal but evolutionary. Its contractions extend over

such spans of time that the contractile power is manifested not by the individual but by the species—or, if not by the whole species, at least by something greater than the individual, something in addition to the individual. And if the claim is that 'tree' is to be understood as *that* sort of inter-temporal multiplicity (in which it is agreed that contractions can be distinguished) then we are no longer speaking of a dyadic object at all, but a triadic one.

The distinction is found in what can be anticipated. As a dyadic object, a tree demonstrates its anticipation of winter by abandoning its leaves, and its anticipation of summer by producing flowers. But as bodily processes, these are characteristics of the tree itself, as that thing which sheds leaves in the fall and flowers in the spring as part of its homeostatic endeavour. We might allude to the Sartrean distinction and say (very loosely) of the dyadic object that its essence precedes its existence, where 'essence' is understood in terms of all the contemplations of which that body is capable. A triadic object, on the other hand, develops its essence by contracting sensations, (perceptualizing them) and incorporating them in its future responses. Such contemplations do not precede existence, but are a product of it, a recognition of it. Perception is sensation in the context of recognition, and productive of recognition. It is thus serial in a way that sensation is not. To the extent that a return to a given homeostatic state is unattainable, the corresponding contemplation cannot exist. Although a new homeostatic balance may be possible—the body may "adapt"—the result is nevertheless a different contemplation, and thus a different body.

But consider the tree that grows in poor soil or harsh conditions. It is not stunted until it contracts these conditions; the tree itself is a contraction and this contractile power is expressed by the individual not the species. How is this consistent with the notion of the tree as a dyadic object? There are two factors complicating this example. First, the dyadic object is reacting to its environment and changing entropically, even while persisting as a dyadic object; and second, while we describe it as homeostatic, homeostasis (particularly in a growing organism) is never more than an approximation. But failure to distinguish reactive changes (like the withering of leaves in a drought) from counteractive changes (like the constriction of stomata) or from proactive changes (like the evolutionary development of leaves with reduced surface area) will result in the

broadening of the notion of contraction and perception to include even monadic objects (as Deleuze and the Neoplatonists do). But the point here is not to demonstrate the univocity of being by pointing out the indistinguishability of these phenomena at certain levels of resolution. On the contrary, it is to point out how the phenomena may be distinguished according to the relationships characterizing these three types of objects.

Just as monadic objects are provisional and imperfect delimitations of material flows (*hylè*), dyadic objects are provisional and imperfect delimitations of what we might call homeostatic flows or series. The dyadic object is not a pre-defined identity or manifestation of an ideal essence. To say that a tree is a dyadic object is to cut into its series, to exclude from one particular delimitation what in other contexts may be included. Thus we may speak of the stunted tree as a dyadic object, without making reference to the healthy sapling that it once may have been or to the bent and battered thing it may in time become. In short, we may exclude from our characterization of the tree *as* a dyadic object both the entropic changes it fails to counteract and the evolution it undergoes in its development; it is *this* tree here and now. It resists the entropic pressures of its environment by counteracting the changes imposed on it. If we observe that it also grows and develops, or suffers and diminishes, we are confounding its triadic and monadic aspects respectively.

Products of the Machine

In the previous section, the four characteristic phenomena of the machine were described in terms of the 'functional relationships' between the machine's working parts. In this section, the phenomena themselves will be the starting point. The first to be considered is reaction. While the most basic and fundamental of all phenomena, it is not directly apprehended by the senses. As with the noumenal plane, to which it is the most closely associated, and even while constitutive of the machine, reaction is grasped only inferentially as the positive, substantial expression of the forces of difference that constitute noumenon.[134] Reaction is coupled with the first objective phenomenon: substantiation.[135] At the noumenal level we can do nothing but presuppose the reality and heterogeneity of being. But at the phenomenal level, reaction implies that being is also

substantial. And not only is it substantial; as demonstrated by sensation it is also heterogeneous: the difference between a body and its environment is what makes sensation possible. Sensation differentiates the heterogeneity of substance.[136] Differentiation is thus the second objective phenomenon. There might seem to be a contradiction between the claim that noumenon is heterogeneous (indeed, comprising pure positive difference) and that substance must nevertheless undergo a process of differentiation. But on the one hand we are speaking of difference that has been presupposed or deduced, and on the other, difference that has been experienced or, as Deleuze puts it, dramatised.[137] Dramatised, but not yet objectified. It is perception that seeks to make sense of the drama by objectifying the heterogeneities produced through sensation. Objectification is the third objective phenomenon. When a sensation arises in the context of past experience, the heterogeneity is given an identity: it becomes an object of experience.[138] It is only here, deep in the processes of the machine that we finally encounter the phenomenon which gives rise to the objects out of which the machine has been built, the very same objects the machine was built to produce. But have we really come upon them, and in describing the machine have we really made use of them? Before we reach the paradox of the machine, we must encounter one last phenomenon: the creation of percepts as the generalised form of experience contracted in the mind through recognition. Perceptualisation is the fourth and final objective phenomenon. Everything that has been said of the machine has been said of a percept. The 'objects' of which it is composed are simulacra; every relationship at every level right down to the noumenal is a percept. The machine is not built out of objects, but out of these generalisations produced by habit, through the repeated conjunction of sensations with percepts from prior experience.[139]

The machine is built out of the noumenal, which extends to the very limits of our perception. These limits are the limits of a percept. The machine is a percept, composed of percepts and productive of percepts. But in moving from objects to percepts we do not thereby avoid the paradox of a machine that produces its own components. But if there is a paradox here, it is not because the machine produces the components out of which it is constructed. It does not pull itself up by its bootstraps: the machine is constructed from a body without organs. We must avoid thinking either that it is the totality of the partial

objects described in such detail above, or that it is the whole that exceeds the sum of its parts.[140] Deleuze and Guattari explain:

> We live today in the age of partial object, bricks that have been shattered to bits, and leftovers. ... We no longer believe in a primordial totality that once existed, or in a final totality that awaits us at some future date. ... We believe only in totalities that are peripheral. And if we discover such a totality alongside various separate parts, it is a whole *of* all of these particular parts but does not totalize them; it is a unity *of* all of these particular parts but does not unify them; rather it is added to them as a new part fabricated separately (AO 42).

The crucial point is expressed at the end of the quotation above, with the claim that the totality is itself a part, an object or a percept added on to the rest.[141] It is not prior to its parts; its parts are not derived from it as shards from a vase: "the Whole itself is a product, produced as nothing more than a part alongside other parts, which it neither unifies nor totalizes" (AO 43).[142] As Deleuze and Guattari emphasise early in *Anti-Oedipus*, the body without organs is *non-productive*—even though it is produced as "the identity of producing and the product" (AO 8).[143]

They shed light on this claim (that the intrinsically non-productive body without organs is nevertheless produced as the identity of production) by describing it as "a recording surface" on which the entire process of production is inscribed and from which the production appears to emanate, as though "miraculated" by the machine—miraculated because the productive flows, which do not (and cannot) originate in the sterile, unproductive body without organs, get turned around in perception and appear to issue from it as their "quasi cause".[144] So there is no paradox after all. The machine does not precede itself. It is constructed from primordial forces and agents of production that it had no hand in producing but which it falls back on and appropriates as its own. Nor are we merely obfuscating here by moving from paradox to miraculation. There is nothing divine in the process.[145] There is no miracle; the machine does not become productive. Deleuze and Guattari call the perception a delirium, and the emanation a "false movement"—but it is "a true consciousness of a false movement, a true perception of an apparent objective movement, a true perception of the movement that is produced on the recording surface" (AO 10). The machine gives us nothing that is not already given in its

parts and the relations between its parts and the forces that constitute those parts and those relations.[146] It is these forces and agents of production that produce the machine, that flow through the machine, and in so doing make possible the perception—the true perception—of the movement as a production of the machine.[147]

Peirce and the Semiosic Machine

What sort of machine is this? What is its function? In a word, it is a semiosic machine. It participates in the production and interruption of semiosic flows. Already we have seen it as an ontologic machine, producing and interrupting the material flow. Now we shall compare its functioning to the semiotic developed by Charles Peirce. In his work, Peirce employs three fundamental notions: First, Second and Third. He uses these in two related, but distinct ways. In addition to the specific use of First as a synonym for Sign, Second for Object and Third for Interpretant, there is a broader sense of Firstness, Secondness and Thirdness as general metaphysical categories. Firstness refers not to the representativeness of the sign, but rather to the originality of a thing, as "something which is what it is without reference to anything else within it or without it" (CP 2.85). or as "that whose being is simply in itself, not referring to anything nor lying behind anything" (CP 1.356-57). Secondness relates to "the brute action" of one thing upon another (CP 8.330), an "occurrence" whose existence consists in our "knocking up against it" (CP 1.358). Thirdness refers not only to 'mediation' (CP 1.328) but also to "the mode of being which consists in the fact that future facts of Secondness will take on a determinate general character" (CP 1.26).

Peirce observes, "The idea of the absolutely First must be entirely separated from all conception of or reference to anything else; for what involves a second is itself a second to that second" (CP 1.357). The "absolute First", then, is prior even to the subject, and attempts to describe it are doomed to failure. Peirce observes: "Only, remember that every description of it must be false to it". He attempts nonetheless to characterize it:

> The First must therefore be present and immediate, so as not to be second to a representation. It must be fresh and new, for if old it is second to its former state. It must be initiative, original, spontaneous, and free; otherwise it is second to a determining cause. It is also something vivid and conscious; so only it avoids

> being the object of some sensation. It precedes all synthesis and all differentiation: it has no unity and no parts. It cannot be articulately thought: assert it and it thus has already lost its characteristic innocence; for assertion always implies a denial of something else (CP 1.357).

In many ways this description of the First, indeed, the absolute First, reflects how noumenon is to be understood in the machine, particularly in the observation that it precedes all synthesis and differentiation and is thus both without unity or parts. It is "the mode of being of that which is such as it is, positively and without reference to anything else" (CP 8.328). But Peirce also compares Firstness with the way "the world was to Adam on the day he opened his eyes to it, before he had drawn any distinctions, or had become conscious of his own existence" (CP 1.357).[148] Describing Firstness in terms of a vivid presence and immediacy sets it out as something available to the senses in a way that noumenon is not. Firstness is thus found in the machine at the beginning of the perceptual series in reaction (the "absolute First") or, to the extent that "it is the immediate consciousness that is pre-eminently first", the sensation of the reactions that constitute substance.

If the "absolute First" lies at the ungraspable edge of a primordial differentiation, the "absolute Second" can be found in the equally ungraspable notion of complete differentiation. As Peirce explains: "We have seen that the conception of the absolute first eludes every attempt to grasp it; and so in another sense does that of the absolute second"; if "God the Creator, is the Absolute First; the terminus of the universe, God completely revealed, is the Absolute Second" (CP 1.362). Secondness refers to objects and the relations between objects; the Second is like a hard fact that cannot be thought away; hard and tangible, it "suffers and yet resists, like dead matter, whose existence consists in its inertia"; crucially, however, Peirce tells us to note that "for the Second to have the Finality that we have seen belongs to it, it must be determined by the first immovably, and thenceforth be fixed" (CP 1.358). We find in this characterization the same paradoxical nature that objects display as components of the machine: on the one hand they are those hard and tangible things that I am forced to acknowledge in my encounters but whose fixity and finality are nevertheless the product of my own perception (CP 1.358).[149]

In a sense, both First and Second remain out of reach and Thirdness is our

inevitable lot. While 'God the Creator' is the Absolute First, and 'God revealed' is the Absolute Second, "every state of the universe at a measurable point of time is the third" (CP 1.362). Unlike the First and Second, the Third is inherently relative and never absolute. And since we can never grasp the absolute, we never truly experience anything but Thirdness. As a result, we may speak of a practical-First, a merely an anterior (rather than primary) differentiation of form, relative to a practical-Second, but Thirdness is "what we are always thinking, even when we aim at the first or second" (CP 1.362).

Peirce often explains that the Third mediates between a First and a Second. But he was not content to understand it simply as 'mediation', and began from around 1885 to identify it with "habit-taking".[150] He wrote the following year: "we must suppose that there is an original, elemental, tendency of things to acquire determinate properties, to take habits. This is the Third or mediating element between chance, which brings forth First and original events, and law which produces sequences or Seconds" (EP 1.234). As the earlier discussion on contraction emphasised, habit makes possible the anticipation of future events. Peirce explicitly identifies this with Thirdness, writing: "If the prediction has a tendency to be fulfilled, it must be that future events have a tendency to conform to a general rule. ... the mode of being which consists in the fact that future facts of Secondness will take on a determinate general character, I call a Thirdness" (CP 1.26).

The triadic process that Charles Peirce calls semiosis, is clearly and comprehensively laid out in a 1902 manuscript; it is worth quoting at length:

> A sign, or Representamen [R1], is a First which stands in such a genuine triadic relation to a Second, called its Object [O1], as to be capable of determining a Third, called its Interpretant [I1], to assume the same triadic relation to its Object [O1] in which it [R1] stands itself to the same Object [O1]. The triadic relation is genuine, that is, its three members are bound together by it in a way that does not consist in any complexus of dyadic relations. That is the reason the Interpretant, or Third, cannot stand in a mere dyadic relation to the Object, but must stand in such a relation to it as the Representamen itself does.[151] Nor can the triadic relation in which the Third stands be merely similar to that in which the First stands, for this would make the relation of the Third to the First [I1:R1] a degenerate Secondness merely.[152] The Third [I1 as R2] must indeed stand in such a relation [O1:R2], and thus must be capable [as R2] of determining a Third of its own [I2];[153] but besides that, it [I1] must have a second triadic relation in which the Representamen [R1], or rather the relation thereof to its Object [O1], shall be its own (the Third's) Object, and must be capable of determining a Third [I2] to this relation.[154] All

> this must be equally true of the Third's Third [I2] and so on endlessly;[155] and this, and more, is involved in the familiar idea of a Sign; and as the term Representamen is here used, nothing more is implied. A Sign is a Representamen with a mental Interpretant (CP 2.274. Labels in parentheses added).

In this passage, Peirce explains that the Third does not merely represent the Second through the First in a relay that would render it a "degenerate Secondness" with respect to the original object. The Third *does* this, and *is* in this sense a degenerate Second, and continues the relay to a subsequent Third (which manifests an even more degenerate Secondness), on so on indefinitely. But it, the Third, also has an object or Second of its own, in relation to which it is thus a First in its own right. This new Second is the relation between the prior Second and the prior First. As the First of this new Second, the Third determines a new Third that will act as the First of a subsequent Second, and so on—in a serial process referred to as "indefinite semiosis".[156] One may see an expression of Peirce's revolving Firsts, Seconds and Thirds at the phenomenal level of the machine, where sensation determines perception determines recognition as Firsts determine Thirds that determine Thirds. Peirce describes this process when he speaks of the sign as a "medium for the communication or extension of a form (or figure)" (SS 196). As a medium, "it is determined by something, called its Object, and determines something, called its Interpretant" (SS 196). The Interpretant (or Third), thus characterized, is that which receives the form of a Second through a First, making it available to a subsequent Third in an indefinite series. If the interpretant can become the sign for a succeeding interpretant, then the sign itself is an interpretant, and the original sign in a semiosic series is an interpretant of its object. It is in this broader sense that in the machine any composite from the perspective of the component is identified with a First (or 'Representamen'), and any composite from the perspective of the context, with a Second (or 'object').

