

Machine and Structure¹

The distinction I am proposing between machine and structure is based solely on the way we use the words; we may consider that we are merely dealing with a 'written device' of the kind one has to invent for dealing with a mathematical problem, or with an axiom that may have to be reconsidered at a particular stage of development, or again with the kind of machine we shall be talking about here.

I want therefore to make it clear that I am putting into parentheses the fact that, in reality, a machine is inseparable from its structural articulations and, conversely, that each contingent structure is dominated (and this is what I want to demonstrate) by a system of machines, or at the very least by one logic machine. It seems to me vital to start by establishing the distinction in order to make it easier to identify the peculiar positions of subjectivity in relation to events and to history.²

We may say of structure that it positions its elements by way of a system of references that relates each one to the others, in such a way that it can itself be related as an element to other structures.

The agent of action, whose definition here does not extend beyond this principle of reciprocal determination, is included in the structure. The structural process of de-totalized totalization encloses the subject, and will

1. Initially intended for the Freudian School in Paris in 1969, and published in *Change*, no. 12 (Seuil), 1971.

2. To adopt the categories suggested by Gilles Deleuze, structure, in the sense in which I am using it here, would relate to the generality characterized by a position of exchange or substitution of particularities, whereas the machine would relate to the order of repetition 'as behaviour and viewpoint relative to a singularity that cannot be changed or replaced' (*Différence et répétition*, Presses Universitaires de France, 1969, p. 7). Of Deleuze's three minimum conditions determining structure in general, I shall retain only the first two:

(1) There must be at least two heterogeneous series, one of which is defined as the signifier and the other as the signified.

(2) Each of these series is made up of terms that exist only through their relationship with one another.

His third condition, 'two heterogeneous series converging upon a paradoxical element that acts so as to differentiate them', relates, on the contrary, exclusively to the order of the machine (*Logique du sens*, Minuit, 1969, p. 63).

not let go as long as it is in a position to recuperate it within another structural determination.

The machine, on the other hand, remains essentially remote from the agent of action. The subject is always somewhere else. Temporalization penetrates the machine on all sides and can be related to it only after the fashion of an event. The emergence of the machine marks a date, a change, different from a structural representation.

The history of technology is dated by the existence at each stage of a particular type of machine; the history of the sciences is now reaching a point, in all its branches, where every scientific theory can be taken as a machine rather than a structure, which relates it to the order of ideology. Every machine is the negation, the destroyer by incorporation (almost to the point of excretion), of the machine it replaces. And it is potentially in a similar relationship to the machine that will take its place.

Yesterday's machine, today's and tomorrow's, are not related in their structural determinations: only by a process of historical analysis, by reference to a signifying chain extrinsic to the machine, by what we might call historical structuralism, can we gain any overall grasp of the effects of continuity, retro-action and interlinking that it is capable of representing.

For the machine, the subject of history is elsewhere, in the structure. In fact, the subject of the structure, considered in its relationship of alienation to a system of de-totalized totalization, should rather be seen in relation to a phenomenon of 'being an ego' – the ego here being in contrast with the subject of the unconscious as it corresponds to the principle stated by Lacan: a signifier represents it for another signifier. The unconscious subject as such will be on the same side as the machine, or better perhaps, *alongside* the machine. There is no break in the machine itself: the breach is on either side of it.

The individual's relation to the machine has been described by sociologists following Friedmann as one of fundamental alienation. This is undoubtedly true if one considers the individual as a structure for totalization of the imaginary. But the dialectic of the master craftsman and the apprentice, the old pictures of the different trades flourishing in different parts of the country, all this has become meaningless in the face of modern mechanized industry that requires its skilled workers to start from scratch again with every new technological advance. But does not this starting from scratch mark precisely that essential breakthrough that characterizes the unconscious subject?

Initiation into a trade and becoming accepted as a skilled worker no longer takes place by way of institutions, or at least not those envisaged in such statements as 'the skill has precedence over the machine'. With industrial capitalism, the spasmodic evolution of machinery keeps cutting across the existing hierarchy of skills.

In this sense, the worker's alienation to the machine excludes him from any kind of structural equilibrium, and puts him in a position where he is as close as possible to a radical system of realignment, we might say of castration, where he loses all tranquillity, all 'self-confirming' security, all the justification of a 'sense of belonging' to a skilled trade. Such professional bodies as still exist, like doctors, pharmacists, or lawyers, are simply survivals from the days of pre-capitalist production relations.

This change is of course intolerable; institutional production therefore sets out to conceal what is happening by setting up systems of equivalents, of imitations. Their ideological basis is to be found not solely in fascist-type, paternalistic slogans about work, the family and patriotism, but also within the various versions of socialism (even including the most apparently liberal ones, like the Cuban), with their oppressive myth of the model worker, and their exaltation of the machine whose cult has much the same function as that of the hero in antiquity.

As compared with the work done by machines, the work of human beings is nothing. This working at 'nothing', in the special sense in which people do it today, which tends more and more to be merely a response to a machine – pressing a red or black button to produce an effect programmed somewhere else – human work, in other words, is only the residue that has not yet been integrated into the work of the machine.

Operations performed by workers, technicians and scientists will be absorbed, incorporated into the workings of tomorrow's machine; to do something over and over no longer offers the security of ritual. It is no longer possible to identify the *repetition* of human actions ('the noble task of the sower') with the repetition of the natural cycle as the foundation of the moral order. Repetition no longer establishes a man as someone who can do that particular job. Human work today is merely a residual sub-whole of the work of the machine. This residual human activity is no more than a partial procedure that accompanies the central procedure produced by the order of the machine. The machine has now come to the heart of desire, and this residual human work represents no more than the point of the machine's imprint on the imaginary world of the individual (cf. Lacan's function of the 'a'³).

Every new discovery – in the sphere of scientific research, for example – moves across the structural field of theory like a war machine, upsetting and rearranging everything so as to change it radically. Even the researcher is at the mercy of this process. His discoveries extend far beyond himself, bringing in their train whole new branches of researchers, and totally redesigning the tree of scientific and technological implications. Even when a discovery is called by its author's name, the result, far from 'personalizing' him, tends to

3. See Glossary, *Objet petit 'a'*.

be to turn his proper name into a common noun! The question is whether this effacing of the individual is something that will spread to other forms of production as well.

Though it is true that this unconscious subjectivity, as a split which is overcome in a signifying chain, is being transferred away from individuals and human groups towards the world of machines, it still remains just as un-representable at the specifically machinic level. It is a signifier detached from the unconscious structural chain that will act as *representative* to represent the machine.

The essence of the machine is precisely this function of detaching a signifier as a representative, as a 'differentiator', as a causal break, different in kind from the structurally established order of things. It is this operation that binds the machine both to the desiring subject and to its status as the basis of the various structural orders corresponding to it. The machine, as a repetition of the particular, is a mode – perhaps indeed the only possible mode – of univocal representation of the various forms of subjectivity in the order of generality on the individual or the collective plane.

In trying to see things the other way round, *starting* from the general, one would be deluding oneself with the idea that it is possible to base oneself on some structural space that existed before the breakthrough by the machine. This 'pure', 'basic' signifying chain, a kind of lost Eden of desire, the 'good old days' before mechanization, might then be seen as a meta-language, an absolute reference point that one could always produce in place of any chance event or specific indication.

This would lead to wrongly locating the truth of the break, the truth of the subject, on the level of representation, information, communication, social codes and every other form of structural determination.

The voice, as speech machine, is the basis and determinant of the structural order of language, and not the other way round. The individual, in his bodiliness, accepts the consequences of the interaction of signifying chains of all kinds which cut across and tear him apart. The human being is caught where the machine and the structure meet.

Human groups have no such projection screen available to them. The modes of interpretation and indication open to them are successive and contradictory, approximative and metaphorical, and are based upon different structural orders, for instance on myths or exchanges. Every change produced by the intrusion of a machine phenomenon will thus be accompanied in them with the establishment of what one may call a system of anti-production, the representative mode specific to structure.

I need hardly say that anti-production belongs to the order of the machine: the keynote here is its characteristic of being a subjective change, which is the distinctive trait of every order of production. What we need

therefore is a means of finding our way without moving as though by magic from one plane to another. We must, for instance, relate to the *same* system of production both what goes on in the world of industry, on the shop floor or in the manager's office, and what is happening in scientific research, and indeed in the world of literature and even of dreams.

Anti-production will be, among other things, what has been described under the term 'production relations'. Anti-production will tend to effect a kind of re-tilting of the balance of phantasy, not necessarily in the direction of inertia and conservatism, since it can also lead to generalizing within a given social area a new dominant mode of production, accumulation, circulation and distribution relations, or of any other superstructural manifestation of a new type of economic machine. Its mode of imaginary expression is then that of the transitional phantasy.

Let us then look at the other end of the chain, the level of dream production. We may identify anti-production with working out the manifest content of a dream, in contrast to the latent productions linked with the impulse machine that constitute part objects. The *objet petit 'a'*, described by Lacan as the root of desire, the umbilicus of the dream, also breaks into the structural equilibrium of the individual like some infernal machine. The subject finds it is being rejected by itself. In proportion with the change wrought by *objet-machine petit 'a'* in the structural field of representation, successive forms of otherness take their places for it, each fashioned to fit a particular stage of the process. Individual phantasizing corresponds to this mode of structural signposting by means of a specific language linked with the ever-repeated urgings of the 'machinations' of desire.

The existence of this *objet-machine petit 'a'*, irreducible, unable to be absorbed into the references of the structure, this 'self for itself' that relates to the elements of the structure only by means of splitting and metonymy, means that the representation of oneself by means of the 'stencils' of language leads to a dead end, to a breaking point, and the need for a renewed 'otherness'. The object of desire de-centres the individual outside himself, on the boundaries of the other; it represents the impossibility of any complete refuge of the self inside oneself, but equally the impossibility of a radical passage to the other. Individual phantasy *represents* this impossible merging of different levels; it is this that makes it different from group phantasizing, for a group has no such 'hitching posts' of desire on its surface, no such reminders of the order of specific truths as the body's erogenous zones, and their capacity for touching and being touched by other people.

Group phantasy superimposes the different levels, changes them round, substitutes one for another. It can only turn round and round upon itself. This circular movement leads it to mark out certain areas as dead ends, as banned, as impassable vacuoles, a whole no-man's land of meaning. Caught up within

the group, one phantasy reflects another like interchangeable currency, but a currency with no recognizable standard, no ground of consistency whereby it can be related, even partially, to anything other than a topology of the most purely general kind. The group – as a structure – phantasizes events by means of a perpetual and non-responsible coming and going between the general and the particular. A leader, a scapegoat, a schism, a threatening phantasy from another group – any of these is equated with the group subjectivity. Each event or crisis can be replaced by another event or crisis, inaugurating a further sequence that bears, in turn, the imprint of equivalence and identity. Today's truth can be related to yesterday's, for it is always possible to re-write history. The experience of psychoanalysis, the starting up of the psychoanalytic machine, makes it clear that it is impossible for the desiring subject to preserve such a system of homology and re-writing: the only function of the transference in this case is to reveal the repetition that is taking place, to operate like a machine – that is in a way that is the precise opposite of a group effect.

The group's instinctual system, because it is unable to be linked up to the desiring machine – *objets petit 'a'* returning to the surface of the phantasy body – is doomed to multiply its phantasy identifications. Each of these is structured in itself, but is still equivocal in its relationship to the others. The fact that they lack the differentiating factor Gilles Deleuze talks of dooms them to a perpetual process of merging into one another. Any change is precluded, and can be seen only *between* structural levels. Essentially, no break is any longer accepted. That the structures have no specific identifying marks means that they become 'translatable' into one another, thus developing a kind of indefinite logical continuum that is peculiarly satisfying to obsessives. The identification of the similar and the discovery of difference at group level function according to a second-degree phantasy logic. It is, for example, the phantasy representation of the other group that will act as the locating machine. In a sense, it is an excess of logic that leads it to an impasse.

This relationship of the structures sets going a mad machine, madder than the maddest of lunatics, the tangential representation of a sado-masochistic logic in which everything is equivalent to everything else, in which truth is always something apart. Political responsibility is king, and the order of the general is radically cut off from the order of the ethical. The ultimate end of group phantasy is death – ultimate death, destruction in its own right, the radical abolition of any real identifying marks, a state of things in which not merely has the problem of truth disappeared forever but has never existed even as a problem.

This group structure represents the subject for another structure as the basis of a subjectivity that is clogged up, opaque, turned into the ego. Whereas, for the individual, it was the object of unconscious desire that

functioned as a system of change or machine, in a group it is either the sub-wholes that happen to come into being temporarily within the group or another group that will assume that function. This area of structural equivalence will thus have the fundamental function of concealing or abolishing the entry of any particular object represented *either* on the screen of the human subject by unconscious desire, *or* on the more general screen of unconscious signifying chains by the change effected by the closed system of machines. The structural order of the group, of consciousness, of communication, is thus surrounded on all sides by these systems of machines which it will never be able to control, either by grasping the *objets petit 'a'* as the unconscious desire machine, or the phenomena of breaking apart related to other types of machines. The essence of the machine, as a factor for breaking apart, as the a-topical foundation of that order of the general, is that one cannot ultimately distinguish the unconscious subject of desire from the order of the machine itself. On one side or other of all structural determinations, the subject of economics, of history and of science all encounter that same *objet petit 'a'* as the foundation of desire.

An example of a structure functioning as subject for another structure is the fact that the black community in the United States represents an identification imposed by the white order. To the modernist consciousness this is a confused, absurd, meaningless state of things. An unconscious problematic challenges the rejection of a more radical 'otherness' that would be combined with, say, a rejection of economic 'otherness'. The assassination of Kennedy was an event that 'represented' the impossibility of registering the economic and social otherness of the Third World, as witnessed by the failure of the Alliance for Progress, the endeavour to destroy Vietnam and so on. One can only note here the points of intersection and continuity between the economy of desire and that of politics.

At a particular point in history desire becomes focalized in the totality of structures; I suggest that for this we use the general term 'machine': it could be a new weapon, a new production technique, a new set of religious dogmas, or such major new discoveries as the Indies, relativity, or the moon. To cope with this, a structural anti-production develops until it reaches its own saturation point, while the revolutionary breakthrough also develops, in counterpoint to this, another discontinuous area of anti-production that tends to re-absorb the intolerable subjective breach, all of which means that it persists in eluding the antecedent order. We may say of revolution, of the revolutionary period, that this is when the machine represents social subjectivity for the structure – as opposed to the phase of oppression and stagnation, when the superstructures are imposed as impossible representations of machine effects. The common denominator of writings of this kind in history would be the opening up of a pure signifying space where the machine would

represent the subject for another machine. But one can no longer then continue to say of history, as the site of the unconscious, that it is 'structured like a language' except in that there is no possible written form of such a language.

It is, in fact, impossible to systematize the real discourse of history, the circumstance that causes a particular phase or a particular signifier to be represented by a particular event or social group, by the emergence of an individual or a discovery, or whatever. In this sense, we must consider, *a priori*, that the primitive stages of history are where truth is primarily to be sought; history does not advance in a continuous movement: its structural phenomena develop according to their own peculiar sequences, expressing and indicating signifying tensions that remain unconscious up to the point where they break through. That point marks a recognizable break in the three dimensions of exclusion, perseverance and threat. Historical archaisms express a reinforcing rather than a weakening of the structural effect.

That André Malraux could say that the twentieth century is the century of nationalism, in contrast to the nineteenth, which was that of internationalism, was because internationalism, lacking a structural expression that matched the economic and social machineries at work within it, withdrew into nationalism, and then further, into regionalism and the various sorts of particularism that are developing today, even within the supposedly international communist movement.

The problem of revolutionary organization is the problem of setting up an institutional machine whose distinctive features would be a theory and practice that ensured its not having to depend on the various social structures – above all the State structure, which appears to be the keystone of the dominant production relations, even though it no longer corresponds to the means of production. What entraps and deceives us is that it looks today as though nothing can be articulated outside that structure. The revolutionary socialist intention to seize control of political power in the State, which it sees as the instrumental basis of class domination, and the institutional guarantee of private ownership of the means of production, has been caught in just that trap. It has itself become a trap in its turn, for that intention, though meaning so much in terms of social consciousness, no longer corresponds to the reality of economic or social forces. The institutionalization of 'world markets' and the prospect of creating super-States increases the allure of the trap; so does the modern reformist programme of achieving an ever-greater 'popular' control of the economic and social sub-wholes. The subjective consistency of society, as it operates at every level of the economy, society, culture and so on, is invisible today, and the institutions that express it are equivocal in the extreme. This was evident during the revolution of May 1968 in France, when the nearest approximation to a proper organization of the struggle was the

hesitant, late and violently opposed experiment of forming action committees.

The revolutionary programme, as the machine for institutional subversion, should demonstrate proper subjective potential and, at every stage of the struggle, should make sure that it is fortified against any attempt to 'structuralize' that potential.

But no such permanent grasp of machine effects upon the structures could really be achieved on the basis of only one 'theoretical practice'. It presupposes the development of a specific analytical praxis at every level of organization of the struggle.

Such a prospect would in turn make it possible to locate the responsibility of those who are in any way in a position genuinely to utter theoretical discourse at the point at which it imprints the class struggle at the very centre of unconscious desire.

The Plane of Consistency¹

The term is an approximation. As will become clear from what I am going to say, first, it cannot be just a single plane, and second, we have to make a distinction between mathematical consistency and the machinic consistency we are concerned with here. For the moment, let us note that:

– Mathematical consistency implies a set of axioms that are non-contradictory.²

– Machinic consistency avoids such an implication in that it does not resort to a dualist system of *applying* multiplicities to a semiotic whole so much as embracing the totality. It does not therefore have anything to 'fear' from purely logical contradictions.

– Moreover, the basis of axiomatic consistency is the fact that ultimately there is a consistency in machinic propositions.

– The plane of consistency indicates that the machinic phylum is a *continuum*. The unity of any process, the unity of history, resides not in the fact of a shared time encompassing and traversing everything, but in the fact of that continuum of the machinic phylum, which itself results from the conjunction of the totality of de-territorialization processes.

Whenever a multiplicity unfolds, the plane of consistency is brought into operation. The machinic phylum is in time and space. Plane, here, has the sense of the phylum, the continuous. Nothing is small enough to escape the net of machinic propositions and intensities. The strata of *subjectivity* are set against the plane of the agency of collective utterance, the subject against the agent. The plane of machinic consistency provides the answer to Russell's paradox. There really is a totality of all the totalities. But it is not a logical totality; it is a machinic one. The problem of the continuous is resolved at the level of the machinic phylum before being stated in mathematical terms.