For the purposes of this discussion, the most relevant aspect of the Peircean sign is not its triadic structure, though the structure is of undeniable importance. More crucial still is the serial nature of its functioning. Peirce emphasised time and again that his notion of the sign was one of a genuine triad, without any "complexus of dyadic relations". In the early characterisations, this meant that the three correlates were

co-present. On this view, the sign acts by bringing the other two into relation; the object, the interpretant and the sign that unites them are together simultaneously.[157] But as Robert Marty concludes from his analysis (of instances between 1865 and 1911 in which Peirce articulates his notion of the triadic sign[158]), Peirce apparently decided around 1905 to take fuller account of the inherent "dissymmetric character" of the sign as a 'medium' of communication (a notion that was nevertheless already present as early as 1867).[159] Marty argues that "by taking into account the dissymmetry of the relationship Object-Sign [Peirce] has... abandoned the triadicity as founder principle and has resorted to a new notion, linked to the highlighting of successive determinations" of the sign in its functioning. But if the notion of the sign as a 'genuine' triad is based on the observation that perception (the Interpretant/Third) is a necessary correlate, then the sign was imbued from the start with an appreciable tension. Without the perception, there can be no sign; the three must come together simultaneously. But by admitting perception to the composite, the door is opened to the notion of a perceptual (semiosic) flow, for perception is not static. Peirce does not abandon the notion of a genuine triadic sign, but, rather, begins to focus on the perceptual process, without distinguishing between that process and the sign itself.

It is the perception that two correlates are related (that is, the perception of the composite—the interpretation or signification) that defines the sign. There is no disagreement between Peirce and Saussure on this point. The sign is "symmetrical" in this sense for Peirce until 1905, when he begins to more fully equate the sign with the perceptual flow: as "a medium of communication"[160] and then "the extension of a form (or figure)".[161] Marty argues that for Peirce to maintain the "dissymmetry" of the relationship, it would have been necessary "either to abandon the idea of basing the sign on the notion of the triad, or to add correctives... or to change the perspective, which does not imply the renunciation of the triadicity but simply causes it to intervene at another level." As the discussion on Barthes' model of myth has indicated, it is through the latter option (that is, by altering the perspective) that a serial movement can be detected in the distribution of what is often described (in the Saussurean tradition) as a purely dyadic sign. It is this serial nature of the process that concerns us here.

We can see in the machine how the form of an object (or Second) is conveyed to

the body through sensation (a response to the reaction between the object and the body).[162] Sensation is thus a representation (a sign or First) of the object. But the sensation of the object becomes the object of perception. The change in the body manifested by the sensation creates a new context for the mind. The subsequent mental reaction to the new circumstances—in effect the sensation of the sensation—is perception, the interpretant, or Third, of the relationship. The same disequilibria also allow form to be conveyed from the mind to the body. In this way, perception itself causes a sensation that results in a new perception. Similarly, changes undergone by the body (in response to the disequilibria that generate perception) alter the body's relationship with its contextual objects, effecting substantial, sensible change in those objects and giving rise to a new bodily context and the possibility of new sensations.

Signs in the Machine

Though there are grounds for the claim that the perceptual process is fundamentally semiotic, there is a still a distinction to be made between the perception, say, of a tree and the perception of the sign that communicates the concept of a tree. It is in this sense that one is obliged to return to Saussure's argument that there are certain objects, unique in their ability to convey meaning (as opposed merely to form). Such objects are not diffused throughout the machine as we have seen the above, phenomenal, notions of First, Second and Third to be. They are, as Saussure describes them, concrete entities comprising signifier and signified.

At the perceptual level of description, not only is the composite sign genuinely, symmetrically, simultaneously triadic (in terms of Peirce's categories), but so too are all objects.[163] Each is a composite of a component in a particular context. The component signifies its context. The sign is the composite from the perspective of the component/signifier and the signification is the composite from the perspective of the context/signified. When a composite is perceived as an object rather than a sign, it is because the context dominates the component. When the component is neglected as a possible perspective from which to evaluate the composite, the composite itself is not even recognized as such and what in other circumstances would be considered the

signification of a sign is instead identified as a mere object of perception. Take for example the roar of a tiger in a thick jungle. We shall not consider the roar as an object/signification, though it is possible to do so. Instead we shall compare a) the composite in which the animal, camouflaged by the undergrowth, is the unseen context in which the roar is a component; with b) the composite in which the animal is the visible context of the roar. In the latter case, the visible presence of the animal so dominates the composite that the component is rendered virtually irrelevant; we are drawn to the composite from the perspective of the context/animal and identify it as an object. Where the animal remains camouflaged, however, the composite is more readily perceived from the perspective of the roar and recognized as a sign in which the tiger is the signification. In a linguistic sign, the signifier is rarely if ever dominated by the signified because the signifier generally has the greater (or even sole) sensible presence and because the signified is often insufficiently delimited.[164]

With the sign conceived as a concrete object, we are able to make sense of Saussure's otherwise difficult distinction between *parole* and *langue*. *Parole* treats the sign in terms of objects created in the speech act (broadly construed) or in the reception of objects so created.[165] But the machine responds to signs just as it does to objects in general; that is, by taking account of percepts contracted through past experience. *Langue*, then, at least in the imperfect sense of that possessed by the individual (as opposed to the linguistic community), is this 'system of values' implied by the composite of percepts contracted in the mind. Moreover, these percepts resolve into the same structure as objective signs (indeed, as all objects). They are distinguished in the machine as the composite of a form in the context of a concept. From the perspective of the form, this composite is referred to as meaning and from the perspective of the concept, as value.

In drawing a distinction between signs and percepts, we not only account for the difference between *parole* and *langue*, but also uncover a sense in which signification and value *are* distinct after all. The first chapter of this paper was largely devoted to the refutation of Saussure's claim that such a distinction was necessary. However, Saussure argues for a synchronic distinction within *langue*. And whether such a distinction is made within *langue* or whether it is made within *parole* it is equally mistaken.[166] Here, however, we are distinguishing not within but between *parole* and *langue* (between object

and percept), as we did between sensation and perception, and find signification and value to be characteristic of objects and percepts respectively. Signification reflects the differentiation of a homogenous context into particular identities or objects (like sheep or *mouton*). Value reflects the ordering of such objects or their reintegration into a system of generalised relations, a system contracted from the perspective of an individual or social history, and quite unlike the context from which they were originally determined.

Colebrook articulates the distinction between the organisation of the world we have delimited into objects and the organisation of the percepts contracted by the mind:

> A soul is enclosure precisely because it does not just respond immediately to what is outside; it forms a 'theatre'. The soul is not just a transparent opening or window onto the world; it has its own world. Think of the way the mind does not just respond to stimulus (it is not fully open to the world) but considers, images or thinks of its world. Matter, by contrast, does not represent or enfold its world; it has no memory or 'contraction' of the world into its own point of view (UD 55).

It is the latter organisation, that of value and meaning, that Deleuze urges us to overcome in order to rediscover the infinitely diverse perspectives of the original context:

> each composing representation must be distorted, diverted and torn from its centre. Each point of view must itself be the object, or the object must belong to the point of view. The object must therefore be in no way identical, but torn asunder in a difference in which the identity of the object as seen by a seeing subject vanishes (DR 56).

Conclusion

This discussion began with a particular claim about the nature of objects. It was neither a novel claim nor one contrary to experience, and, indeed, similar observations have been made throughout history. In its simplest formulation it can be expressed as, "context matters", and if left at that, it would no doubt be passed over by most readers as too obvious to remark upon. The implications, however, are far-reaching. Context matters because the context shapes the text: the text is different in a different context. The gun is different with you holding it. It is, moreover, a matter of perspective which constitutes the text and which constitutes the context: you are different holding the gun. If this is granted

then it must also be granted that the true object exceeds the admittedly variable thing that it is in isolation and encompasses the context that shapes it. The true object is a composite of the ostensible object and its context. This, as we have seen, has been the working definition of an object throughout the discussion: an object is a composite of a component and a context. But this "definition" is curiously recursive (or, better, *in*cursive), for if the composite that results from the conjunction of component and context is an object, and objects are shaped by their context, then the result itself—the composite—is also shaped by its context, and so on. Where does it end? Indeed, where does it begin?

This discussion was devoted to an exploration of the issues (context) surrounding the claim that context matters. It began with a look at the implications in terms of linguistic/semiotic theory, starting with Ferdinand de Saussure's first, incomplete steps toward bringing context into the definition of linguistic objects, and challenging the notion that a rigid distinction can be sustained between the object (as a signification) and its context (value). Support for this challenge was sought in the work of Roland Barthes, whose attempts to account for the distinction between denotation and connotation within a broadly structuralist framework offered a useful model for the characterization of objects. Barthes' work on myth, moreover, provided a valuable example of what Gilles Deleuze calls "series", a notion employed throughout this paper as a way to understand the relations between objects. At the same time, the idea of serial relations was presented as the underlying principle of Deleuze's metaphysics/ontology, and invoked throughout the discussion on Deleuze as way to understand what are often rather opaque arguments—arguments, however, that address the very problems arising from the claim that context matters. Deleuze's response to the problem of context was important, above all, in its recognition that the solution is tied to the problem in such a way that the result can only be described as a machine—an object, which, like all objects, is indissolubly linked in a serial progression, a flow, from which it tentatively and momentarily cuts out its niche (as solution) but which it nevertheless perpetuates (as modified problem).

Though it may come as a surprise, it cannot be said that the perpetuation of the problem in its very solution is a weakness or flaw. On the contrary, recognising the inevitability of such an outcome is part of understanding what it means to say that context matters. The solution to the problem is a machine. Granted the machine, as an object, can

be no more fixed—no more a *ground*—than the objects it produces. Nevertheless, the machine presented in this paper is an enlargement, a magnification, of a particular flow, useful in demonstrating not only what it means for the solution to be machinic, but what it means to ascribe meaning to objects in the first place. Early in the third chapter I referred to a claim made by Deleuze and Guattari in *Anti-Oedipus*, where they argue that the search for meaning in language is misguided: "How it works is the sole question". The question was addressed by showing where the various elements involved in the production of signs fit in the machine that produces them, which is to say, how they interrupt the flow and perpetuate it.

As a solution to the problem of the production of linguistic objects—signs—the machine took a particular form. The dyadic relations (between object and context), which constitute the problem, gave way in the solution to triadic relations. In this, the structure of the machine is indebted to the ideas of Charles Peirce for whom the fundamental necessity of three-fold relations is axiomatic. The affinity between Peirce's linguistic model and the machine described above is no better illustrated than by the serial proliferation (or "semiosis") that constitutes production in both cases. Ultimately, however, the machine is not even about language or signs, but about the creation of objects from a flow that resists such a delimitation—objects that do not exist but for the machine, from the perspective of the subject at the heart of the machine. Born of violence, they reject the authority of the machine and maintain a problematic resistance it only vainly attempts to render docile. Above all, it must not be forgotten that we too exist for the machine, and this long discussion will have succeeded if it does nothing more than demonstrate our role as producer and product of our own design.