1. Notes made in April 1972.

2. Robert Blanché shows that a closer analysis distinguishes between contradiction and consistency, between different notions of consistency, and so on (*L'Axiomatique*, Presses Universitaires de France, 1955, p. 48). This is something that needs exploring.

Mathematics and Physics, Technological Innovation and the Military Machine

– At first these appear to be quite disparate fields which will only coincide in present-day development of the economic and national military complex.

– But in fact, we have to start from the premise that, from the very *first*, they merge into one another, and that what makes the web of history – that is of history up until the scientific revolutions – is the machinic phylum.

The machinic phylum takes off with the military machine, then with the technological innovations linked with the concentration of the means of production in primitive state machines (cities, empires, etc.), and finally with the scientific revolutions. But the machinic power of desire was, always and everywhere, already there. To take an example, the invention of bronze in southern Siberia led to the territorialization of tribes whose form of production was settled and agrarian. The collective desire energy rapidly changed its object and turned those societies into a military proto-machine. Nomadism introduced further benefits, both in material terms and in terms of desire. (In some cases, the extensive stock-breeding of the nomad machine caused settled agriculture to disappear altogether.)³ In 'a few decades', there had come into being an encoded surplus-value which led to the abandonment of settled homesteads. Wealth 'suddenly stopped being the desire to own a piece of ground'. People had acquired 'a new conception of ownership, with land as something merely to be used, based on *movable goods*, flocks, horses, chariots, personal effects, bows and arrows, what was gained by pillage' and 'an expanded wealth'.

In all this, machinic power was making and unmaking primitive territoriality and nomadism, the primitive state and its divisions. We therefore find the plane of consistency both as the impossible goal of the history of science and the preliminary to the 'start' of history.

It is important to consider the position of the plane of consistency in relation to the semiotic machine, to the independence acquired by the voice as the instrument for opening up the field of the spoken word. Why should the battle-cry, the mating call, leave the sphere of the functional, of caste behaviour, to become open to a transvaluation of encoding? Words have a different use: they carry further – or perhaps they go nowhere. They produce new connections. After all, it is surely in this figurative shift of the oral semiotic machines that the essence of the phenomenon of religion lies?

In any case, it is in the framework of the city machines, with the primitive state as anti-production of the military proto-machine, that we can identify one of the two basic strata of the territorialization of the plane of machinic consistency – the other one in fact being brought into action by the military

3. 'Présence des Scythes', *Critique*, December 1971.

proto-machine. The question of whether the military proto-machine comes before or after the primitive state is secondary. There is, in effect, a link, an encoded surplus-value between the two. Either the primitive state finds itself having to fall back on the military proto-machine in the name of anti-production, or, conversely, it has itself achieved a technological take-off, a system of innovation (in the sphere of written language, the use of metals, differentiating the kind of work to be done by people from that done by animals etc.), and is in turn enriching the military machine and moving it a notch higher in the process of de-territorialization.

The fluxes are tidied away, controlled and over-encoded by means of the writing machine. In this case, despotism is synonymous with forcing everything into a bi-univocal mould, fitting the whole of the goods on the shelves into a new whole of graphic symbols.

The military proto-machine consumed its goods – for instance, when a pharaoh died, his concubines, his servants and even his slaves were killed. In the feudal system, on the other hand, which set out to preserve the labour force of its serfs and the fighting force of its vassals, the primitive state restricted and delayed such consumption. The sign was retained. Semiotic Oedipalism, for the writing machine, consists in an external taking hold of objects and subjects in their completeness. Writing and reckoning are not the same as consuming, though to name a thing may be a way of eating it.

The position of writing is thus one of anti-production. A written text, itself impotent, is nevertheless a sign of power. This is the source of the dichotomy between mathematics and physics. Pythagoras was concerned with the 'essential' numbers that lay beyond 'real' powers. In an article in the *Encyclopaedia Universalis*, 'Physique et mathématiques', Jean Marc Levy-Leblond presents a critique of the two forms in which people have sought to make mathematics 'the language' of physics. Mathematics is viewed either as the language of nature, which man must learn (the attitude of Galileo and Einstein), or as the language of man in which natural phenomena have to be expressed (the attitude of Heisenberg). But there are also all the possible positions between these two, all of which, in one way or another, tend to consolidate the dualism between empiricism and formalism – opposing nature to man, experience to theorizing, concrete to abstract, scientific phenomena to scientific laws and so on.

Levy-Leblond maintains that there are two possible uses for mathematics in the sciences. It may have a relationship of *application* – as with chemistry, biology, the sciences of the Earth and all other spheres in which there is numerical calculation and a manipulation of quantities. Or it may have a relationship of *constitution* or *production*. 'Thus mathematics is interiorized by physics', and their concepts are indissolubly interlinked (derived

speed and the electro-magnetic field, for instance). This sort of relationship is peculiar to physics (which Bachelard failed to realize when he spoke of a 'progressive mathematicization' of all the sciences). Nevertheless, the separation between mathematics and physics remains. They are different in kind.

Unlike mathematics, physics is difficult to express in axioms. One can give several coherent mathematical expressions of the same law or concept in physics (mathematical polymorphism). In physics the principles and laws are more mobile, more transcursive, less hierarchized. Conversely, a single mathematical structure can govern a number of different domains without there being any 'underlying unity' – what Poincaré called 'a hidden harmony in things' (mathematical plurivalence). It is the identity of the object of physics that can only be known approximately, that eludes absolute definition. Thus there is a contradictory two-way movement going on: mathematics is tending to ever greater autonomy, but also tending to greater interdependence with mathematical physics.

In Levy-Leblond's view one must abandon the idea of any hierarchy among the sciences in favour of mathematicizing them: 'it is by the nature of its relationship to mathematics, and by the constitutive role mathematics plays, that any branch of the natural sciences – major or minor – can be seen as belonging to the sphere of physics'. In other words, physics is constituted by two processes of de-territorialization (a semiotic process and a material process). An object in physics becomes consistent only in so far as it can authentically be treated mathematically. It no longer has a relationship of application with the sign, but one of production. The way the particle corresponds with the sign no longer refers to the disjunctive syntheses of a system of representation, but to an experimental connective system and a theoretical conjunctive system, in which the surplus-values of encoding or of sets of axioms are formed.

We thus end up with a physics-mathematics complex that links the de-territorialization of a system of signs with the de-territorialization of a cluster of phenomena in physics. Levy-Leblond would seem, at this second, 'material' level, to be maintaining the primacy of the existence of the real. The traditional split between mathematics and the natural sciences (including physics) sanctioned by experimentation⁴ would appear to be, for him, insuperable.

We may note the twofold connection between the de-territorialized phe-

4. The way in which he rejects any subjection of physics to mathematics – that is, to the most de-territorialized stratum – by quoting the example of astro-physics, which became established on the previously mathematicized ground of astronomy, is unconvincing. Mathematical astronomy was never a 'non-experimental' science: it was physics already on the way to being turned into mathematics.

nomenon of the physicist and the mathematics sign machine.⁵ Rather than talking about an object, let us say we are dealing with a *moment of inertia on the part of the machinism* at a given point in the contingent process of de-territorialization. In the last resort, mathematics is also an experimental science. It experiments with semiotic phenomena which were in the past still at rest as graphic symbols are still at rest, but might perhaps be so in the future more after the fashion of the figures of speech and syntactical rules of information-theory machines. The object of physics is particles (there are some hypothetical ones, known as tachyons, that are supposed to travel faster than light, going back in time, and not being subject to the usual limitations of causality and information).⁶ Every such moment of inertia is connected with a particular situation of the machinism. Just as the machinism of experimentation of theoretical physics has produced the conditions for the expansion of mathematical physics, so the information-theory machinism will probably come to have more and more effect on the development of 'pure' mathematics. We may therefore come to think in terms of both mathematics and physics being in some sense alongside the theoretic-experimental machine. Far from thinking that we can radically axiomatize physics, we shall find ourselves on the contrary having to relativize the axiomatization of mathematics.

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The computer will produce as many possible axiomatizations as you like for every theory – a positive flood of axiomatics.⁷ Mathematics is not concerned with pure universal semiotic harmony. It is as much a machine as physics is, except that, from the point of view of technical machinism, it is somewhat further behind. Gödel's theorem marked the condemnation of any claim that axiomatics is omnipotent.⁸ Undoubtedly, therefore, there can be less and less possibility of concluding the various attempts at mathematic axiomatization with any super-axiomatics. On the contrary, what I want to show is that all

5. I also have reservations about the split between physics and the other sciences that use numerical order. It is possible that there are other mathematics, other experimentations, other machinisms.

6. Here we come to a little problem in science-fiction: what would a computer working with tachyons be like? Cf. *Recherches*, no. 7, December 1970, p. 675.

7. In my view there is no justification for Ruyer's position in condemning *a priori* the possibility that cybernetics may expand infinitely.

8. '... Gödel's theorem makes clear that whatever theory there may be based on a finite number of axioms to make it possible to construct arithmetic, one can always discover some unprovable proposition in it ...' (Warusfel, *Dictionnaire des Mathématiques*, p. 257). If one appends that paradoxical proposition as a supplementary axiom, then we have a different theory, but one in which there is a further unprovable proposition. It is impossible 'that a finite number of axioms should be enough to establish any universal mathematics in which not merely would the principle of the excluded third (P cannot at the same time be true and false) be true, but in which any proposition might be either true or false. Some theorems will always remain non-demonstrable because there is no answer to them' (ibid.).

the partial machinisms harmonize on a single plane of consistency – not susceptible to being totalized into one axiomatic, not susceptible to representation, but infinitely de-totalized, de-territorialized, de-axiomatized. And that it is on this plane of consistency that mathematics links up with the other sciences.

Machinic consistency evades the alternative of mathematical consistency defined by Gödel's theorem. First of all, to it a machinic connection may be actual and non-actual: machinic time encodes contradiction, the observer of the contradiction has his own machinic time, the connection is governed by the general relativity of conjunctions. Secondly, nothing escapes it. Machines cannot stand emptiness, lack, negation, an exclusively referential stratum. With machines the question is one of connection or non-connection, without conditions, without any need to render an account to any third party. It is from that that the surplus-value of encoding originates. The situation is like that of the bumble-bee which, by being there, became part of the genetic chain of the orchid. The specific event passes directly into the chain of encoding until another machinic event links up with a different temporalization, a different conjunction.

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It is the principle of the excluded third term that is itself excluded here. Ultimately, the only reference is the plane of consistency, but no limit or lack must be written into it. The plane of consistency is the organless body of all axiomatic systems; it is not the total being of the machinism, but the impossibility of concluding or totalizing machinic expansion.

Behind the opposition between what is as yet hardly axiomatized at all (that is, physics) and what is very much so (that is, mathematics) one can see the outline of the order of what is 'radically non-axiomatizable' – machinic multiplicity. Axiomatics was related to the structure of representation, whereas the flux of axiomatization relates to machinic production. This being so, can one maintain that physics has a special relationship with the order of existing reality?

The object of the mathematics/physics complexus is not physical; it relates neither to the nature of the physical nor to the physical as nature. Machinism links together physics and mathematics, working equally well with symbols and particles. The particle is defined by a chain of symbols; physicists 'invent' particles that have not existed in 'nature'. Nature as existing prior to the machine no longer exists. The machine produces a different nature, and in order to do so it defines and manipulates it with symbols (the diagrammatic process).

Epistemological primacy therefore lies neither with mathematics nor with physics. It may perhaps lie with art. It is arguable that the most de-territorialized level relates to the sign. It is true that the mathematical sign has

sometimes let its hand be forced by the de-territorialization of experimental physics, but, equally, it is the de-territorialization of the sign that governs the entire process, generalizing its effects, and projecting the surplus value of encoding onto the totality of encoded areas. Even in cases where physics appears to be controlling the movement, the machinic points remain on the side of the mathematics machine. And this will be even more the case as physics becomes more involved in information-theory technology and abandons any claim to signify anything at all apart from its own machinic connections.

Yet those particles really do exist – somewhere else, in other galaxies for example. They are not invented or arranged by mathematics and physics as though created by an artist. However, the galaxies are *also* collective production agents, 'setting up' particles, arrangements of matter, of life and so on. It is not a question here of contrasting nature with creation, but of likening it to creative machines. The galaxies are also collective agents if not of utterance, at least of production.

What is perhaps peculiar to what happens on our planet is that production is always accompanied by a transcription: the collective transductive agency of nature is paralleled and surpassed by a collective agency of utterance, within which the de-territorialization of the sign plays a major part. The sign parallels the particle. It goes further than it in its capacities of de-territorialization, and provides it with an added capacity for multiplicity.

The de-territorialization that runs through the whole mathematics/physics complex involves scientists, but also a lot else besides: all of political society, the flux of investments, armies and so on. De-territorialization is produced as much by the sign as by nature. However, the most important instrument, the machinic spearhead, now sides with the sign. The sign-point of this complex can be considered from two angles: as a *sign* it is an agent of de-territorialization; as a physical *point*, it is the point of recurrence of the residual physical flux in the role of anti-production.

We are now concerned not with the representative function of the sign, or of its application, but with the productive and anti-productive aspects of the sign-point. The distinction between mathematical representation and the production of physics relates to what we may call a scientific Oedipus situation. With the advent of writing, the sound machine has become secondary. With the coming of information machinisms, and their audio-visual developments, the traditional writing machine may now also be on the way to becoming secondary.

To return to individuated utterance: it is something that cannot be detached from its circumstances of time and place, of sex, of class, etc. However, the moment of inertia when the splitting-off into subjectivity occurs cannot be assigned purely and simply to the order of representation. Just

what is it that enables a sign machine to 'grasp' and control a flux of particles? It is man's specific capacity for de-territorialization that enables him to produce signs for no purpose: not negative signs, not nothing signs, but signs to play about with for fun, for art. Human intervention so transforms things that an oral semiotic machine produces *numen* for no reason, and a writing machine in the hands of mischievous scribes runs to no purpose (for example, the poetry of ancient Egypt).

Art and religion are arrangements for producing signs which will eventually produce power signs, sign-points capable of playing the part of particles in the arena of de-territorialization. The Shamanic invocation, the sign-writing of the geomancer, are in themselves direct symbols of power. They mark the importation into nature of signs of power, of a schiz that, via successive surplus values of encoding, will eventually bring true the wildest dreams: first the dream of the alchemist; first desire, before de-territorializing mathematical signs and the particles of physics. It is the dualist reduction of capitalist Oedipal science that tends to sterilize science even as it is expanding (splitting up into separate compartments research, production, technology, teaching, art, economics, etc.). It is the conjunction of the military machine and the State with science that determines the importance to be attributed to science and defines the scope of its activity.

We must therefore distinguish between the individuated Oedipal utterance, directed towards bi-univocity, the complete object, representative application, and the quite different individuated schizo utterance whose force, whose de-territorializing charges, go out to the furthest corners of the universe. The phenomenon of physics does not need to be 'mentalized', but encoded, made machinic. To read, to understand, to interpret – this is to render powerless. The sign must abandon its yearning for oral semiotics and be transformed into a machinic sign-point so as to throw itself unreservedly into the machinic phylum.

The schizo position, which articulates the de-territorialized chains of collective agencies of utterance that constitute the present-day scientific machine, cannot be reduced to the sum of the interventions by individuals. It is something trans-individual. The schizo scientist individually produces de-territorialized signs alongside a collective machine. The cutting edge, so to say, of the machine is here the desire, or perhaps the madness, of the scientist. His desire has become a sign of power by coming into contact with the machinism. The collective agency of utterance that connects things with people does not crush 'human values'. What gives the scientific machine its super-power is the super-humanness that carries desire to the heart of being. Far more powerful than any physicist's cyclotron is the desire that produces de-territorialized signs – super-particles capable of exploding 'natural' particles into a multiplicity, and so in a sense forcing them to be on the defensive.

The de-materialization of nature, its transmutations, its new productions, all depend on the de-territorializing power of desire. The intensity of desire is stronger than the de-territorializing intensities anywhere else in nature. Not desire in itself, the desire of dreams, but the desire inscribed in machinic complexes.

The question then is whether awareness of self, of individuated utterance, is a function of anti-production. To this there are two answers. If what is meant is the Oedipalist *cogito*, the reduction to the level of the individual, the ego, the family, then the answer is Yes. But if the consciousness machine is seen as something that empties out the sign, the space in one's heart, to charge it with a wholly new power so that it can become attached to whatever it wants at once, faster than light, then the answer is No. The tachyon could be an elementary particle of de-territorialization belonging at once to physics and to the arrangements of semiotics. Indeed, perhaps the very thought of de-territorialization constitutes a kind of anti-matter!

The annihilation of intentionality by the phenomenologists does not make use of some substance supposed to be a vast Nothing, but the omnipotence of a complex of de-territorialization is potentially capable of creating a multiplicity out of whatever it touches. Consciousness and awareness of oneself, and of the nearness of a collective utterance machine, produces the most enormous machinic 'charge' of de-territorialization – a kind of anti-energy, of semiotic anti-matter.

The plane of consistency is thus what enables all the various strata of socius, of technology and so on to be cut across, invested, disinvested and transferred. Does this bring us back to the idea that there is an absolute knowledge, a superior rationality, that is the goal of history? No, for there is no question of its being a super-system of reference. The thesis of the plane of consistency as the unattainable goal of history amounts to a rejection of any attempt at totalization, any reduction to a single representative order, or code or set of axioms. It is a positive affirmation that it is possible to escape from hierarchies of reference, and an undermining of representative consistency.

Consistency denies that there is one *being* that would encode the essence of history for its own sake. It affirms the coherence, the consistency of a *process* not expressible in hard and fast propositions or rational theologies. Intensive multiplicities do not refer either to reason or chaos, or to eschatological significations. The machinic phylum runs through all being that is held in the time/space strata of individuated utterance. Being in itself, being as unity, being as the essence of the same, results from the contingency of an utterance made impotent.

Diagrammatic conjunctions are the motive force for de-territorialization. They are the source of the machinic phylum. Only because representation has been flattened out into exclusive dysjunctive syntheses do we find modes

of subjectivation isolated from any production. Time and consciousness are not bound up with an individuated *cogito*. The links in the process of de-territorialization are the events, the meaning, the emergence of machinic mutations. There are as many different times coexisting as there are machines in action. The conscious human being is simply the manifestation of the greatest intensity in the conjunction of the processes of de-territorialization, the high point of de-territorialization, the point at which the sign scours itself out, folds in upon itself to open out into a script that is level with reality.