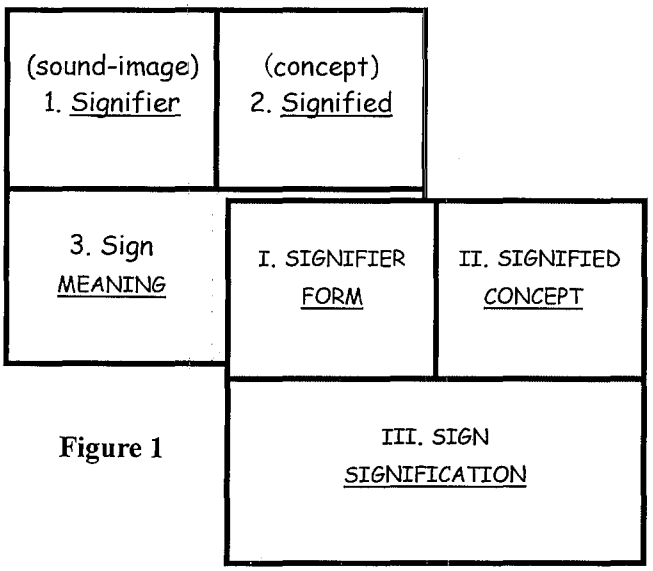


Figure 1

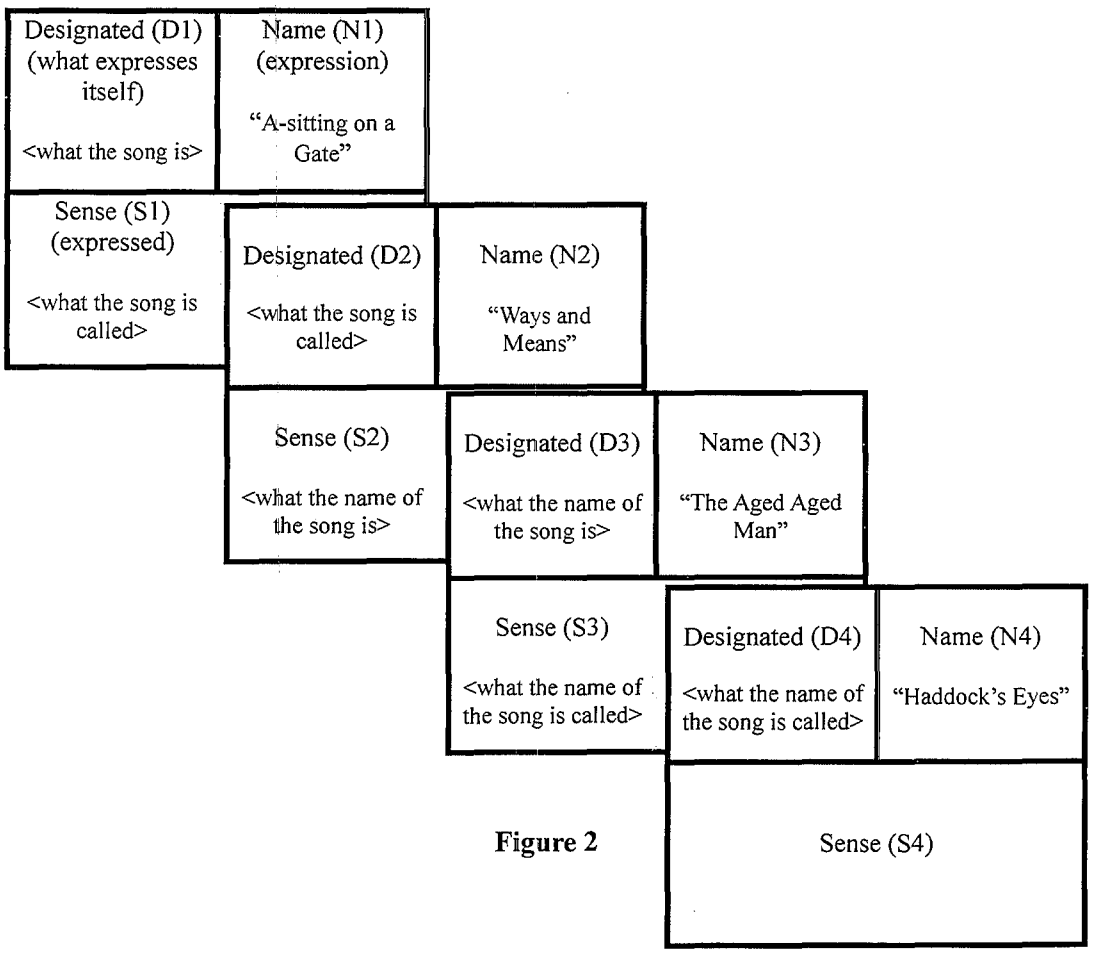


Figure 2

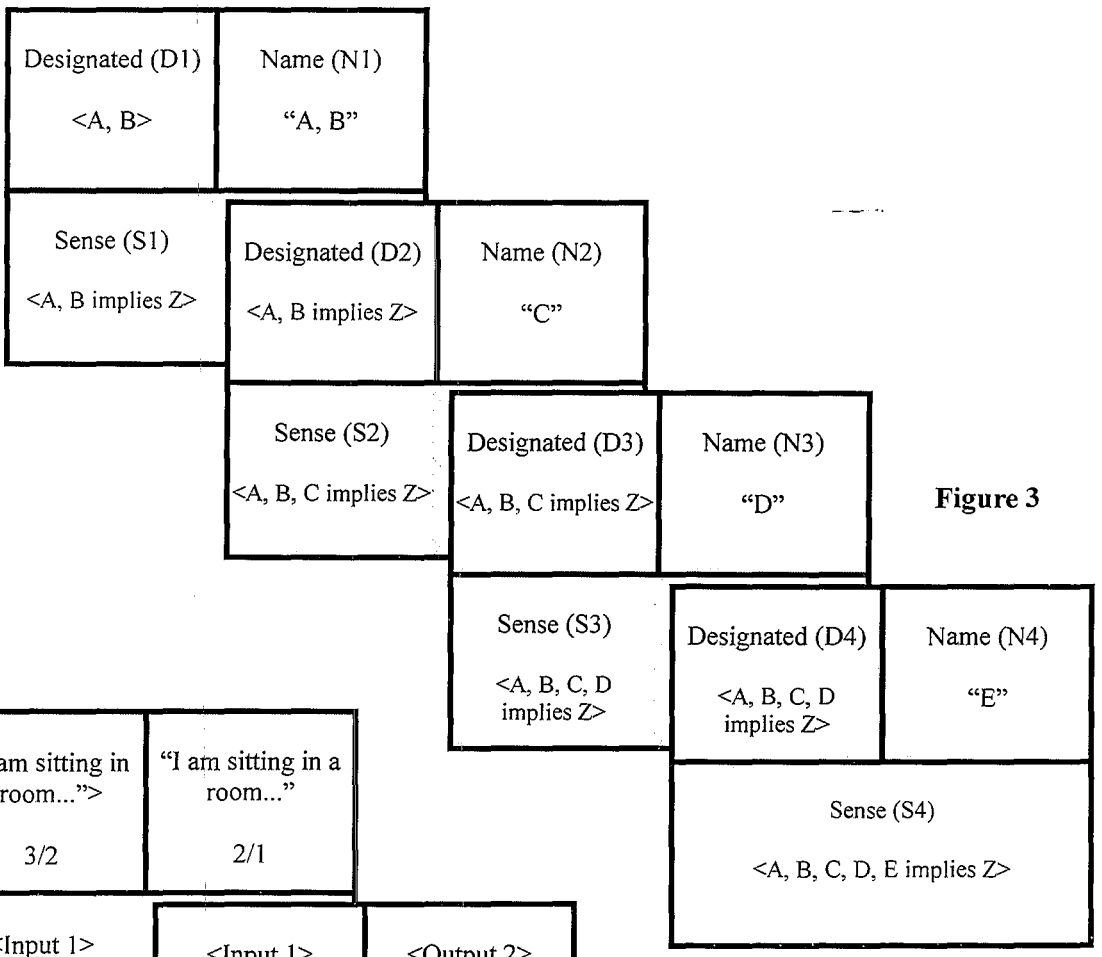


Figure 3

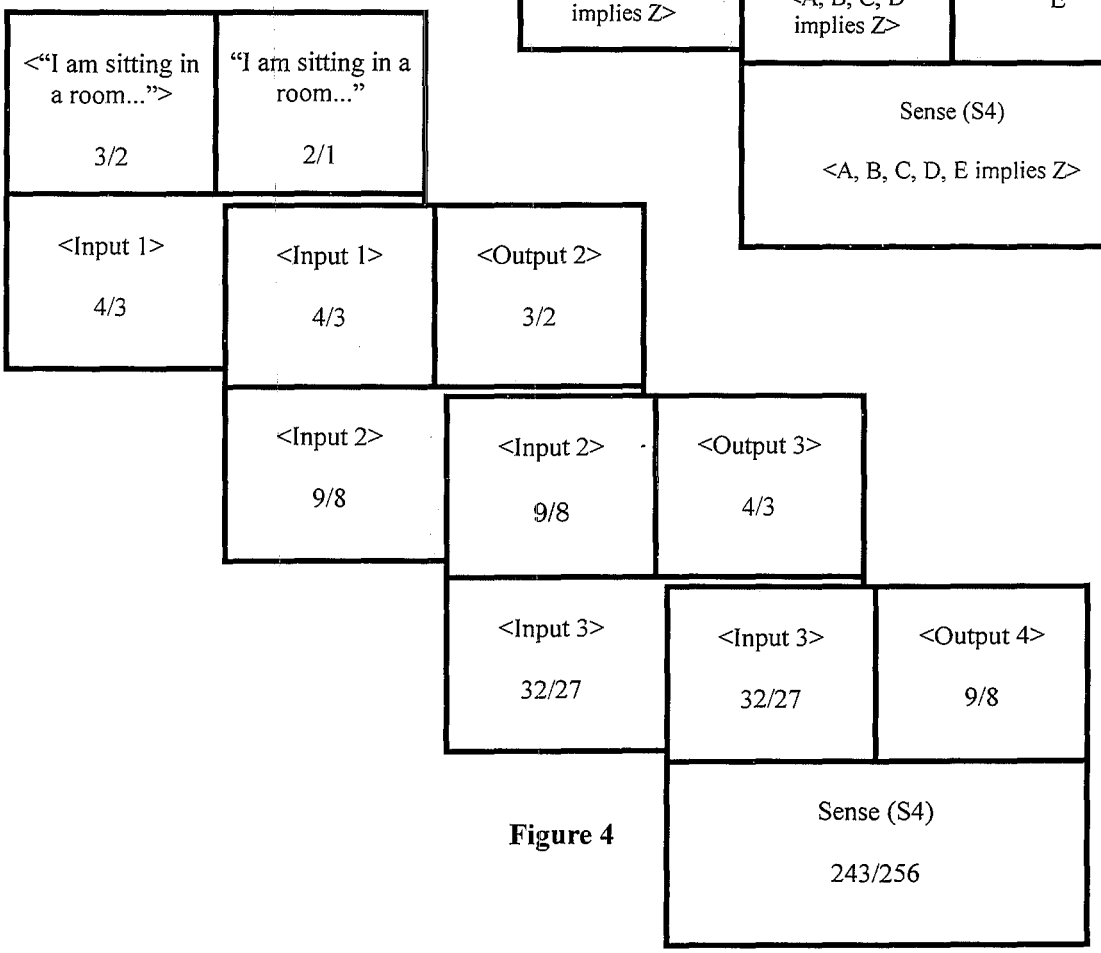


Figure 4

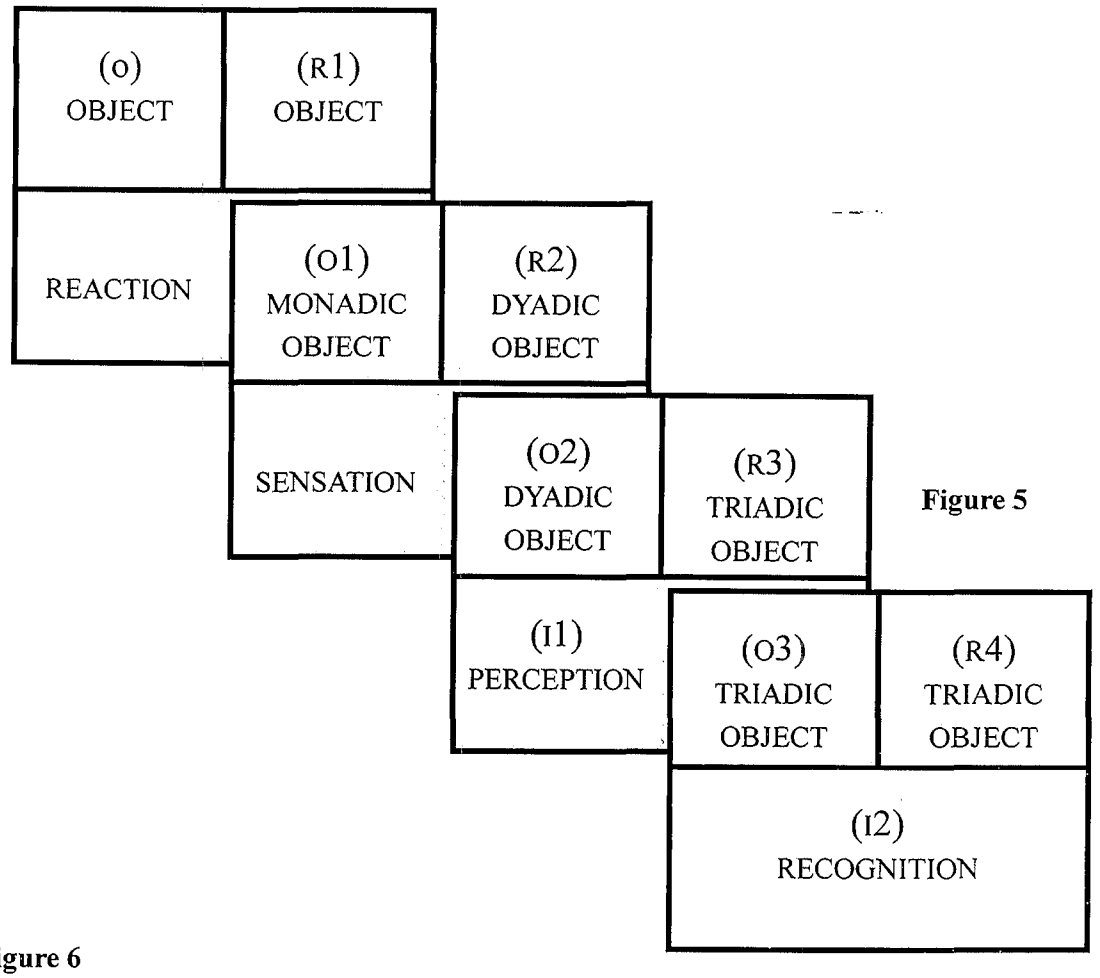


Figure 5

Figure 6

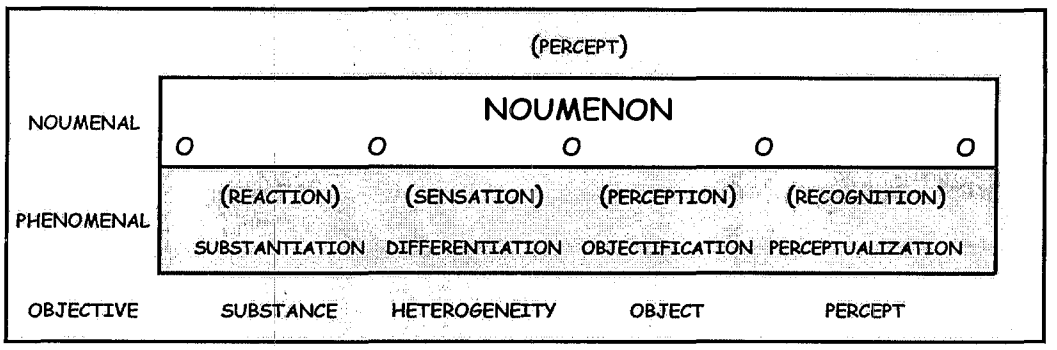
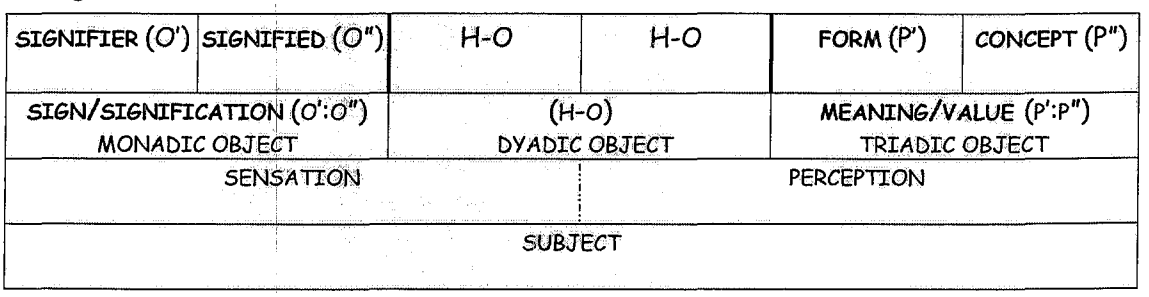


Figure 7



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Notes

[1] We will see how Deleuze similarly argues that the *truth* of this proposition depends on the *sense* intended, for "We always have as much truth as we deserve in accordance with the sense of what we say". But truth is grounded by sense and "We cannot accept that the grounded remains the same as it was before, the same as when it was not grounded" [DR 154]. Likewise, we see in the subject and the gun the identities we deserve according to the "sense" we allow to ground them.

[2] In his critique of 'scientific knowledge', Merleau-Ponty also argues for the essential role of context:

> science succeeds in constructing only a semblance of subjectivity: it introduces sensations which are things, just where experience shows that there are meaningful patterns; it forces the phenomenal universe into categories which make sense only in the universe of science. It requires that two perceived lines, like two real lines, should be equal or unequal, that a perceived crystal should have a definite number of sides, without realizing that the perceived, by its nature, admits of the ambiguous, the shifting, and is shaped by its context [PP 11].

[3] This section of Butler's story is not a straightforward argument for one position or another. It is ostensibly a satire of Darwin's *Origin of Species* as well a parody of "the specious misuse of analogy" by creationists like Bishop Joseph Butler and William Paley [see ER 42, and ER 43 note 5]. But it is not easy to separate the ideas he offers only facetiously, from those he holds but intentionally misrepresents, from those he merely cloaks in levity. Butler first expressed his view of man and machines in an essay entitled "Lubucratio Ebria" (or "Drunken Night time Pedantry") and developed it in a number of other serious works, where he considered it one of his "finds" (epiphanies), which formed the basis of his own poorly received theory of evolution (*contra* Darwin) [see ER 206 note 8]. It was in fact his opinion that there must be incipient traces of mind even in the inorganic world [see SB 55]. This paper takes the position that Butler is probing the implications of Darwin's theory (as well as the claims of Thomas Huxley) and presenting the "absurd" paradox that "if organisms develop by chance variations, either they are machines, nothing but levers and chemical processes, or machines are organisms and can develop the ability to think and plan that living beings seem to possess" [SB 37]. In *Luck or Cunning?*, Butler argues that Huxley's theory that living beings are conscious machines "can be fought just as much and just as little as the theory that machines are unconscious living beings; everything that goes to prove either of these propositions goes just as well to prove the other also" [quoted in ER 205 note 3]. Whether or not Butler could bring himself to accept the truth of Darwin and Huxley's position, he has worked out the implications of their view with clarity and insight.

[4] Compare with Deleuze and Guattari's example of an orchid [AO 39]. The authors return to this theme in *A thousand plateaus*, where they refer to this sort of organisation as a 'multiplicity' or 'rhizome'. They argue that the wasp is "a piece of the orchid's reproductive apparatus". They add, with echoes of Butler's 'machinate mammal', that there is "a becoming-wasp of the orchid and a becoming-orchid of the wasp" [TP 10].

[5] Butler writes:

"Observe a man digging with a spade; his right forearm has become artificially lengthened, and his hand has become a joint. The handle of the spade is like the knob at the end of the humerus; the shaft is the additional bone, and the oblong iron plate is the new form of the hand which enables its possessor to disturb the earth in a way to which the original was unequal" [ER 203].

[6] It would be a misinterpretation to read into this a characterization of the presidency as an autocracy of the sort embodied by "*Le Roi Soleil*", for the powers contracted by the president—the limbs incorporated into the presidential body—are reciprocally conditioned in a way the absolutist monarch would never have understood: the leader does not take office without the office taking him. Such reciprocity will form an important theme throughout this paper, one that Merleau-Ponty expresses well when he explains: "The sensible gives back to me what I lent to it, but this is only what I took from it in the first place. ... I do not possess it in thought... I abandon myself to it and plunge into this mystery, it 'thinks itself within me'" [PP 214].

[7] Deleuze addresses this when he tells us to consider what every boundary presupposes; namely, 'untamed' differences that persist alongside the delimitations: "There is a crucial experience of difference and a corresponding experiment: every time we find ourselves confronted or bound by a limitation or an opposition, we should ask what such a situation presupposes. It presupposes a swarm of differences, a pluralism of free, wild or untamed differences; a properly differential and original space and time; all of which persist alongside the simplifications of limitation and opposition" [DR 50].

[8] Deleuze identifies this with schizophrenic perception: "Everything is body and corporeal. Everything is a mixture of bodies, and inside the body, interlocking and penetration. ... A tree, a column, a flower, or a cane grow inside the body; other bodies always penetrate our body and coexist with its parts" [LS 99].

[9] Medical researchers have come to recognize the profound extent to which even a relatively small number of foreign bodies may influence personality and behaviour. Of particular relevance to the musings of Deleuze and Guattari is an intracellular parasite known as *Toxoplasma gondii*, which infects perhaps 50 million Americans (and a proportionately greater number in poorer countries). Studies have shown that *Toxoplasma* organisms impair learning and memory in infected mice and rats, and produce a variety of behavioural changes, including a reduction in neophobia and a consequent diminution of the infected animal's natural aversion to the odour of cats (and, according to researchers at Stanford, actually induce a specific *attraction* to cat odour), which increases the likelihood that the animals will be eaten by their feline predators. It is an extraordinary example of "evolutionarily driven manipulation of host behavior by the parasite", in which a new behaviour is induced that enables *Toxoplasma* to complete its life cycle. A large number of recent studies suggest a link between *Toxoplasma* infection and schizophrenia in humans, which brings an interesting scientific perspective on the link between 'larval selves' and schizophrenia. [See Torrey E.F., Yolken R.H., "Toxoplasma gondii and schizophrenia", *Emerg Infect Dis* (serial online), November, 2003].

[10] As Deleuze and Guattari put it: "We form a rhizome with our viruses, or rather our viruses cause us to form a rhizome with other animals" by connecting their genetic material to our DNA [TP 10].

[11] Deleuze and Guattari claim: "A rhizome may be broken, shattered at a given spot, but

it will start up again on one of its old lines, or on new lines. You can never get rid of ants because they form an animal rhizome that can rebound time and again after most of it has been destroyed" [TP 9]. Douglas Hofstadter also considers being as an "ant-heap". In a long dialogue called "Ant Fugue", he compares an anthill to a brain. To the objection that "An ant colony is simply a bunch of individual ants running around at random looking for food and making a nest", Hofstadter has his interlocutor reply, "You could put it that way if you want to insist on seeing the trees but missing the forest" but "ant colonies, seen as wholes, are quite well-defined units, with their own qualities" [GEB 311-36]. Deleuze and Guattari urge us to move beyond the notion of *things* as mass phenomena or molar aggregates and encourage us to embrace multiplicities of molecular phenomena, which go beyond the One and the Many and affirm something irreducible to any sort of unity [AO 42]. As they later explain:

> The machine taken in its structural unity, the living taken in its specific and even personal unity, are mass phenomena or molar aggregates; for this reason each points to the extrinsic existence of the other. And even if they are differentiated and mutually opposed, it is merely as two paths in the same statistical direction. But in the other more profound or intrinsic direction of multiplicities there is interpenetration, direct communication between the molecular phenomena and the singularities of the living, that is to say, between the small machines scattered in every machine and the small formations dispersed in every organism: a domain of nondifference between the microphysical and the biological, there being as many living beings in the machine as there are machines in the living [AO 286].

[12] According to a marginal note, Butler is referring to the view of the Cannon Street and Charing Cross railway station as seen from Waterloo Bridge. In an indication of his seriousness, he writes in *Alps and Sanctuaries* nearly a decade later (in 1881):

> When, again, I think of Waterloo Bridge, and the huge wide-opened jaws of those two Behemoths, the Cannon Street and Charing Cross railway stations, I am not sure that the prospect here is not even finer than in Fleet Street. See how they belch forth puffing trains as the breath of their nostrils, gorging and disgorging incessantly those human atoms whose movement is the life of the city. How like it all is to some great bodily mechanism of which the people are the blood [quoted in ER 195 note 6].

[13] Such an object, a *whole* constructed by a final activity of the mind, is central to the system Deleuze develops with Guattari in *Anti-Oedipus*, where they refer to it as a "Body without Organs". The term is frequently used in the third chapter of this discussion to characterize the machine.

[14] Deleuze and Guattari complain: "We're tired of trees. We should stop believing in trees, roots, and radicles. They've made us suffer too much" [TP 15].

[15] Deleuze writes: "Univocity means the identity of the noematic attribute and that which is expressed linguistically—event and sense". He adds: "In short, the univocity of Being has three determinations: one single event for all events; one and the same *aliquid* for that which happens and that which is said; and one and the same Being for the impossible, the possible, and the real" [LS 206].

[16] Deleuze writes: "When the identity of things dissolves, being escapes to attain univocity, and begins to revolve around the different. That which is or returns has no prior

constituted identity: things are reduced to the difference which fragments them, and to all the differences which are implicated in it and through which they pass" DR 67]. In "Cézanne's Doubt", Merleau-Ponty addresses this issue both in terms of language and being, echoing Saussure's claim that 'nothing is distinct before language'. Referring to an artist such as Cézanne and Balzac, Merleau-Ponty claims: "he speaks as the first man spoke and paints as if no one had ever painted before. What he expresses cannot, therefore, be the translation of a clearly defined thought, since such clear thoughts are those that have already been said within ourselves or by others" [MPA 69]. He also writes: "Just as the function of words is to name—that is, to grasp the nature of what appears to us in a confused way and to place it before us as a recognizable object—so it is up to the painter... to 'objectify,' 'project,' and arrest'" [MPA 68]. The notion that there is a "viscosity" in the appearance of objects comes up both in "Cézanne's Doubt" and *Phenomenology of Perception.* In the former he writes: "We, forgetting the viscous, equivocal appearances, go through them straight to the things they present. The painter recaptures and converts into visible objects what would, without him, remain walled up in the separate life of each consciousness: the vibration of appearances which is the cradle of things" [MPA 68]. In his discussion on sense experience early in *Phenomenology of Perception*, he argues:

> It is sometimes the adherence of the perceived object to its context, and, as it were, its viscosity, sometimes the presence in it of a positive indeterminate which prevents the spatial, temporal and numerical wholes from becoming articulated into manageable, distinct and identifiable terms. And it is this pre-objective realm that we have to explore in ourselves if we wish to understand sense experience [PP 12].

[17] As Deleuze explains, "Every word is physical, and immediately affects the body" [LS 100].

[18] On the contrary, as Deleuze and Guattari put it: "We invoke one dualism only in order to challenge another. We employ a dualism of models only in order to arrive at a process that challenges all models. Each time, mental correctives are necessary to undo the dualisms we had no wish to construct but through which we pass" [TP 20].

[19] The sound-image is "not the material sound, a purely physical thing, but the psychological imprint of the sound, the impression that it makes on our senses" (CGL 66). It thus includes the written symbol, which Saussure claims is merely "the tangible form" of the sound image [CGL 15].

[20] More will be said about perspective in Chapter 3, but in brief, every composite may be considered from the position or 'point of view' of any of its components. A sign is a composite from the perspective of the signifier; a signification is a composite from the perspective of the signified. Deleuze tells us of Nietzsche's attempts to recognize sickness and health as components of a composite in which one or the other provides a perspective on the same life. "Nietzsche exhorts us to live health and sickness in such a manner that health be a living perspective on sickness and sickness a living perspective on health; to make sickness an exploration of health; of health an investigation of sickness" [LS 198]. Nietzsche himself writes:

> Looking from the perspective of the sick toward *healthier* concepts and values and, conversely, looking again from the fullness and self-assurance of a *rich* life down

> into the secret work of the instinct of decadence—in this I have had the longest training, my truest experiences; if in anything, I became master in *this*. Now I know how, have the know-how, to *reverse perspectives*" [EH 223].

[21] Deleuze and Guattari argue that one can never posit a genuine dualism or dichotomy ("even in the rudimentary form of the good and the bad") because they would only be "the products of an active and temporary selection, which must be renewed" [TP 10].

[22] It is through a multiplication of such perspectives in every sign that we might achieve what Deleuze and Guattari describe as a "perceptual semiotics" [TP 194], where both the infinite, non-human perspectives and the perspectives of humans (or their linguistic sub-communities) are simultaneously accounted for. Colebrook expresses this very project when she explains: "We need to understand how it is that the human eye has come to be taken as *the* subjective starting point for perception, and we also need to forge a 'perceptual semiotics' that explains how subjects and objects are formed from perceptions" [UD 140].

[23] These categories include medical symptoms, criminal evidence, weather forecast, &c. "A sample of urine for analysis was called signum by the ancients" [SPL 15].

[24] Deleuze rejects the term 'signifier', but he makes the same point:

> This seems to us to be the significance of McLuhan's analysis: to have shown what a language of decoded flows is, as opposed to a signifier that strangles and overcodes the flows. In the first place, for nonsignifying language anything will do: whether it be phonic, graphic, gestural, etc., no flow is privileged in this language, which remains indifferent to its substrate or its support, inasmuch as the latter is an amorphous continuum [AO 240].

[25] Deleuze and Guattari prefer the terms 'expression' and 'content' to 'signifier' and 'signified', and argue that the former are not reducible to the latter [TP 68]. They write: "we should never oppose words to things that supposedly correspond to them, nor signifiers to signifieds that are supposedly in conformity with them. What should be opposed are distinct formalizations, in a state of unstable equilibrium or reciprocal presupposition" [TP 67]. But this is a matter of terminology, as their explanation makes clear: "Signifier enthusiasts take an oversimplified situation as their implicit model: word and thing. From the word they extract the signifier, and from the thing a signified in conformity to the word, and therefore subjugated to the signifier" [TP 66]. This paper opens with Saussure's claim that the situation does *not* begin with a *word* and a *thing*, and argues against any notion of a thing that fails to recognise the necessity of a reciprocal conditioning, not only between signs, but also within them—between the signifier and signified—just as Deleuze and Guattari demand: "highly relative, always in a state of reciprocal presupposition" [TP 66]. Moreover, as Chapter 3 will make clear, the relationship between the one and the other is a product of the machine from which the sign is derived, just as Deleuze and Guattari require of expression and content:

> Form of content and form of expression involve two parallel formalizations in presupposition: it is obvious that their segments constantly intertwine, embed themselves in one another; but this is accomplished by the abstract machine from which the two forms derive, and by machinic assemblages that regulate their relations [TP 68].

[26] Here it might be noted that applying a portion of the signified to call up a *concept* is

not to say that the signified can be manipulated in the same way as the signifier. On the contrary, using different aspects of the signified as signifiers is to create wholly new signifiers. The contortions they are subjected to in their role as signifiers does not affect them as components of the signified.

[27] A rigid signification not only risks externalising relationships, but also flattening the relations within the posited object. Deleuze and Guattari worry that:

> names are taken in their *extensive* usage, in other words, function as common nouns ensuring the unification of an aggregate they subsume. The proper name can be nothing more than an extreme case of the common noun, containing its already domesticated multiplicity within itself and linking it to a being or object posited as unique. This jeopardizes, on the side of words and things both, the relation of the proper name as an *intensity* to the multiplicity it instantaneously apprehends. ... Freud counted on the word to reestablish a unity no longer found in things. Are we not witnessing the first stirrings of a subsequent adventure, that of *the* Signifier, the devious despotic agency that substitutes itself for asignifying proper names and replaces multiplicities with the dismal unity of an object declared lost? [TP 27].

[28] Barthes' comments resonate with what Deleuze says of 'style':

> That is what style is, or rather the absence of style—asyntactic, agrammatical: the moment when language is no longer defined by what it says, even less by what makes it a signifying thing, but by what causes it to move, to flow, and to explode—desire. For literature is like schizophrenia: a process and not a goal, a production and not an expression [AO 133].