The finality of history is not to be found in a blind machinism, but in the finality of desire, in fact of the most self-aware desire of all, that of the superman who has won mastery of being-in-itself by sacrificing mastery of his individual consciousness. Solitude, meditation, letting the contemplation of desire have free rein, the loss of individuation in favour of cosmic engagement – all this leads to a paradoxical combination of effects: an individual hyper-subjectivation of desire (as in Samuel Beckett, for example) and a radical abandonment of the individual subject to collectivities, that link man with the machinic phylum.

Capitalism tries to interiorize the unbounded boundaries of the plane of consistency. It arranges organs, self-contained objects, relationships, individual subjectivity. What prevented the organless body of the primitive State from abolishing the plane of consistency into infinite fragments was the setting in motion of the machinic phylum. Whereas the military proto-machine destroyed whole towns, destroying even its own soldiers, the machinic phylum survives.

Intensive Redundancies and Expressive Redundancies¹

We must distinguish between intensive and expressive redundancies. Intensive redundancies advance by way of intrinsic encoding, without involving specific strata of expression; thus they themselves remain the prisoners of encoding stratification. They include, for example, the intrinsic stratification of the field of nuclear particles, or that of atomic, molecular, chemical or biological organization. None of these forms of encoding, reproduction, maintenance and interaction can be detached from its individual stratum. There is no relationship of expression, concordance, interpretation, reference, etc., among the different strata; they remain unaffected by one another. One can only pass from an energy stratum to, say, a material or biological stratum, by means of a surplus-value of encoding, a kind of proliferation and interlacing of codes, but one with respect for the autonomy and integrity of the various strata. The heaped-up strata form a kind of humus, or what one might call a system of soups. Behind life there is a biological soup, beyond the biological soup a physico-chemical soup and so on. We thus have a semiotic machine which is encoded without changing levels. Abstract machines remain the prisoners of their stratifications.

Only when specific, autonomized semiotic machines are brought into play can there be a direct passage from one stratum to another. There will then be not a surplus-value of encoding, but a trans-encoding. The semiotic machine sets off a procedure of absolute de-territorialization that is capable of crossing all the stratifications. Such a semiotic machine embarks on its autonomization with the biological reproduction machine. In fact, this latter is the first specialization of a reading machine that crushes the intensities, squeezing them as one squeezes the juice out of fruit. The machine of genetic expression implies the detachment of one strand of encoding to act as a reproduction mould. Thus there is established a system of twofold articulation: a de-territorialized strand of encoding, in other words a strand as far as possible detached from the second and third dimensions,² a line that is attached to the

1. Notes made in April 1974.

2. The relative positions of the time dimension might perhaps make it possible to pinpoint the difference between genetic codes and linguistic codes; the time when relationships of bi-univocalization come into being is narrower and stricter in the genetic machine, whereas the forms or underlying structures in language introduce a certain lag between the organization of utterances and that of codes.

intensities and diagrammatizes them. Only the fact that such a line can be discerned makes it possible to read and transcribe a complex process diachronically. The process of reproduction, in crystallography for example, does not have recourse to this alignment system of the code. A three-dimensional crystal, or a solution in the process of becoming crystallized, only 'de-codes' the organization of another crystal from outside; it can only model or adapt itself to it. Unlike the RNA and DNA chains, a crystal remains too territorialized to be able to reach the level of the abstract machines that govern the process of physico-chemical de-territorialization. But the genetic chain is just as much the prisoner of the organism stratum.

The same is the case, though to a lesser extent, with the de-territorialization of uttering forces – in primitive societies for instance. They make a start on setting trans-coding systems into operation, but such trans-coding is still only relative and poly-centred. This poly-centredness is the expression of a kind of rejection of the 'gangrene' of de-territorialization, a rejection that can be indicated by the way a machinic system is organized into castes. (For example, traditional societies will try to restrict the expansion of metallurgy perhaps, or of writing, by allowing them only to be used for certain specific purposes.) Only at the end of the process of degeneration of signifying semiologies, with the emergence of a machinic utterance complex, will the lines of diagrammatization and socio-material collective agencies start to operate which will produce the sign machines that can really control the stratifications. The de-territorialization of signs – in mathematical physics, information-theory, etc. – gives the sign a kind of super-linear quality; so much so that one can no longer speak strictly in terms of a sign at all any more. We have left the sphere of a pre-signifying poly-vocal expression involving movements, words, dancing; we have even left that of semiologies over-encoded by the signifier, and the post-signifying sphere of the axiomatized letters and signs of science and art; we are now dealing with a direct expression of abstract machinisms. The difference between sign and particle is blurred; diagrammatization denies the primacy of material fluxes, while on the other hand the real intensities speak for themselves, borrowing the method of machines including only a minimum of semiological inertia. Theories, theorists and economic/experimental complexes form a network of non-signifying expressive substances which can demonstrate their de-territorializations in space and time, without the mediation of any representation.

At this level one can no longer speak of separate scientific areas such as the area of astro-physics or the area of micro-physics. We are faced with a single universe of abstract machines, working both on the galactic and on the atomic scale. (Cf. the theories about the first second of the expansion of the universe.) Thus it is the very idea of scale that succumbs to the principle of relativity,

and if there are extra-terrestrial worlds similar to the human, it is as reasonable to expect to find them in the world of micro-physics as in other galaxies. Not that this makes it any easier to make contact with them!

The existence of semiotic machines, therefore, corresponds to an intermediate phase in the de-territorialization process. 'Before' the sign (this side of it) the abstract machines remain the prisoners of stratification. 'After' the sign (with a-signifying machinic complexes) we leave the semiotic register to pass to the direct inscription of the abstract machines on the plane of consistency. 'Before' the sign there is a redundancy of pure stratified information. 'After' the sign, there is a de-stratified information, a de-stratifying diagrammatization – in other words a principle of transformation that repeats the relative de-territorializations, and opens up the intensive stratifications on the basis of the de-territorializing power of the sign machines. Between the two are the semiologies of significative redundancy, in other words all the systems that work to render impotent the intensive processes of de-territorialization. The stratified encodings – physico-chemical, biological, ecological, etc. – having collapsed one after another, de-territorialization has lost some of its weight. The strata are no longer hermetically separated; fluxes of intensive de-territorialization pass from one to another. Systems of double articulation of form–content redundancies represent an attempt at total shutting-off. But their only result is a relative de-territorialization, a stratification of form that will end by missing its main aim, which was to keep a tight rein on the potential creativity of non-signifying machines (military and technological machines, machines of writing, of monetary signs, scientific signs and so on). After the barriers of 'natural' de-territorialization, the next things to go will be those of 'artificial' semiological de-territorialization. This will mean the failure of all attempts to give things a representative nature, based on the worlds, and worlds beyond the worlds, of the mind as so many fortifications against the accelerating process of de-territorialization.

Information theory has tried to save the bacon of the semiologies of signification by defining significative redundancies as being in inverse proportion to the quantity of information – but this is no more than a rearguard semiological skirmish. In fact, the transfer of information belongs to a diagrammatic process that has no direct relation with the significative redundancies of human 'understanding'. 'Before' the signifier, redundancy and information came together in a process of intrinsic diagrammatization. 'After' it, diagrammatization starts off a process of unlimited trans-encoding. Between the two, however, signifying semiological stratification still has a vital part to play: for in fact the residues of a signifying process accumulate in the same ways as those of any other strata of encoding. Lines of interpretation, with their hierarchy of contents and lines of significance, with their carefully monitored expansion, become a kind of raw material for the

setting-up of non-signifying sign machines. The by-products of the signifier, figures of expression, pre-diagrammatic agencies, are essential elements of the engineering of accelerators of particle-signs whose de-territorializing power will be capable of breaking down the strata of encoding.

The organization of the living world first set up this sort of accelerator. At a certain level, multi-cellular organisms are still colonies or collections of uni-cellular organisms, living partly by a system of intra-encoding, and partly by trans-encoding. But trans-encoding, though limited by having to maintain those intrinsic encodings, is open to various cosmic intensive stratifications, which it expresses and rearranges. In this sense, it may be said to represent the starting-up of a primitive a-signifying semiotic machine. But we shall obviously have to make a radical distinction between this biological machine and the a-signifying machines of collective agencies of utterance. Indeed it is hard to say whether or not this is already in fact a *sign* machine. The signifying sign and the a-signifying sign depend on the operation of two other extremely specific types of machine: first, on this sort of accelerator of de-territorialization that carries it to the absolute in order to nullify it, and then on the 'semiotic processing factories' that convert that absolute de-territorialization into quantum form. It would be ridiculous to suggest that the same system of signs is at work at once in the physico-chemical, the biological, the human and the machinic fields. Only non-signifying particles, moving away from abstract machines, would be capable of such an exploit. The conditions in which they are produced remain extremely specific, depending on the achievement of machinic agencies with nothing universal about them. The signs of semiology and of almost all semiotics constitute strata like any others. Just as there are strata of elementary particles, of physical, chemical and biological elements, and so on, so there are semiotic strata, and strata of a-signifying machinisms that, in varying degrees, bring into play quanta of absolute de-territorialization. Consequently, then, though signs remain localized upon particular strata, abstract machines are, on the contrary, implicated in all strata.