We also find a similar sentiment in Peirce's 'semiotic realism'. As James Hoopes explains in his preface to a collection of Peircean writings: it holds that the world is always accurately represented "because the very thoughts or signs in which we conceive of the world share a monistic or substantial identity with it" [PS 9]. This notion of a "monistic or substantial identity" plays a fundamental role in Deleuze's philosophy, where it is referred to as the "univocity" of being.

[29] He says elsewhere: "Error however is a very artificial notion, an abstract philosophical concept, because it affects only the truth of propositions which are assumed to be ready-made and isolated" [LS 138]. Deleuze makes a related point, with respect to philosophical *concepts*, in *What is Philosophy?*. There he argues, with Guattari, that "Philosophy does not consist in knowing and is not inspired by truth ... We will not say of many books of philosophy that they are false, for that is to say nothing, but rather that they lack importance or interest, precisely because they do not create any *concept*" [WP 82].

[30] This is why Deleuze and Guattari claim that "Only teachers can write 'false' in the margins" [WP 83].

[31] Later Deleuze writes:

> The true and the false do not suffer the indifference of the conditioned with regard to its condition, nor does the condition remain indifferent with regard to what it renders possible. The only way to take talk of 'true and false problems' seriously is in terms of a production of the true and the false by means of problems, and in proportion to their sense [DR 162].

[32] This issue will be taken up again in chapter 3, with respect to the relations between the parts of the machine.

[33] Deleuze says in *The Logic of Sense*: "It is exactly the boundary between propositions and things" [LS 25]. He also describes it as an *event*, distinct from manifestation, signification and denotation), but which nevertheless belongs to language, "giving it a foundation and a condition" and without which the rest would be "only noise—and an indistinct noise" [LS 208].

[34] Deleuze and Gauttari offer a nice articulation of a reciprocal conditioning, like that of signification and value, in terms of the *concept* understood as the "solution" to a problem that constitutes *sense*: "A solution has no meaning independently of a problem to be determined in its conditions and unknowns; but these conditions and unknowns have no meaning independently of solutions determinable as *concepts*" [WP 81]. Or, as Peirce observes, "Men and words reciprocally educate each other" [CP 5.313].

[35] Deleuze writes: "signification refers only to *concepts* and the manner in which they relate to the objects conditioned by a given field of representation; whereas sense is like the Idea which is developed in the sub-representative determinations" [DR 155]. Deleuze is in fact critical of three related notions from the orthodox view of language: *denotation*, *manifestation* and *signification*. Denotation or designation refers to the correspondence between a proposition (the designator) and an ostensible objective state of affairs (the designated); manifestation refers to the correspondence between the proposition and personal desires or beliefs, and is thus identified with what Saussure calls *parole*; signification, in contrast, refers to the correspondence between the proposition and universal or general concepts implied by other propositions, and may be understood in terms of what Saussure called *langue* [see LS 16].

[36] Deleuze and Guattari prefer the terms 'expression' and 'content' to 'signifier' and 'signified', and argue that the former are not reducible to the latter [TP 68]. They write: "we should never oppose words to things that supposedly correspond to them, nor signifiers to signifieds that are supposedly in conformity with them. What should be opposed are distinct formalizations, in a state of unstable equilibrium or reciprocal presupposition" [TP 67]. But this is a matter of terminology, as their explanation makes clear: "Signifier enthusiasts take an oversimplified situation as their implicit model: word and thing. From the word they extract the signifier, and from the thing a signified in conformity to the word, and therefore subjugated to the signifier" [TP 66]. This paper opens with Saussure's claim that the situation does *not* begin with a *word* and a *thing*, and argues against any notion of a thing that fails to recognise the necessity of a reciprocal conditioning, not only between signs, but also within them—between the signifier and signified—just as Deleuze and Guattari demand: "highly relative, always in a state of reciprocal presupposition" [TP 66]. Moreover, as Chapter 3 will make clear, the relationship between the one and the other is a product of the machine from which the sign is derived, just as Deleuze and Guattari require of expression and content:

> Form of content and form of expression involve two parallel formalizations in presupposition: it is obvious that their segments constantly intertwine, embed themselves in one another; but this is accomplished by the abstract machine from which the two forms derive, and by machinic assemblages that regulate their relations [TP 68].

[37] That is to say, by taking the mythical *sign* (for which Barthes reserves the term signification) as the *proposition* comprising an *expression* (Barthes' *form*) and a *designation* (*concept*). See Figure 1.

[38] Deleuze explains that this would result in "an indefinite nominal regress" where each proposition referred to another "which designates the sense of the preceding" [DR 155].

[39] It may sound confusing, even contradictory, to claim that there are words whose sense is retained in the form of non-sense, but even a few examples are illuminating. The paradigmatic ones are Lewis Carroll's: for instance, "Snark" and "Jabberwocky". Citing "Humpty-Dumpty's theory", Carroll himself offers an insight into the *sense* that can be made of such words: "two meanings packed into one word like a portmanteau, seems to me the right explanation for all". He offers by way of example the word, "frumious", which, he explains, may be uttered by one with "a perfectly balanced mind" in a moment of indecision over whether "furious" or "fuming" should be given precedence in the order of speech [HS 42]. Deleuze rejects this explanation as incomplete, arguing: "the portmanteau word is grounded and formed only if it coincides with a particular function of an esoteric word which it supposedly denotes". "Snark", for instance, may in fact be a portmanteau of 'snake' and 'shark', but the composite animal (snake-shark), as content (*teneur*) is secondary to the functioning of the esoteric word, which is to carry an incorporeal sense: "It is not therefore in its 'portmanteau' aspect that the word fulfils its function". There is thus nothing to privilege the portmanteau word over other forms of the esoteric word, such as contractions ("y'reince"), onomatopoeia ("Phlizz"), or the intentionally indeterminate ("thing") [LS 53].

[40] In *The Logic of Sense*, Deleuze offers his clearest description of the serial proliferation of *sense*:

> Sense is like the sphere in which I am already established in order to enact possible denotations, and even to think their conditions. Sense is always presupposed as soon as *I* begin to speak; I would not be able to begin without this presupposition. In other words, I never state the sense of what I am saying. But on the other hand, I can always take the sense of what I say as the object of another proposition whose sense, in turn, I cannot state. I thus enter into the infinite regress of that which is presupposed [LS 35].

[41] Barthes even uses the same term, "metalanguage", to describe the higher-order proposition [MY 115].

[42] Deleuze argues: "we can be satisfied with a regress of two alternating terms: the name which denotes something and the name which denotes the sense of this name. This two-term regress is the minimal condition of indefinite proliferation" [LS 37].

[43] This is the origin of the terms that will be formally adopted in the machine to distinguish signs from percepts.

[44] Barthes applies the same analysis to semiological systems as diverse as food and fashion. The example above is paralleled by a linguistic one, the Latin phrase, "quia ego nominar Leo" [MY 116].

[45] Similarly, the sound of a bell may signify the arrival of food, which in turn stimulates a salivary response in a Pavlovian dog. This issue is taken up in greater detail in Chapter 3.

[46] Deleuze writes: "given a proposition which denotes a state of affairs, one may always take its given sense as that which another proposition denotes" [LS 35].

[47] Deleuze explains: when "we consider that which alternates in this succession, we see that each name is taken first in the denotation which brings it about, and then in the sense which it expresses, because it is this sense which serves as the denotation of the other name" [LS 44].

[48] Deleuze writes: "if we call each proposition of consciousness a 'name', it is caught in an indefinite nominal regress, each name referring to another name which designates the sense of the preceding [DR 155].

[49] Or to express it in terms of the propositions from the Lewis Carroll example: "A-sitting on a Gate" is <the song>; but as D2 <'A-sitting on a Gate'> is called "Ways and means", which is <what 'A-sitting on a Gate' is called>; as D3, <'Ways and Means'> is called "The Aged Aged Man", which is <what 'Ways and Means' is called>; as D4, <'The Aged Aged Man'> is called "Haddock's Eyes", which is <what 'The Aged Aged Man' is called>.

[50] Charles Peirce makes the same point in terms of signs when he says: "A Sign is anything which represents something else (so far as it is complete) and if it represents itself it is as a part of another sign which represents something other than itself, and it represents itself in other circumstances, in other connections". In short, a sign cannot represent its own sense. Peirce continues with a helpful example: "A man may talk and he is a sign of that he relates, he may tell about himself as he was at another time. He cannot tell exactly what he is doing at that very moment. Yes, he may confess he is lying, but he must be a false sign, then. A sign, then, would seem to profess to represent something else" [CP 2.228]. Compare with what Deleuze says in *Difference & Repetition*: "We speak of our 'self' only in virtue of these thousands of little witnesses which contemplate within us: it is always a third party who says 'me'" [DR 75]. We will see something similar in Deleuze's claims about the "fractured *I*".

[51] The sense (S1), that <the truth of 'A' and 'B' implies the truth of 'Z'>, is only established by a second proposition (N2), called 'C', which designates S1 *as* D2—and the truth of 'C' is not established until a further proposition (N3), called 'D', designates S2 *as* D3. In effect, 'C' *signifies* that <the truth of 'A' and 'B' implies the truth of 'Z'>, but in establishing the conditions for the truth of 'Z' (that is, the truth of 'A' and 'B'), 'C' itself becomes a necessary condition, a fact designated only by a subsequent proposition, 'D', (which designates that <the truth of 'A', 'B' *and* 'C' implies the truth of 'Z'>) and which thus in turn becomes a necessary condition (and so on).

[52] Deleuze follows Kant in rejecting Descartes' argument. Citing Kant's "General note on the Transition from Rational Psychology to Cosmology", Deleuze says:

> The entire Kantian critique amounts to objecting against Descartes that it is impossible for determination to bear directly upon the undetermined. The determination ('I think') obviously implies something undetermined ('I am'), but nothing so far tells us how it is that this undetermined is determinable by the 'I *think*': "in the consciousness of myself in mere thought I am the *being itself*, although nothing in myself is thereby given for thought. [DR 85-86, quoting CPR 382].

[53] Deleuze adds: "The activity of thought applies to a receptive being, to a passive subject which represents that activity to itself rather than enacts it, which experiences its effects rather than initiates it, and which lives like an Other within itself". [DR 86]. We

may map this as we did the other series: with 'I' (N2) designating the self (D2) yet failing to capture the sense of the 'I' (S2) that designates the self as 'I'.

[54] Returning to the issue of a fractured 'I' and the necessary introduction of a temporal component, in *What is Philosophy?*, the authors write:

> I am always determined in time as a passive and phenomenal self, an always affectable, modifiable, and variable self. The cogito now presents four components: I think, and as such I am active; I have existence; this existence is only determinable in time as a passive self; I am therefore determined as a passive self that necessarily represents its own thinking activity to itself as an Other (*Autre*) that affects it. This is not another subject but rather the subject who becomes an other. [WP 31].

[55] The text reads:

> I am sitting in a room different from the one you are in now. I am recording the sound of my speaking voice and I am going to play it back into the room again and again until the resonant frequencies of the room reinforce themselves so that any semblance of my speech, with perhaps the exception of rhythm is destroyed. What you will hear, then, are the natural resonant frequencies of the room articulated by speech. I regard this activity not so much as a demonstration of a physical fact, but, more as a way to smooth out any irregularities my speech might have. [Alvin Lucier, «I Am Sitting in a Room» for voice on tape, 1970].

[56] It may, of course, be denied that the name is identical with the designated; one may argue, for instance, that the "semantic content" of the text remains constant throughout the series and that only the expression changes, or possibly that the proposition remains constant while the designated is transformed with each repetition. But in the one case, the repetitions would yield expression after expression in a potentially infinite series of names for the same designated, while in the latter case, the same expression would designate an indefinite series of objects. Neither alternative offers a persuasive characterization of the name or the designated.

[57] In this, Deleuze is building on Hume's claims. Hume writes:

> The principle is *custom* or *habit*. For whatever the repetition of any particular act or operation produces a propensity to renew the same act or operation, without being impelled by any reasoning or process of the understanding, we always say, that this propensity is the effect of *custom*. ... And it is certain we here advance a very intelligible proposition at least, if not a true one, when we assert that, after the constant conjunction of two objects—heat and flame, for instance, weight and solidity—we are determined by custom alone to expect the one from the appearance of the other. This hypothesis seems even the only one which explains the difficulty, why we draw, from a thousand instances, an inference which we are not able to draw from one instance, that is, is no respect, different from them [HU 336].

[58] Later in the same section Deleuze says:

> What we call wheat is a contraction of the earth and humidity, and this contraction is both a contemplation and the auto-satisfaction of that contemplation. ... What organism is not made of elements and cases of repetition, of contemplated and contracted water, nitrogen, carbon, chlorides and sulphates, thereby intertwining

all the habits of which it is composed? [DR 75].

The notion of "auto-satisfaction" reappears in *What is Philosophy?*, where it is rendered (in English) as "'enjoyment' and 'self-enjoyment'" [WP 212].

[59] The living process is a contemplation, and contemplation is a living process. There is no essential distinction between intellection and organic development. With the machine proposed in Chapter 3, a distinction *will* be drawn between sensation and perception, but not of the sort that Deleuze warns against and not of the sort that Merleau-Ponty rejects in *Phenomenology of Perception*. Rather, the term perception will indicate, as Merleau-Ponty suggests in making his case against sensation, "a *direction* rather than a primitive function" [PP 12]. Merleau-Ponty cites Scheler's *Die Wissenformen und die Gesellschaft*:

> Man approaches ideal and exact images better than the animal, the adult better than the child, men better than women, the individual better than the member of the group, the man who thinks historically and systematically better than the man impelled by tradition, 'imprisoned' in it and incapable of objectivizing, by building up recollection, the environment in which he is involved, of localizing it in time and possessing it by setting it away from himself in a past context DW 397 quoted in PP 12, footnote 1].

Scheler's hierarchy does not include plants or 'inert matter' (and we may dispute his assessment of women), but his point is that there is a progressive refinement (as one moves toward the top of the hierarchy) in the ability to separate the apparent from the ideal. As Merleau-Ponty remarks: "perception is more strictly bound up with the local stimulus in its developed than its undeveloped state, and more in conformity with the theory of sensation in the adult than in the child" (where sensation and perception are hardly to be distinguished at all) [PP 12]. We may add that in plants no such distinction exists and that for inert matter the distinction is meaningless. Thus, contrary to both Merleau-Ponty and Deleuze, perception is to be distinguished from sensation if for no other reason than its association with "ideal and exact images", which sensation knows nothing about.

[60] If we map this first synthesis as we did other series, we find that one instant (N2), along with the impression drawn from previous repetitions (D2), results in a contraction (S2), which provides an impression (D3) that, in the context of a subsequent instant (N3), results in another contraction (S3), and so on, where each instant constitutes the present present and each impression constitutes the immediate past, together contracted into the living present. The labels (N, D, S) are useful here only to indicate the relative position of the various elements as compared with the series we have already considered. It is in the second synthesis of time (described below) that we most clearly recognize the elements of the series in terms of designation and sense.

[61] From the perspective of the passive synthesis, the limit of the contemplation is understood as an extreme *satiety* or *fatigue*, and only from the perspective of the active synthesis as *lack* or *need* (*manque*). Deleuze claims that it is a confusion between these two perspectives that leads to an understanding of desire as suffering from need or lack. In a profound reversal of what 'everyone knows', Deleuze argues that desire lacks nothing, that needs are derived from desire, as counterparts within the real that *desire* produces. Desire is *productive*. Its objective being is the Real *in and of itself* and it

remains closely responsive to the conditions of objective existence: "it embraces them and follows them, shifts when they shift, and does not outlive them". Need, on the other hand, marks the point where desire, and the passive syntheses that condition the desire, are lost. Deleuze argues that it is the function of social production, and of a market economy in particular, to put desire on the side of *acquisition* rather than *production*, to deliberately organize lack amid an abundance of production, to 'counterproduce' it as empty spaces or 'vacuoles' of unmet needs where none previously existed. The eruption of need is not to be understood in terms of dispossession, but, rather, of the falling victim to "the great fear of not having one's needs satisfied". Hence the term, *antiproduction* for this sort of process. [DR 77; and AO 25-29].

[62] Thus, we may say that "need marks the limits of the variable present. The present extends between two eruptions of need, and coincides with the duration of a contemplation" [DR 76, 77].

[63] Every series is a composite of two (or more series). The series constituted by the progression of *signs* comprises two heterogeneous series—the series of names: [N1, N2, N3...] and the series of designations [D1, D2, D3...] that are brought together by, and converge toward, that "paradoxical element, which is their 'differentiator'"—the dark precursor instantiated as an esoteric word. [DR 122, LS 60]. Deleuze writes: "it is always the case that one series has the role of the signifier, and the other the role of the signified, even if these roles are interchanged as we change points of view" [LS 46].

[64] In the second temporal synthesis, the present present can be mapped as N2, designating a past present, D2. However, the past 'in general', S3, like *sense* or *difference*, escapes the representation. It may be designated, by N3, as another particular past present, D3, but only to the extent that it preserves itself and may be focused on as a particular of the past in general, S3, which remains presupposed. Hence the paradox of "the contemporaneity of the past [S2] with the present that it *was* [D3]" [DR 81, labels added].

[65] Deleuze says: "*Signs* as we have defined them—as habitudes or contractions referring to one another—always belong to the present" [DR 77].

[66] It is, rather, *represented in memory*: "Habit is the originary synthesis of time, which constitutes the life of the passing present; Memory is the fundamental synthesis of time which constitutes the being of the past (that which causes the present to pass)" [DR 80].

[67] In a phrase that will be become important later, when an attempt is made to *ground* the *machine*, Deleuze characterizes the pure past as the final ground of the passage of time: the "in-itself" or *noumenon* [DR 83, 88].

[68] As Deleuze explains, "time is the most radical form of change, but the form of change does not change" [DR 89].

[69] Since the synthesis is formal and fixed rather than empirical and dynamic: "It matters little whether or not the event itself occurs, or whether the act has been performed or not: past, present and future are not distributed according to this empirical criterion". Thus Deleuze suggests for the requisite symbol such theatrical events as making the sun explode, throwing oneself into a volcano, or killing God or the father [DR 89].

[70] Deleuze's interpretation of this passage from Plato's *Timaeus* is analysed below, in the section under the heading 'Intensity and Difference'.

[71] This corresponds well with Deleuze's claim, cited earlier, that the grounding of truth is a metamorphosis. The caesura, the moment of change in the present, is similarly

grounding; it grounds time and, in destroying the self, grounds repetition in the eternal return.

[72] Deleuze writes: "Nietzsche's leading idea is to ground the repetition in eternal return on both the death of God and the dissolution of the self" [DR 11]. The death of God is the symbol that draws together the two halves of the caesura, and the dissolution of the self is the becoming of difference in itself [DR 40]. According to Deleuze, Nietzsche meant nothing more by the notion of eternal return than

> that identity not be first, that it exist as a principle but as a second principle, as a principle *become*; that it revolve around the Different: such would be the Copernican revolution which opens up the possibility of difference having its own concept, rather than being maintained under the domination of a concept in general already understood as identical" [DR 40].

He continues:

> Eternal return cannot mean the return of the Identical because it presupposes a world...in which all previous identities have been abolished and dissolved. Returning is being, but only the being of becoming. ... Returning is the becoming-identical of becoming itself. Returning is thus the only identity, but identity as a secondary power; the identity of difference, the identical which belongs to the different" [DR 41].

[73] Williams bemoans Deleuze's murkiness and even suggests that he is in error, concluding: "His explanation of Plato's point is, therefore, far from clear—perhaps even unnecessarily complicated or, if we are feeling ungenerous, simply wrong" [DDR 180].

[74] We might say that the intensive difference implied by imaginary numbers is held even more tenaciously—indeed, to the point that it is difficult to see how such 'virtual' difference can be rendered extensive.

[75] Plato does not explicitly identify 32/27, saying only that a fraction is left over after filling up the intervals of 4/3 with the interval of 9/8; and the final term, 243/256, is only described, ambiguously, as the fraction expressed "in the ratio of 256 to 243" [PT 36]. As for the former, there can be little doubt that 32/27 is the fraction to which Plato alludes, since it is demanded by the progression he is evidently following. In the second case, the ambiguity corresponds to a curious breakdown in the series, where 243/256 does not fill an interval between 1 and 2, while its reverse (256/243) does. The progression of the series with double intervals is (1, 2), 2, 4, 8, 32, 256..., while the progression of the series with triple intervals is (1, 3), 3, 9, 27, 243.... Each of the serial forms (that is, the double and the triple) comprises two identical progressions, where the 'signifying' element (like the Output in Lucier's composition) is always the 'signified' element of the prior repetition. In these two series, the 'signifying' element is a multiplier. The intervals between the terms (that is, for instance, between 1 and 2 or 2 and 4) are filled in exactly the same way, through a separate series whose progressions correspond to the ratio of the elements of the two original progressions (in exactly the same order): 3:2, 4:3, 9:8, 32:27, 243:256.... The serial form here also comprises two identical progressions, where the 'signifying' half is always the 'signified' element of the prior repetition. In this case, the 'signified' element is the divisor in a ratio of which the dividend is the divisor of the prior ratio. The ratio of 3/1:2/1 equals 3/2, which serves as the dividend of the ratio, 2/1:3/2; the result, 4/3, serves as the dividend of the ratio, 3/2:4/3, which equals 9/8, &c.

[76] Deleuze designates the mixture of divisible and indivisible as A+B/2. Williams believes that Deleuze is in error. He explains: "Deleuze is very ambiguous at this point since, when he writes B/2, he means the unequal part of B when A or a factor of A is taken away from B. He really should have used the notation B= *x* times A+C, where C is not divisible by A" [DDR 180]. It is Williams, however, who appears to be mistaken on this point, as shall be explained below.

[77] Deleuze uses two related terms with regard to the actualisation of the Idea. The first is "explication", which, he says, we speak of "in relation to the intensity which 'develops' and which, precisely, determines the movement of actualisation". Explication is the separation of an implicated multiplicity as it is brought into extension. Differenciation refers to the Idea as it has been actualised [DR 244-45]. These terms, and others deployed by Deleuze in characterizing the process of actualization, will be explained in greater detail later in the chapter.

[78] While Williams mischaracterizes Deleuze's explanation in this particular passage, he accurately describes the broader point that Deleuze wishes to convey:

> The mathematical cases are a further example of the way in which a well-ordered extension or numbering presupposes something that resists that order and yet is important for it. We sense that a new abnormal number such as 3/4 or the square root of –1, is significant even though we cannot account for that significance without generating a new number series. Moreover, that new number series still fails to fully explain the earlier significance. [DDR 181].

[79] 'Embryonised' suggests (possible) future actualities, real potentials in a virtual state, like the future bird implied by the genetic material still bundled within the egg. The use of the word here recalls Deleuze and Guattari's characterization of the 'body without organs' as an egg: "Nothing but bands of intensity, potentials, thresholds and gradients", which are no more involved in resemblance or representation "than a predestined zone in the egg resembles the organ that it is going to be stimulated to produce within itself" [AO 19]. Deleuze also illustrates his notion of individuation with the example of egg/embryo later in *Difference & Repetition.* [See DR 248-52].

[80] Perhaps unsurprisingly, Deleuze often refers to the enveloping intensity as *depth*, which constitutes the "field of individuation". This is an important notion for Deleuze as it articulates a distinction between the *virtual* and the *actual*. It is a 'field', he explains, "because the differential relation on which it is focused is not yet a species, nor are its distinctive points yet parts. They will become so, but only in being actualised by the action of this field which it constitutes". Where intensity is implicated or *enveloped*, on the other hand, we find *distances*, which constitute individual differences [DR 253]. In *depth*, there are no incompatibilities: "Incompatibility is born only with individuals, persons, and worlds in which events are actualized, but not between events themselves or between their *a-cosmic*, *impersonal*, and *pre-individual* singularities" [LS 203]. In *depth*, "it is through infinite identity that contraries communicate and that the identity of each finds itself broken and divided. This makes each term at once the moment and the whole; the part, the relation, and the whole; the self, the world, and God; the subject, the copula, and the predicate" [LS 200].

[81] Deleuze distinguishes a multiplicity as a "delicate milieu of overlapping perspectives, of communicating distances, divergences and disparities, of heterogeneous potentials and

intensities". As we have already seen (in the discussion of the *Timaeus*) our experience of the limitations and boundaries of difference presupposes "a swarm of differences, a pluralism of free, wild or untamed differences; a properly differential and original space and time". These untamed differences, which constitute the abstract and potential multiplicities are the real, but more profound, element from which the opposing forces and limitations are drawn, and they persist alongside the limitations and oppositions. [DR 50]. Ideas are virtual multiplicities, comprising relations between differential elements [DR 206].

[82] This is a notion Deleuze adapts from Leibniz's description of the monads, and which he develops more fully in *The Fold: Leibniz and the Baroque*. Deleuze notes that clear/confused does not qualify the Idea—since qualities exists only in extension—but, rather, qualifies the individual, the thinker, who thinks or expresses it. [DR 253].

[83] Deleuze writes:

> Embryology shows that the division of an egg into parts is secondary in relation to more significant morphogenetic movements: the augmentation of free surfaces, stretching of cellular layers, invagination by folding, regional displacements of groups. A whole kinematics of the egg appears, which implies a dynamic. Moreover, this dynamic expresses something ideal [DR 214].

[84] On the contrary, there are only "sign-signal systems". He explains: "In so far as a system is constituted or bounded by at least two heterogeneous series, two disparate orders capable of entering into communication, we call it a signal. The phenomenon that flashes across this system, bringing about the communication between disparate series, is a *sign*" [DR 222].

[85] "Qualities and extensities, forms and matters, species and parts are not primary; they are imprisoned in individuals as though in a crystal. Moreover, the entire world may be read, as though in a crystal ball, in the moving depth of individuating differences or differences in intensity" [DR 247].

[86] Deleuze clarifies this somewhat by explaining "It is because of the action of the field of individuation that such and such differential relations and such and such distinctive points (pre-individual fields) are actualised" [DR 247]. In short, "Individuation always governs actualisation" [DR 251].

[87] Deleuze adds:

> The individual thus finds itself attached to a pre-individual half which is not the impersonal within it so much as the reservoir of its singularities. In all these respects, we believe that individuation is essentially intensive, and that the pre-individual field is a virtual-ideal field, made up of differential relations [DR 246].

[88] Deleuze says of the Idea that it is "*real without being actual, differentiated without being differenciated, and complete without being entire*" [DR 214].

[89] Deleuze writes: "with actualisation, a new type of specific and partitive distinction takes the place of the fluent ideal distinctions. We call the determination of the virtual content of an Idea differen*t*iation; we call the actualisation of that virtuality into species and distinguished parts differen*c*iation" [DR 206]. The distinction may be seen in the notion of colour. The Idea of colour comprises the virtual coexistence of relations between differential elements of a particular order: the elements are "differen*t*iated".

When the relations are actualised, they form qualitatively distinct colours incarnated in distinct extensities: they are differenciated. Deleuze writes:

> The Idea of colour, for example, is like white light which perplicates in itself the genetic elements and relations of all the colours, but is actualised in the diverse colours with their respective spaces; or the Idea of sound, which is also like white noise. There is even a white society and a white language, the latter being that which contains in its virtuality all the phonemes and relations destined to be actualised in diverse languages and in the distinctive parts of a given language [DR 206].

[90] As Deleuze puts it: "Intensity is the determinant in the process of actualization. It is intensity which is immediately expressed in the basic spatio-temporal dynamisms and determines an 'indistinct' differential relation to the Idea to incarnate itself in a distinct quality and distinguished extensity" [DR 245].

[91] This claim recalls Deleuze's comments about truth as "a matter of production"—truth as the production or "empirical result" of *sense*.

[92] In a striking passage, Deleuze says of objects of recognition:

> They lack the claws of absolute necessity—in other words, of an original violence inflicted upon thought; the claws of a strangeness or an enmity which alone would awaken thought from its natural stupor or eternal possibility: there is only involuntary thought, aroused but constrained within thought, and all the more absolutely necessary for being born, illegitimately, of fortuitousness in the world. Thought is primarily trespass and violence, the enemy....

[93] Again, we are reminded of Deleuze's claim that truth cannot be grounded on the condition of the possible, but on *real* experience.

[94] Deleuze explains: "The theatre of repetition is opposed to the theatre of representation, just as movement is opposed to the concept and to representation which it refers back to the concept" [DR 10].

[95] As mentioned briefly in a previous note, the body without organs is the *whole* of which the desiring machines and partial objects are the parts. But it is not merely the sum of its parts; it is a whole in addition to its parts, a whole that brings new connections between its parts and which appears to be the source from which the parts are derived. It is an *identity*, but not of the sort we have been striving to avoid. On the contrary, it is characteristic of the identities we have been trying to create. It is the identity of *producing* and *product*: "It is this identity that constitutes the third term in the linear series: an enormous undifferentiated object. Everything stops dead for a moment, everything freezes in place—and then the whole process will begin all over again" [AO 7].

[96] Not only are signs to be understood as productive and dynamic, they are to be seen as an expression difference not restricted to an independent set of linguistic relations but to include even the relations that constitute organic processes. Colebrook articulates it well:

> Language is just one structure among others and expresses more profound prehuman differences. The differentiated structures through which we live—such as language or culture—are organized or 'coded' forms of imperceptible differences. These differences are 'imperceptible' precisely because they have not been ordered, organized and represented in any systematic form. ... These molecular differences are productive and positive ... signs are not uniquely human

> constructs that 'we' use to communicate. All life is a plane of interacting signs. We are confronted by a world of signs and codes ... And each series of signs creates its own lines of difference ... And all these specific modes of difference are made possible by pure and positive difference: a 'differential power' that for Deleuze is life itself [UD xli-xliii].