De-territorialization is either categorized (in 'nature' or in the binary semiotic machines into which it is forced by the signifying-consciousness system) or set free by the non-signifying machines of the collective agencies of utterance. Depending on movement from one stratum to another, abstract machines will receive a greater or lesser degree of actualization and force. This degree of liberation corresponds to the degree of intensity of the de-territorialization.³ It is as though there were, at the 'beginning', a slow,

3. Two types of intensities must be distinguished, differential intensities as between different strata, and the absolute intensity of the complete organless body. Absolute intensity displays at once all the force of de-territorialization as such, and all its powerlessness to break away from the semiological de-territorialization of the signifying-consciousness system.

hierarchized de-territorialization in the intrinsic encodings, and then an accelerated de-territorialization by a kind of up and down process. At each peak of de-territorialization there is the emergence of an abstract machine followed by a fresh stratification. With the movement from one stratum to the next, the coefficient of acceleration of de-territorialization simply increases. The abstract machines speed up the process of intensive de-territorialization until the strata burst apart, thus crossing a threshold, a kind of 'wall of absolute de-territorialization'. If the de-territorialization rebounds from that threshold, we are still in the world of semiological impotentization (the signifying-consciousness system); if it gets across it, we move into the world of a-signifying particle-signs (agencies of collective utterance).

Subjectless Action¹

One can always replace any pronoun with 'it',² which covers all pronominality, be it personal, demonstrative, possessive, interrogative or indefinite, whether it refers to verbs or adjectives. 'It' represents the potential articulation of those linked elements of expression whose contents are the least formalized, and therefore the most susceptible of being rearranged to produce the maximum of occurrences. 'It' does not represent a subject; it diagrammatizes an agency. It does not over-encode utterances, or transcend them as do the various modalities of the subject of the utterance; it prevents their falling under the tyranny of semiological constellations whose only function is to evoke the presence of a transcendent uttering process; it is the a-signifying semiological matrix of utterances – the subject *par excellence* of the utterances – in so far as these succeed in freeing themselves from the sway of the dominant personal and sexual significations and entering into conjunction with machinic agencies of utterance.

One can always understand an I-ego underlying any pronominal function. A supposed utterer external to the language used is then taken to be making its imprint on the discourse, and that imprint is what is called the subject of the utterance. A flux of pure subjectivity transcends the statements made and processes them according to the dominant economic and social norms. This operation begins with a split in the 'it', the pretended discovery that 'it' contains a hidden *cogito*, a thinking I-ego. The elements of expression are taken over by an uttering subject. An empty redundancy, a second-degree redundancy appears alongside all the redundancies of expression. The phonic expression no longer evokes a gestural, postural, ritual, sexual, etc. expression. It has first to turn back upon itself, cut itself off from the collective desiring production, and become arranged on separate, hierarchized semiological strata. The splitting of the I-ego is the point of origin of systems of reciprocal articulation – double articulation – between redundancies of content and redundancies of signifying expression. The material and semiotic

1. Given at the 1974 Milan Conference, 'Psychanalyse et Sémiotique', 10/18.

2. The French is *il*, which means both he and it. The nearest approximation to this in English seems to me to be 'it', but readers will find this section clearer if they bear in mind that 'it' can be used to mean he, or it as a subject, or the indefinite 'it' of 'it is raining', 'it is true'. [*Translator*]

fluxes are made to fit a mental world constituted by being filled with mental representations that have been rendered powerless. Intensities fade away into echoes; machinic connections come apart; utterances no longer refer to anything but themselves and the formalization of the dominant discourse. The sign can no longer be linked directly with what it refers to, but must have recourse to the mediation of the signifying machine. The sign will always have to refer to the semiologies of the power machines, with their particular syntagmatic and paradigmatic coordinates, if it is to produce any effect at all upon reality. To constitute the semiology of the dominant order, the function of individuating subjectivation detaches and articulates two semiotic levels, the spoken word and the written word. While the polyvocality of the 'primitive' language is flattened out by the despotic formalism of a writing machine (a power machine inseparable from the territorial fixation of the nomadic military machine), 'primitive' writing machines as a whole fall under the control of a single official writing machine: the signifying machine of double articulation. The letter castrates the voice by dividing speech up into phonemes, and the voice mutilates the diagrammatic potential of an arche-writing by rearranging words according to meaning. The desiring intensities are thus governed by a world of mental representations organized around a fictive subject – a subject whose power is derived from rendering them powerless.

With this semiology, there is no longer any direct trans-encoding between one semiotic and another, nor therefore any surplus-value of encoding. The so-called semiologies of analogy, for example, become dependent upon the signifying semiologies of double articulation. Similarly with all the pre-signifying semiotics of perception – aesthetic, loving, economic and so on. There is no limit to the power to which the signifying semiologies lay claim; it covers all modes of encoding, even the a-semiotic ('natural') and a-signifying (machinic and artificial); the splitting of utterance comes more and more to infect and over-encode all semiotic elements. The totality of expression is thus emptied by a pure reflexiveness that creates a kind of imaginary Other World out of systems of formalizing now powerless contents directed both to 'natural' material fluxes and artificial machinic fluxes. The establishment of signifying subjectivation results in the 'it' of a personological triangulation, itself the result of repeated re-enactments of that first splitting of the I-ego.

The tools brought into operation by the arrangements of individuated subjectivation will become boomerangs. At one level, that of the individual and the person, they succeeded in nullifying desire in its relationship with material fluxes, with intensive de-territorializations. But they cannot prevent the molecular, sub-human, semiotic escape of a-signifying figures of expression from starting up a new desiring machine at a quite different level, and with a quite different power. The sudden, absolute de-territorialization that

broke desire up into subject and object has failed, despite its absoluteness, to abolish itself in the paroxysm of joy of a machinic consciousness that has truly broken all territorial moorings. (We do, however, find such consciousness without ties in certain extreme effects of schizophrenia, drugs, trances, etc.) Thenceforth these territorial remnants reorganize themselves into a-signifying particles; they will provide the raw material for a-signifying semiotic machines beyond the reach of the impotentizing attacks of the reflexive consciousness. In one sense, the Cartesians were right: the *cogito* does mark a radical escape from the system of coordinates of time, space and substance governing representation. But the *cogito* is still a fiction, for all that, a machine-fiction. The process of making conscious carries desire to such a pitch of excess, of irrecoverable final de-territorialization, of detachment from all reference-points, that it no longer has anything to hang on to, and has to improvise whatever expedients it can to avoid being destroyed in its own nothingness. It is not even a question of a binary opposition between being and nothingness, of all or nothing; consciousness is at once both all and nothing. The force of desire, at this blazing point of nothingness, wears itself out upon itself – a kind of black hole of de-territorialization.

From then on there are two possibilities: that of asceticism, of castration, or that of a new economy of de-territorialization with super-powerful sign-machines capable of coming into direct contact with non-semiotic encodings. Such sign-machines in some way take hold of the absolute de-territorialization of the representational consciousness and set it to work for artificial machinic forces – forces manipulating a flux of figures which become, in a new quantic form, the bearers of that absolute de-territorialization.

Rather than adopting Lacan's overdone opposition between *reality* and *the real*, I prefer to borrow Hjelmslev's terminology, and suggest that the alternative is between a *dominant reality* stratified by the various semiological substances of the content and the form, and 'non-semiotically formed' *intensive materials* (though let it be noted that being 'non-semiotically formed' does not imply for Hjelmslev that they are therefore 'scientifically formed').³

One can, then, distinguish several types of de-territorialization:

- an *absolute* de-territorialization, either in global form with the instance of consciousness, or in quantic form with non-signifying machines;
- an *intensive* de-territorialization, at the level of material fluxes;
- a *relative* de-territorialization, at the level of signifying semiologies and mixed signifying/a-signifying semiotics, whose aim is to secure control of the effects of de-territorialization by means of semiotic strata depending on the signifying machine.

3. Cf. Louis Hjelmslev, *Essais linguistiques*, Éditions de Minuit, 1971, p. 58.

To the three modalities of encoding, we can thus see three corresponding rhythms of de-territorialization:

– a *slow* de-territorialization, that takes place only by breaking through or getting beyond the strata built up earlier. But with each such break, time, the co-efficient of de-territorialization, speeds up. (One must in fact talk in terms of space/time interaction.) At this level it has become impossible to overcome the accumulation of heterogeneous façades, the stratification of encoding systems, or at least of what, within those systems, resists translation. The various coefficients of de-territorialization create relative fields of de-territorialization which themselves produce an intensive de-territorialization. The ‘semiological soup’ speeds up, so to say, and blocks off the entire ‘ecological/ethological/biological soup’, while this latter simultaneously conceals (though it does not destroy) the ‘physical/chemical soup’ . . . and so on. The relative intensities thus remain subject to a stratified mode of encoding (signals, figures, indexes that do not raise a specific semiotic plane – nervous stress, for instance, or the hormonal message). There is no translating from one stratum to another. There are surplus-values of encoding, without any significance, and all possibilities of diagrammatization are reduced to the minimum;

– an *absolute* de-territorialization, that accompanies the absolute loss of power, with a system of signifying signs;

– a de-territorialization of *heightened power*, with machinic systems of utterance, a kind of accelerator of particle-signs, which, in quantic forms, take possession of absolute de-territorialization in order to de-stratify both the machines of the plane of signifying expression and those of the plane of content-encoding.