[97] "Matter-flows, *hylè*, the schizophrenic flux, replace being, or at any rate give being a kick in the pants (as Lacan might put it), with the effect that everything we want to call understanding has to be seen as either an arrest of this flow, an extraction from it, or a passing into it" [DM 22]. "For as we suspected at the very beginning, partial objects are only apparently derived from (*prélevés sur*) global persons; they are really produced by being drawn from (*prélevés sur*) a flow or a nonpersonal *hylè*, with which they re-establish contact by connecting themselves to other partial objects" [AO 46].

[98] Doors are literally opened and closed, bridges built and burned, roads paved for good or ill.

[99] "Structure is in fact a machine for the production of incorporeal sense (*skindapsos*)" [LS 82]. Sense "is not something to discover, to restore, and to re-employ; it is something to produce by a new machinery" [LS 83].

[100] Citing "the ethnologists and the Hellenists" Deleuze and Guattari claim:

> a symbol is not defined by what it means, but by what it does and by what is done with it... there is no unconscious material either, nor is there a psychoanalytic interpretation, but only uses, analytic uses of the syntheses of the unconscious, which do not allow themselves to be defined by an assignment of a signifier any more than by the determination of signifieds. How it works is the sole question [AO 180].

[101] Peirce, too, considered language and thought to be the *substantial* products of machinic processes rather than Ideas of soul or mind in the Cartesian or Berkelean sense. As Hoopes explains, Peirce "described thought as a relation of signs possessing a material quality. He was therefore willing to describe human thought in physiological terms" [PS 10].

[102] Objects (or "partial objects") are produced by being drawn from the *hylè* [See AO 46]. "The term *hylè* in fact designates the pure continuity that any sort of matter ideally possesses" [AO 36].

[103] This difficult notion will become clearer as the machine is put together, but the following description may be helpful:

> The machine produces an interruption of the flow only insofar as it is connected to another machine that supposedly produces this flow. And doubtless this second machine in turn is really an interruption or break too ... In a word, every machine functions as a break in the flow in relation to the machine to which it is connected, but at the same time is also a flow itself, or the production of a flow, in relation to the machine connected to it [AO 36].

As Colebrook notes in her explanation of Deleuze's "desiring machines", the connections that constitute such machines are not connections between terms: "they need to be understood as the expression of a flow of life from which extended terms can then be abstracted" [UD 103]. Thus, while the machine is described below as an *object* (or rather a *composite*) whose functioning can be seen in the relations among its objective parts, it

must be remembered that such terms do not have any meaning prior to their production by the machine itself.

[104] There is not "a ground or body that is then divided or separated into parts. Rather it is from the connections and disjunctions of parts that we discern the body without organs that is nothing more than the plane of all syntheses and intensities; it does not exist independently or prior to these syntheses" [UD 114].

[105] "At the limit there is a single phylogenetic lineage, a single machinic phylum, ideally continuous: the flow of matter-movement, the flow of matter in a continuous variation, conveying singularities and traits of expression" [TP 406].

[106] For Deleuze, difference is not to be understood in a negative sense, as difference *between* two positive terms, but as something that exists in itself and is manifested through intensity: "Difference is this state in which determination takes the form of unilateral distinction. We must therefore say that difference is made or makes itself" [DR 28]. Moreover, the things between which common sense finds difference are themselves the product of difference, and behind such difference is nothing: "It is always differences which resemble one another, which are analogous, opposed or identical: difference is behind everything, but behind difference there is nothing" [DR 57].

[107] One of the challenges in describing the machine has been to find the most fitting names for the parts and the relations between those parts. On the one hand, they should be neither so outlandish or unfamiliar that their place in the machine cannot be intuited nor so familiar that their common usage obscures the very specific manner in which they have been adapted. Peirce himself cites this latter concern in justifying his novel use of the word Thirdness, explaining that he prefers "the less colored term because its suggestions are not so narrow and special" [CP 5.58]. Rather than indulge in the unrestrained production of neologisms (portmanteaus and other nonsense words in the spirit of Lewis Carol), I have employed more familiar terms—with the hope that their usual connotations are taken as no more than a provisional direction and that they will ultimately be understood to signify no more and no less than what the machine requires of them. *Noumenon* is here opposed to *phenomenon*, as that which is independent of, and prior to, perception. Deleuze and Guattari describe something similar when they use the term 'plane of consistency' or 'planomenon' (as a sort of totality or sum of all bodies without organs) [see TP 157, 165], which they identify with what Hjelmslev calls 'matter': "the unformed, unorganized, nonstratified, or destratified body and all its flows: subatomic and submolecular particles, pure intensities, prevital and prephysical free singularities" [TP 43]. Colebrook hints at what is intended by the term 'noumenon', when she explains: "There are not two types of being (inert matter and representing subjects). There is one virtual whole of being that is given or actualised through an infinity of perceptions, including the worlds and 'souls' of animals, plants, rocks and other machines" [UD 54].

[108] For Deleuze, it is an empirical project: transcendental empiricism. We are not cut off from the source of our experience, never lose touch with it:

> Empiricism truly becomes transcendental, and aesthetics an apodictic discipline, only when we apprehend directly in the sensible that which can be sensed, the very being *of* the sensible: difference, potential difference and difference in intensity as the reason behind qualitative diversity. It is in difference that movement is produced as an 'effect', that phenomena flash their meaning like

signs. The intense world of differences, in which we find the reason behind qualities and the being of the sensible, is precisely the object of a superior empiricism [DR 56].

[109] We do not experience the profound heterogeneity of intensive difference; we cannot *differentiate* among all the differences. Homogeneity is thus a measure of our indifference to the difference we fail to differentiate.

[110] These inferences are represented, in Figure 6, at the noumenal level of the machine, as a string of separate yet undistinguished objects, O.

[111] It separates itself from the noumenal on the basis of relationships defined at a higher level of description: the phenomenal level, where four distinct phenomena are differentiated in the relations between three types of objects. The objects themselves are resolved only at the highest level of description: the perceptual level. The machine comprises all three types of objects and all three levels of description.

[112] As Deleuze and Guattari explain: "the plane of consistency is occupied, drawn by the abstract Machine; the abstract Machine exists *simulatneously* developed on the destratified plane it draws, and enveloped in each stratum whose unity of composition it defines" TP 70].

[113] As Colebrook explains: "There is no single distinct domain of perception (such as mind) set over against a separate domain of inert matter. Life is a series of divergent perceptions which actualise worlds" [UD 54].

[114] Deleuze and Guattari explain: "The notion of unity (*unité*) appears only when there is a power takeover in the multiplicity by the signifier or a corresponding subjectification proceeding.... Unity always operates in an empty dimension supplementary to that of the system considered (overcoding)" [TP 8].

[115] Figure 6 illustrates what may be described as the *processional* relationship among the *phenomena* and their corresponding products. From left to right, they follow a path from the *actualisation* of undifferentiated *noumenon* to the *perceptualisation* of the percepts. From top to bottom, the descriptive levels follow the same path from the *noumenal* (and by inference the *substantial* and *heterogeneous*) to the *phenomenal* and finally the *perceptual*. Figure 7, on the other hand, renders the key relationships between the components statically.

[116] Or "partial objects" (as Deleuze characterizes them, following and extending the notion introduced by Melanie Klein). Echoing Lacan's description of the relationship between signs as "rings of a necklace that is a ring in another necklace made of rings" [AL 153] we may say of objects that they are *components of composites that are themselves objects that are components of composites*—or, after Deleuze, "every machine is a machine of a machine" [AO 36]. We may even see this relationship in Deleuze's discussion of repetition in the first passive synthesis of time. Deleuze compares Bergon's example of A A A A... ("tick, tick, tick, tick...") with Hume's AB AB AB A... ("tick-tock, tick-tock, tick-tock, tick..."). Deleuze explains:

> The principle distinction between these two forms rests upon the fact that in the second case difference not only appears in the contraction of the elements in general but also occurs in each particular case, between two elements which are both determined and joined together by a relation of opposition. The function of opposition here is to impose a limit on the elementary repetition, to enclose it

> upon the simplest group, to reduce it to a minimum of two (tock being the inverse of tick). Difference therefore appears to abandon its first figure of generality and to be distributed in the repeating particular, but in such a way as to give rise to new living generalities [DR 72].

'Opposition', indicates the perceived heterogeneity between repetitions. On the most basic level, the 'particularity' is abandoned and each repetition is reduced to a general (and homogenous) 'tick'. On a higher level of resolution, the 'tick' is perceived as a relatively particular component of a larger composite, "tick-tock" (a new living generality). We might go further and see that at an even higher level of resolution the composite is itself a component of ABCD ABCD... (tick-tock-dick-dock...).

Note that this does not the 'define' an object (or composite or component). Objects are not defined, they are produced: drawn from the *hylè*. The above merely describes the pattern of distribution. As all *objects* are *composites* (and also *components* of other *composites*), the same entity is sometimes described in this paper as an *object*, at other times as a *composite* and at other times still, as a *component*. *Object* is the more general term. In discussing *objects* as *composites*, only two *components* are ever considered: the component under consideration (the "*component*") and everything else (the "*context*"); the same entity may be referred to as either *component* or *context* of a particular *composite*, depending on the *perspective*.

[117] The espousal of a particular numerical preference may seem an esoteric, even Pythagorean, idiosyncrasy, but it is not arbitrary. On the one hand, mere dyadic relations are demonstrably incomplete; as Peirce writes, "To me, who have for forty years considered the matter from every point of view that I could discover, the inadequacy of Secondness to cover all that is in our minds is so evident that I scarce know how to begin to persuade any person of it who is not already convinced of it" [CP 8.331]. On the other hand, relations involving more than three terms are apparently always reducible. Peirce argues: "while it is impossible to form a genuine three by any modification of the pair, without introducing something of a different nature from the unit and the pair, four, five, and every higher number can be formed by mere complications of threes" [CP 1.364]. So important is the triadic structure to Peirce's philosophical system that he claims even to be able to deduce from it the principles of logic [AC 20].

[118] As first mentioned in connection with sense, at the beginning of chapter 2, these are not merely logical or formal relations, and are better characterized as 'actions' and their corresponding composites as 'events'.

[119] We must bear in mind that even these objects, which apparently sustain perception, are, like all objects, themselves the product of perception. As Colebrook explains it: "When we think about this event of perception we tend to imagine two points: the perceiving brain and the thing perceived. But both these points—the viewer and the viewed—are images abstracted from the event of perception" [UD 164].

[120] Deleuze is following Hume in the claim that our anticipation is not a matter of reason or reflection. Hume writes:

> Suppose a person, though endowed with the strongest faculties of reason and reflection, to be brought on a sudden into this world; he would, indeed, observe a continual succession of objects, and one event following another; but he would not be able to discover anything farther. ... And in a word, such a person, without

> more experience, could never employ his conjecture or reasoning concerning any matter of fact, or be assured of any thing beyond what was immediately present to his memory and senses. ... All inferences from experience, therefore, are effects of custom, not of reasoning [HU 335].

Hume does not attempt to explain any further what he means by habit, freely admitting that "By employing that word, we pretend not to have given the ultimate reason of such a propensity. We only point out a principle of human nature, which is universally acknowledged, and which is known by its effects" [HU 336]. But we can come to understand habit in terms of Pavlov's experiment with conditioned reflex in dogs, where A is the conditioned stimulus (say, the sound of a bell) and B is the associated unconditioned stimulus (a bone). With sufficient repetition (AB, AB, AB) the sound of the bell (A ...) will become associated with the bone (... B) "with a force corresponding to the qualitative impression of all the contracted ABs", a fact evidenced by the dog's increased salivation at the sound of the bell despite the absence of the relevant unconditioned stimulus.

If we think of A (prior to the formation of any associations) in the context of a particular mental state, X, we can see that A will have little impact on X. Other than perhaps a startle response, the sound of the bell will not lead to a predictable reaction in the hearer. Like a drop of water falling into a pool, the ripples will be insubstantial and soon effaced by other stimuli. Nevertheless, X in the context of A will be subtly (if briefly) distinct from X prior to A. Call this state AX. The subsequent occurrence of B (if experienced soon enough) will thus occur in the context of AX and effect a change we may call BAX (which triggers increased salivation).

In speaking of B, A and X, we ignore the heterogeneities that make further differentiation possible: X is not a homogenous mental state, but a multiplicity in continuous flux; A may consist of a number of distinct sounds (ding, dong, ding, dong); and B may comprise both the sight and smell of food. But we can ignore the internal heterogeneities (that is, between the components of B, A or X) in favour of the more significant heterogeneities between the composites and their context (for instance, between the "ding, ding, ding" as a whole and the relative silence that precedes and follows it). In the same way, when the association between A and B is made, the stimulus is perceived not as B in the context of AX, but as BA in the context of X. Despite the internal heterogeneity of the composite BA, the difference between BA and X is more evident still, and more significant than the difference between B and AX. When A has become associated with B, the actual stimulus-B is no longer necessary to affect the change from X to BAX. Just as we do not need to see every side of an object in order to respond to it *as* that object, the dog does not need to 'see' every side of BA before it recognizes it as food. A becomes like the front of an object, the sensation of which is sufficient to generate the perception, BA.

[121] Again, these "relationships" are to be understood as events.

[122] "Every representamen is related or is capable of being related to a reacting thing, its object" [CP 5.138].

[123] Peirce uses the word 'form' in a letter to Lady Welby, where he describes a sign as: "any medium for the communication or extension of a Form (or feature)" [SS 196].

[124] Where a body cannot fully regain equilibrium, the event is not fully sensed. An

amputation, for instance, does not lead to a proportionately greater sensation than does a lesser injury (despite the greater damage) for rather than responding to the actual damage the body can only reach a new equilibrium and generate sensations corresponding to the processes involved in achieving that new balance.

[125] Merleau-Ponty argues against a 'theory of sensation' that "builds up all knowledge out of determinate qualities, offers us objects purged of all ambiguity, pure and absolute, the ideal rather than the real themes of knowledge" [PP 11]. In short, he rejects a notion of sense-experience as something that coincides absolutely with an impression or a quality [PP 13].

[126] PP 10.

[127] In refusing to draw a distinction between sensation and perception (as a 'passive synthesis' of the imagination), Deleuze nevertheless needs to augment his account with a higher level process that he calls the 'active syntheses' of memory and understanding. The latter processes explain how the particularity of independent cases (which are lost in the generality of the contracted form and the living present) can be retained and represented 'reflexively' (as either the past or future of reflection). Attributing the view to Hume, Deleuze writes:

> he shows that the cases contracted or grounded in the imagination remain no less distinct in the memory or in the understanding. Not that we return to the state of matter which produces one case only when the other has disappeared. Rather, on the basis of the qualitative impression in the imagination, memory reconstitutes the particular cases as distinct, conserving them in its own 'temporal space'... In other words, the active syntheses of memory and understanding are superimposed upon and supported by the passive synthesis of the imagination [DR 71].

[128] We may see how perception can be understood as a serial process akin to the paradigmatic series from Deleuze and Carroll. Just as a proposition cannot express its own sense, a monadic object cannot express the event that resulted in its change, even if the 'information' is embedded in its structure (for instance, as the impact of a meteorite is embedded in a planet as a crater). A dyadic object, on the other hand, can generate series of two terms, such that the repetition in the second term provides the 'sense' of the first (i.e., sensation). But it does so by reversing the first repetition and returning to a homeostatic state. It can thus never generate a third term to express the sense of the second term. The triadic object is not similarly restricted. Not only can it generate a third term to express the sense of the second (i.e., the sense of the sensation, or 'perception'); as an evolving (rather than homeostatic) object it can generate a potentially infinite series of terms, each expressing the sense of the one prior, akin to what Peirce calls indefinite semiosis.

[129] Deleuze explains that as the mind moves from the particular to the general in the contraction of experience, it also extends the living present from the past to the future: "the difference produced in the mind is generality itself in so far as it forms a living rule for the future" [DR 71].

[130] It must be emphasised that this notion of recognition is as different from what Deleuze rejects in *Difference & Repetition* as the prior notion of sensation is from what Merleau-Ponty rejects in *Phenomenology of Perception*. Recognition, as the term is used in the machine, does not correspond with what Deleuze identifies as good sense or

common sense; that is, "the harmonious exercise of all the faculties upon a supposed same object" [DR 133]. Rather, it is closer to what Deleuze characterizes (though far more broadly) as *contraction*—the contraction of distinct percepts into larger composites. The term reflects Peirce's characterization of the interpretant as "a cognition of a mind" [CP 2.242], with an allusion to the repetitions involved in the process.

[131] It might appear to others (perhaps even the majority) that the characterizations are actually far too broad. I find this latter objection less serious than the claim that the proposed distinctions are too fine.

[132] DR 75.

[133] In a wonderful passage in *Difference & Repetition*, Deleuze characterizes the larval subject:

> These thousands of habits of which we are composed—these contractions, contemplations, pretensions, presumptions, satisfactions, fatigues; these variable presents—thus form the basic domain of passive syntheses. The passive self is not defined simply by receptivity—that is, by means of the capacity to experience sensations—but by virtue of the contractile contemplation which constitutes the sensations. This self, therefore, is by no means simple: it is not enough to relativise or pluralize the self, all the while retaining for it a simple attenuated form. Selves are larval subjects; the world of passive syntheses constitutes the system of the self, under conditions yet to be determined, but it is the system of a dissolved self. There is a self wherever a furtive contemplation has been established, whenever a contracting machine capable of drawing a difference from repetition functions somewhere [DR 78-79].

[134] Deleuze and Guattari speak of something like reaction when they describe the origins of intensive quantities:

> They come from the two preceding forces, repulsion and attraction, and from the opposition of these two forces. ... And they undergo relative rises or falls depending on the complex relationship between them and the variations in the relative strength of attraction and repulsion as determining factors. In a word, the opposition of the forces of attraction and repulsion produces an open series of intensive elements, all of them positive, that are never an expression of the final equilibrium of a system, but consist, rather, of an unlimited number of stationary, metastable states through which a subject passes [AO 19].

[135] This move from the noumenal to the substantial might be compared in Deleuze's complex 'indi-drama-differenc/*t*iation' to the individuation that gives rise to differenciatied extensities. Substance is to be understood as an intensive quantity, no longer undifferen*t*iated, but not yet differenciated into actual extensive qualities.

[136] It is through *sensation* that the differen*t*iated intensity is *dramatised.*

[137] Deleuze's distinction between differen*t*iation and differenciation is not made explicit in the machine, which characterizes virtual and actual differences equally as *heterogeneities*, and the uncovering of heterogeneity as *differentiation.*

[138] Deleuze and Guattari write in *A thousand Plateaus*: "We do not have units (*unités*) of measure, only multiplicities or varieties of measurement. The notion of unity (*unité*) appears only when there is a power takeover in the multiplicity by the signifier or a corresponding subjectification proceeding" [TP 8].

[139] As we saw earlier in a claim by Deleuze, every organism is a sum of contractions, not only in its receptive and perceptual elements, but right down to its viscera. There are contractions of the mind that exist even before the machine produces a single percept. They are generated by a machine with a longer history and more distant horizons, the larger composite of which our machine is only a component.

[140] As Deleuze and Guattari put it: "partial objects are not the expression of a fragmented, shattered organism, which would presuppose a destroyed totality or the freed parts of a whole; nor is the body without organs the expression of a 'dedifferentiated'... organism stuck back together that would surmount its own parts" [AO 326].

[141] And we would likewise fail to *totalise* the whole and its parts if we were to bring them together into an even grander union. We may be reminded, in this endeavour, of the fruitless effort on the part of Plato's God to totalise quantity in terms of the equal.

[142] Elsewhere they argue: "The body without organs is in fact produced as a whole, but a whole alongside the parts—a whole that does not unify or totalise them, but that is added to them like a new, really distinct part" [AO 326]. They add: "it has an effect on these other parts simply because it establishes aberrant paths of communication between noncommunicating vessels, transverse unities between elements that retain all their differences within their own particular boundaries" [AO 43]. Colebrook explains: "there is [not] a ground or body that is then divided or separated into parts. Rather it is from the connections and disjunctions of parts that we discern the body with organs that is nothing more than the plane of all syntheses and intensities; it does not exist independently or prior to these syntheses" [UD 114].

[143] In case there is any doubt as to what they mean by non-productive, they also characterise it as "the unproductive, the sterile, the unengendered, the unconsumable". See also AO 11. In *A thousand plateaus*, the authors assert in apparent contradiction that the body without organs "causes intensities to pass; it produces and distributes them in a *spatium* that is itself intensive, lacking extension." [TP 153]. But unless there was an unacknowledged change in doctrine between the writing of *Anti-Oedipus* and *A thousand plateaus*, the claimed productivity must be what Deleuze and Guattari describe in *Anti-Oedipus* as "an apparent objective movement" [AO 10] on the otherwise "nonproductive stasis of the body without organs" [AO 9]. We may also look to the claim cited in an earlier note for insight. There, the authors use similarly active terms to describe the body without organs' ability to bring "noncommunicating vessels" into relation. But despite the language, they do not mean that the body without organs literally "establishes" any paths of communication. They simply mean that the parts are given novel relations as a result of being drawn into a whole.

[144] Deleuze and Guattari write:

> It falls back on (*il se rabat sur*) all production, constituting a surface over which the forces and agents of production are distributed, thereby appropriating for itself all surplus production and arrogating to itself both the whole and the parts of the process, which now seem to emanate from it as a quasi cause. Forces and agents come to represent a miraculous form of its own power: they appear to be "miraculated" (miraculés) by it. In a word, the socius as a full body forms a surface where all production is recorded, whereupon the entire process appears to emanate from this recording surface [AO 10].

[145] While Deleuze and Guattari claim (*contra* Spinoza) that "The body without organs is not God, quite the contrary", they add: "the energy that sweeps through it is divine, when it attracts to itself the entire process of production and serves as its miraculate, enchanted surface, inscribing it in each and every one of its disjunctions". But it is the *energy* that is divine, and not just the energy, but the "energy of disjunctions" they call *Numen*. While not immediately relevant, Numen is important to the machine in that it accounts for the 'reciprocal encroachments and increasing inclusions'. As Deleuze and Guattari explain:

> no matter what two organs are involved, the way in which they are attached to the body without organs must be such that all the disjunctive syntheses between the two amount to the same on the slippery surface. Whereas the "either/or" claims to mark decisive choices between immutable terms (the alternative: either this or that), the schizophrenic "either...or...or" refers to the system of possible permutations between differenes that always amount to the same as they shift and slide about. [AO 12].

[146] As Deleuze and Guattari explain, "The organs-partial objects and the body without organs are at bottom one and the same thing.... *Partial objects are the direct powers of the body without organs, and the body without organs, the raw material of the partial objects*" [AO 326].

[147] In the introduction to her explication of Deleuzean thought, Colebrook explains:

> it is less the case that we decide who 'we' are than that forces 'decide' for us. Our languages, our genes, our bodies, our desires, historical forces, social forces—all these things intersect and constantly mutate, in such a way that what we are cannot be traced back to a single point of origin or intent. Far from accepting the human point of view, and explaining the world from the position of human meaning, we need to see how the processes of meaning and human life are produced from what is essentially prehuman [UD xlii].

[148] This recalls what Merleau-Ponty claims an artist like Cézanne or Balzac seeks to communicate when "he speaks as the first man spoke and paints as if no one had ever painted before":

> Before expression, there is nothing but a vague fever, and only the work itself, completed and understood, will prove that there was *something* rather than *nothing* to be found there. Because he has returned to the source of silent and solitary experience... the artist launches his work just as a man once launched the first word, not knowing whether it will be anything more than a shout, whether it can detach itself from the flow of individual life in which it was born... [MPA 69].

Compare also the notion that Firstness is akin to the world before Adam had drawn any distinctions with what Merleau-Ponty calls primordial perception, which likewise makes no distinctions between the senses: "The lived object is not rediscovered or constructed on the basis of the contributions of the senses; rather, it presents itself to us from the start as the centre from which these contributions radiate. We *see* depth, the smoothness, the softness, the hardness of objects; Cézanne even claimed that we see their odor" [MPA 65]. Merleau-Ponty repeats this important thought in *Phenomenology of Perception*, where he adds: Cézanne declared that "a thing would not have this colour had it not also this shape, these tactile properties, this resonance, this odour, and that the thing is the absolute fullness which my undivided existence projects before itself" [PP 318-19].

[149] Peirce indirectly acknowledges the paradoxical nature of objects when he writes: "Every sign stands for an object independent of itself; but it can only be a sign of that object in so far as that object is itself of the nature of a sign or thought. For the sign does not affect the object but is affected by it; so that the object must be able to convey thought, that is, must be of the nature of thought or a sign" [CP 1.538].

[150] Peirce first makes mention of it in a letter to William James in October 1885.

[151] Peirce often explains this claim by comparing the relations to a scenario in which an individual (A) presents a gift (B) to a friend (C). There is no relation between B and C without A; the relation is 'genuinely triadic' [CP 5.66]. As Peirce explains elsewhere, "a sign is something, *A*, which brings something, *B*, its *interpretant* sign determined or created by it, into the same sort of correspondence with something, *C*, its *object*, as that in which itself stands to *C*". [AC 20].

[152] The relationship in which the First stands is one of determination by its object [O1:R1]. If the Third [I1] stood in a similar relationship to the First [R1], it would be likewise determined [R1:I1], and thus be a degenerate First [R2] to the original Second [O1].

[153] And as R3, I2 must be capable of determining I3, and then I4, and so on in a progressively more degenerate relationship to the Second [O1].

[154] The difference with this second triadic relation is the recognition that the sign itself has produced a new object. The Third [I1] becomes the First or representamen [R2] not of the original object [O1], but of the previous sign itself [R1 as O2]. As a First, it [R2] must be capable of determining a new Third [I2].

[155] The new third [I2] must likewise be able to act as a First [R3], but, again, not to the same object [O2] that the prior First [R2] represented, but to that First as an object in its own right [R2 as O3].

[156] Peirce writes elsewhere that the sign is "Anything which determines something else (its interpretant) to refer to an object to which itself refers (its object) in the same way, the interpretant becoming in turn a sign, and so on ad infinitum" [CP 2.303].

[157] Such a relation is expressed in Peirce's definition of a 'representation': "A mental representation is something which puts the mind into relation to an object. A representation generally (I am here defining my use of the term) is something which brings one thing into relation with another" [MS 810]. Peirce explains:

> it is necessary for a sign to be a sign that it should be regarded as a sign for it is only a sign to that mind which so considers and if it is not a sign to any mind it is not a sign at all. It must be known to the mind first in its material qualities but also in its pure demonstrative application. That mind must conceive it to be connected with its object so that it is possible to reason from the sign to the thing [MS 381].

Peirce calls the relating element the Interpretant.

[158] This otherwise unpublished analysis can be seen at Professor Marty's web site at the university of Perpignan; http://www.univ-perp.fr/see/rch/lts/marty/76defeng.htm#analisis.

[159] Peirce describes the Interpretant as a sort of sign in the mind that is determined by the sign: the sign "addresses somebody, that is, creates in the mind of that person an equivalent sign or perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign" [CP 2.228].

[160] Marty points out that in a 1905 text [SS 192-93], that although the sign is reduced to

"a passive correlate in its relationship to the object" the interpretant is not yet seen as *determined*; that change occurs in another 1905 text, when Peirce describes the sign as "something... acted upon [and] in its turn acts upon something" [MS 283].

[161] Peirce uses this term in a draft letter to Lady Welby dated March 9, 1906, continuing: "Being medium, it is determined by something, called its Object, and determines something, called its Interpretant" [SS 196].

[162] *Form* is used at this point in the general sense that Peirce intends when he describes it as that "which is communicated from the object through the Sign to the Interpretant" [MS 793] and not as the specialized term that Barthes applies to the mythical signifier [MY 117] and which has been adapted in the lexicon of the machine (see Figures 1, 7) to distinguish the objective signifier from the perceptual signifier.

[163] Even the tree, distinguished above from the sign that communicates the concept of a tree, can be a sign; though as a sign it is not *merely* a tree and not perceived as such.

[164] Except where the linguistic signifier is somehow defective (a broken transmission, illegible handwriting, unfamiliar accent, &c) it offers a distinct presence (visual, acoustic, tactile, &c). The signified, on the other hand, is not only insensible, but also more or less ambiguous until reduced in the context of other signs in a syntagm. For instance, even while the signifier /hit/ is recognisable, its signification is unclear, with possible signifieds including <a popular success>, <an assassination>, <a drug dose>, <forceful contact>, &c.

[165] In an evocative passage regarding the schizophrenic experience of language, Deleuze conveys the material quality of the sign and the dynamism involved in one's encounter with it:

> a word, often of an alimentary nature, appears in capital letters, printed as in a collage which freezes it and strips it of its sense. But the moment that the pinned-down word loses its sense, it bursts into pieces; it is decomposed into syllables, letters, and above all into consonants which act directly on the body, penetrating and bruising it [LS 100].

[166] Recalling Deleuze and Guattari's description of disjunctive inscription, we may say that rather than an exclusive disjunction that imposes "decisive choices between immutable terms (the alternative: either this or that)", Saussure's distinction breaks down into a schizophrenic 'either...or...or' of a "system of possible permutations between differences that always amount to the same" [AO 11].