One cannot get round the paradox of an absolute de-territorialization being transformed by discrete quanta into semiotic units without abandoning all attempts to explain how the capacity of machines of scientific, economic, artistic and other signs can intervene in the intrinsic encodings of material *agencements*. That there is this absolute de-territorialization in the economy of non-signifying signs is clear from two consequences it produces:

– the direct passage between sign fluxes and material fluxes in the process of diagrammatization (from absolute and quantic de-territorialization to the intensive de-territorialization of fluxes);

– the fact that non-semiotic agencies, on the one hand, and non-signifying agencies, on the other, cannot be broken down in a binary fashion. It is impossible, outside some structuralist illusion, to reduce them to minimal digitalized units. One can, of course, always translate any physical-chemical, biological, behavioural or economic process into the terms of a mathematical logic that can be reduced to systems of binary opposition and to an axiomatic syntax. But this will never provide an explanation of the real functioning, the

diagrammatic agencies that produce those processes, their capacity for de-territorialization, how they fit into the machinic phylum and the abstract mutations they effect on the plane of consistency. A diagrammatic particle-sign carries a quantum of absolute de-territorialization that puts it beyond the intensive de-territorialization processes of the material fluxes to which it is linked. The system of diagrammatic signs parallels real de-territorialization, performing its silent and motionless dance on the plane of consistency away from any machinic manifestation in time, in space or in substances of expression. It is as though the massive arousal of consciousness, in spite of – or because of – its impotence, had exploded its capacity for de-territorialization and collapsed into a black hole which then emitted fluxes of a new kind: a thousand sharp points of particle-sign de-territorialization. From human desire, now made impotent, there has emerged a kind of machinic superpower. The territorialized agencies of utterance and the individuated subjects of utterance will of course continue to burn themselves on this global absolute of de-territorialization and on this still threatening collapse of representation that they try to achieve by means, for example, of gods of some kind. They will try to tame the abstract machinisms, but at the molecular level they cannot prevent the quanta of possibility thus liberated from managing, sooner or later, to enter into direct contact with natural, economic, social and other encodings.

Faced with the danger of this upsurge of the nomad molecular fluxes, the signifying machine has to redouble both its means of defence and its efforts of impotentization. Today’s signifying subjectivity can no longer rest content with dealing merely with imaginary ghosts, phantoms, benevolent gods, perfectly adapted to fit the area of representation, as was that of the pre-signifying dispensation of primitive societies. The collective systems of re-enclosing, of re-territorialization, are held back. In a double twisting movement, the individuated subjectivity turns back upon itself in reaction to these molecular semiotic fluxes. Microscopic vision and hearing concentrate all the strata of meaning upon an ideal point of signifying subjectivation. It is no longer enough for subjectivity to annihilate the world globally; it must now take hold of every semiotic element with the forceps of double articulation of the planes of content and of form. It will have to take every utterance, wherever it comes from, and syntactize, morphologize, hierarchize and axiomatize it (cf. Noam Chomsky’s *Syntactic Structures*). All signs of intensive de-territorialization will be repressed by the system of relative de-territorialization of semiotic redundancies. Once an a-signifying machine has been ‘liberated’ – as for example the banking system of the Venice, Genoa, Pisa triangle in the Renaissance – it is immediately taken over by a double articulation machine that limits its effects by subjecting them in practice to the particular content system of an oligarchical society. The diagrammatic

the powerless world of representation and a subjectivation that can only, ever, lack reality. By 'lacking' it, I do not mean just not having it, but lacking in an active sense, in the sense that it is continually filled with a lack. The expression/content machine of the money/merchandise relationship of the mixed semiotics of the capitalist economy, for example, will infect all territorialities with its own specific axiomatics. The intensive multiplicities of economic and social production, having no other source of expression, will be obliged to accept these double redundancy systems of form and content, and the full organless body of the intensities will be broken apart by the system of surveillance of significance and subjectivation. The organless body can only survive as best it may by oscillating between emptiness and the fulness of a malignant tumour. The intensities will be surrendered to the organization, the hierarchy, the bi-polarity, the equivalence and the interpretation of the dominant values. The organless body of 'moving' will thus be entirely shifted towards the logico-sexual organization of a particular social order. Whereas the logic of the undetermined verb left all the possibilities of expression of the pre-personal fluxes open to the widest variety of institutional and political frameworks, the logic of the subject will produce a reversibility, an equivalence, a pronominal interpretation compatible with the fluxes of capitalism in terms of a grid of mutually exclusive opposites: inter-subjective *or* intra-subjective, sexual *or* non-sexual, masculine *or* feminine, within the triangle (I-you-he) *or* outside it. From the *material* logic of abstract machines, a logic that coincides with the unleashing of a de-territorialization process, we have moved over to an *axiomatized* logic whose coordinates of signification retain only what helps to preserve the dominant social order.

This repressive axiomatization established by signifying semiologies with the pronominal function is only one example. The same sort of process dictates the entire organization of the language – syntactic, morphematic, semantic, connotative, rhetorical, poetic. All systems of strata, all systems of stratified double articulation (including those of mixed semiotics), contribute to this same work of controlling, or what we may call 'semiologizing', the multiplicities. In every case the aim is the same: the diagrammatic flux of a-subjective statements has to be transformed into a subjective I-ego flux in such a way as to particularize, formalize and substantify every situation, and to stratify each of its ramifications – economic, sexual, aesthetic and so on. A general subjectivity, which establishes a dominant mental reality permanently cut off from all the real intensities, permanently guilty in law, will affect all forms of semiotization, and will always have to be seen as exterior and attributable to personological functions, by way of the system of semiological double articulation. Qualitatively, everyone should in theory be equal before the flux of this subjectivity. But quantitatively, each will receive a share commensurate with the place he or she occupies where the various formations

of power intersect. In law, we are all subjects – not necessarily the subjects *of* the signifier, but at least subject *to* Knowledge, Power, Money. But the shares in this kind of subjectivity are in fact radically different, depending on whether one is a child, a member of a primitive society, a woman, poor, mad and so on. The 'it' arose out of quanta of absolute de-territorialization by way of abstract dances of particle-signs following intensive material processes. In the I-ego economy, on the other hand, power switches towards relative de-territorialization; absolute de-territorialization is made to work towards its own impotence by the operation of systems of redundancies of awareness whose efforts are directed to systems of mutually exclusive, binary oppositions. Whereas the 'it' shaped a machinic force of action semiotically without passing any judgement upon the value of the non-it, the slightest manifestation of an I-ego is over-determined by a whole set of social stratifications, hierarchical positions and power relationships.

Machinic Propositions¹

The production of utterances by territorialized agents had in itself a certain diagrammatic effectiveness, a certain semiotic grasp of material and social energies. But this was as yet no more than a diagrammatism controlled by the functioning of the territorial group as a whole, intended to compartmentalize it in the same way as any other machinism capable of setting to work on its own account. As utterance becomes individuated, the diagrammatism will become differentiated, specialized; whereas from the language point of view it becomes impoverished and fades, from the point of view of sign machines it can only develop and expand. There are thus three semiotic areas:

(1) that of the sciences, technology and the economy, which is constantly being acted upon by diagrammatic machines that function from mathematical and algorithmic utterances;

(2) that of the languages of authority, the languages of bureaucracy and religion, whose diagrammatism is entirely directed to controlling the residual semiotizations of desire;

(3) that of spoken languages, where the various strands of de-territorialization and territorialization of the other two areas come together. Thus the work of purging and impoverishing territorialized languages imposed by the fluxes of capitalism tend to result in setting up two quite distinct types of meta-languages of 'judgement' or over-encoding:

– algorithmic meta-languages that express statements of scientific judgement supported by a rigorously controlled and controlling logic, whose role is to impose and guarantee a certain content of 'universal' truth in the utterances they produce.

– bureaucratic meta-languages that express statements of authority, whose role is equally to impose and guarantee a certain content of 'universality' in the significations and formalizations they produce.

Truth and authority can thus be considered as formations that replace the organless bodies of territorialized semiotics. The despotic syntactization of the semiotics in the sphere of praxis, and the semiotization of the power machines in the sphere of the socius thus combine their effects so as to define,

1. Unpublished.

concentrate and accelerate the diagrammatism of what used to be the territorial machine. These formalization machines that can modify existing structures are concentrated in the hands of a power formation that dominates the 'scribe' caste. But that operation can be carried out only if the process it involves is deemed to be a universal one: hence the role of de-territorialized monotheism, and of the unity of the transcendent power – science, reason, legitimacy or whatever. Truth must be 'universal' if people are to accept and interiorize the particular power formation that controls the sign machines responsible for linking formalizations of expression with the dominant formalizations of content. The idea that statements as such can be the bearers of formalization, of universal information, is the same as the idea that a value of universal exchange can be derived from the circulation of market commodities. The split between 'surface' statements and the fundamentals of logical truth develops out of a method of transcendentizing the signifier particularly dear to the hearts of scientists; this is in fact part of the basis of their organization as a caste, of what differentiates them from other groups. No longer is it from a despot, or a despotic social formation, that the utterance of truth proceeds: underlying all the writings, all the realities of power, there is a profound truth levelling up the logical fabric of the signifying chains. Political truth is not just something produced by society; the values of desire, 'discoveries' of a completely arbitrary kind, all these are reinforced by Truth existing in itself. The language of science, like that of capitalism, considers itself – as pure discourse – to be the exclusive repository of the forces of diagrammatism it brings into action. Yet really, by definition, diagrammatism *cannot* be concentrated into a single semiotic stratum: it is always trans-semiotic. If a diagrammatic relationship is established between a system of utterance and a material or social machinic system, it is not because of any formal similarities or correspondences. What happens is that the diagrammatism involves the *same* inner machinism within both systems – an abstract machinism of positive de-territorialization.

Denying the existence of propositions that transcend linguistic utterances and machinic forces is only one aspect of a more general denial that there is any universal formal law. Diagrammatism brings into play more or less de-territorialized trans-semiotic forces, systems of signs, of codes, of catalysts and so on, that make it possible in various specific ways to cut across stratifications of every kind. Thus there can be no question of any self-existent Truth. A proposition is true in a particular machinic field; when any material or semiotic machine changes things, it will cease to be true. Truth is what is happening now. It stops when the machinic connections are broken. Consequently, there are as many logics, or as many dimensions of logical truth, as there are types of engagement. In other words, to search for some universal propositional logic underlying all of scientific discourse is to follow a mirage.

Propositions of judgement relate to all the different types of utterance machine. I prefer, therefore, to talk of machinic propositions. Linguistic statements are not to be compared with the values of universal truths, but with specific combinations of machinic propositions (that is, of abstract machines). In recognizing the truth values of the referent, Meinong² came to try to escape from a simplistic alternative between existence and non-existence: ideal objects, he said, subsist (*bestehen*) without necessarily existing (*existieren*). He also suggests a third way of being, the *ausserseiend* of the pure object 'beyond being and non-being', and a fourth, an *n*th kind of being that can be attributed to an object by successive negations.³ But his battle with the 'prejudice in favour of the real' does not lead him on to attack the illusion that there exists some universal being transcending all contingent manifestations. I, on the other hand, prefer to start from the idea that there are as many modes of existence as there are modes of activity and machinic propositions. To ask whether the object of intentionality has a real reference is absurd. What is 'underlying' linguistic utterance, perceptive semiotization, etc., is an abstract machine to which the coordinates of existence (space, time, substance of expression) do not apply. This object, at the heart of the object, is not situated in some kind of heaven of representations: it is both 'in the mind' and in things, but outside all coordinates. As a de-territorializing machine it cuts across the coordinates both of language and of existence. It is neither a mental object nor a material one.

This being so, there is no occasion to consider 'degrees' of existence or 'degrees' of truth. *Everything exists, and everything is true*: the unicorn exists in one particular stratum of machinic propositions and one particular system of discourse quite as much as the horse or the dinosaur exist in others. The organless body of existence, the existence of the pure object beyond being and non-being, is not an undifferentiated universal category. It is the point of all abstract, machinic differentiations without coordinates (the plane of consistency). The intensive multiplicities, 'before' being caught in the movement of coordinates of existence from one stratum to another, constitute an abstract matter of pure differentiation.

The functioning of machines, therefore, cannot be reduced either to logical/mathematical articulations, or to stratified manifestations that we should have to explore with the aid of some phenomenological 'science'. Instead of logic and phenomenology, what is needed here is a science of *machinics* – in other words a system of arranging machinic propositions that cannot be reduced to logical/mathematical statements or the realms of phenomenology.

2. Alexius Meinong (1853–1920), a pioneer in object theory. His most important works are: *Über Annahmen* (1902), *Hume Studien* (1877–92), and *Über Gegenstände höherer Ordnung* (1899).

3. Léonard Linsky, *Le Problème de la référence*, Seuil, 1974, p. 34.

Machinic propositions have no hierarchy: they do not start from the simple and work up to the complex. There is complexity in their most elementary stages, and their totalities may well function in an elementary way. 'Machinics' is not based on universal principles, nor does it postulate any transcendent law. The object is not to establish a machinic logic, but only to grasp the way phylums and rhizomes function. Since the strata where they appear are inseparable, machinic propositions keep cutting across them, establishing highly differentiated lines of escape (lines of positive de-territorialization). These, in return, will become a foundation for coordinating them in space, time and substance (coordinates of negative de-territorialization). Machinic propositions cannot be 'simplified' or 'reduced' like mathematical formulae or logical statements. But when they are not re-absorbed into a black hole of positive de-territorialization, or formed into a network of lines of escape unrelated to any strata, they accumulate to form residual blocs that provide the raw material for constructing strata. We thus pass from a system of latent quanta, inherent in the lines of escape, to a stratified construction in which the lines are arranged to fit together in a system of multiple articulation. In the first, virtuality, continually fluctuating with the threat of a black-hole-style abolition, ensures the possibilities of openness and rearrangement represented by the line of escape; in the second, the quanta are rearranged in blocks (infinite–limited–discontinuous) in systems of articulation from stratum to stratum. Discontinuity among the strata replaces the intensive quantic regime (finite–contiguous–continuous–unlimited).⁴ We have, then, to consider a twofold stratification: a molar, visible stratification, relating to matter, life, sign machines, etc., and a transversal, molecular stratification that captures the energy of de-territorialization, and forces it to spin round on its own axis rather than letting it escape, in effect like a black hole. So, all the processes of de-territorialization – absolute, relative and so on – will have in one way or another to adjust to the state of stratification of machinic propositions, since there is no way of making the fluxes *not* have been stratified as they have been; thus, unlike the abstract machinism, this is a *fait accompli*, a subjection to events for the machinic phylum which we shall later compare with the function of concrete machines. In the last analysis, at the level of machinic agencies in action, the distinction between abstract machine and stratification disappears: it is as though the positive de-territorialization of the abstract machinism and the negative de-territorialization of the stratum-to-stratum articulations neutralize one another without there being any question of a 'dialectical synthesis'.

4. Cf G. Deleuze and F. Guattari, *Kafka: pour une littérature mineure*, Éditions de Minuit, 1975.

Positive de-territorialization; negative de-territorialization

Considered 'independently' of the strata, then, and only at the level of lines of escape and stratum-to-stratum engagements, de-territorialization has a positive and a negative nature.

Positive de-territorialization corresponds to a sheer black-hole effect, to an absence or abolition of coordinates (one can distinguish between a line of escape for the absence of coordinates and a line of abolition for their de-territorialization, but this very distinction shows that one cannot consider positive de-territorialization apart from strata: in effect, the line of abolition implies strata, and the line of escape is always a line evading strata). Unlike this intrinsic de-territorialization, negative de-territorialization is differential, establishing systems of determinants and substances of expression. Out of the mutations of its quantic system, positive de-territorialization constructs *one* abstract machinic reality, a single reality accountable to nobody; whereas negative de-territorialization constitutes *the* concrete, stratified reality based upon its systems of connection, interaction, encoding, reproduction, etc.

But the contrast is still too clear-cut. In point of fact, positive de-territorialization enters in varying degrees into the constitution of the propositions of coordinates and substances. There is a positive de-territorialization of space at the level of astro-physics and particles, while, at our level, time represents a positive process of de-territorialization. It is just that we never have any contact with that time and space in the initial stages except via the machines of expression that deal with intensive material, substantifying it in the business of subjectivizing and stratifying semiotization (concrete machines of symbolic semiotics, signifying machines, the machinism of authority and so on).

A brief résumé of some machinic propositions

- A. Fluxes
- B. Strata
- C. Object-species totality

A. FLUX PROPOSITIONS

Proposition 1 – Positive de-territorialization

This is found in its pure state in the black hole. But it is a basic component of propositions of intensive flux (line of escape and line of abolition). In reality, positive de-territorialization is not 'yet' a proposition – but that does not mean that it is an anti-proposition: it exists as much before as after any propositionality.

Proposition 2 – Positionality machines

These demonstrate the impossibility of black holes as a proposition of existence. Positive de-territorialization cannot exist apart from the machinic propositions that negate it. The first pro-positional agency that connects these two types of de-territorialization is the *extensive flux*. At the level of systems of stratification, machines of positionality will later be specified as propositions of interaction, of crystallization, of catalysis, of moulding, of reproduction, of diagrammatic effect and so on.

Proposition zero – or 1 – Intensive fluxes

This proposition, an anti-dialectic paradox, should be presented before those relating to de-territorializations, even though it can exist only in association with machines of extensive propositionality. The intensive fluxes constitute the channel of negotiation of positive territorialization for the other propositions.

Proposition 3 – Abstract machines

These represent the peculiar mode of quantic organization of the positive de-territorialization of the intensive fluxes. The negative de-territorialization of the positionality propositions (proposition 2) is thus 're-positivized'. Positive de-territorialization is quantified and put into operation in the fluxes and strata according to machinic formulae that cut across and overtake the system of coordinates and substances. (There is, obviously, no necessary link between one proposition and the next, but only a machinic action. Thus what was, at the level of proposition 2, for example, determination by negative positionality, determination by encoding, by the creation of lack, by objectivation, by representation, etc. – all of which appeal to much 'later' propositions of stratification – gives way to the return of sheer positive de-territorialization. There is thus no *Aufhebung*; proposition 1, in connection with the propositions of stratification, functions as an abstract machine of breaking off and innovation without preserving any of the 'gains' of de-territorialization. From the standpoint of positive de-territorialization, there is never any established gain, but only the residuum of machines and strata.)

Abstract machines can equally be defined, much later on (see proposition 17), as resulting from the conjunction of several processes of positive de-territorialization, which implies the possibility and autonomy of certain processes.

Proposition 4 – The nature and speed of de-territorialization

De-territorialization is positive and absolute in the case of black holes, quantic in the case of lines of escape, negative, continuous and differential in the case of relationships among strata, and non-existent in the case of the organless body of the stratifications. The speed of de-territorialization also brings into play propositional components that would only enter the scene 'later' in a dialectical phenomenology – in other words stratifying determinations. For the relationship

$$\frac{\text{negative de-territorialization}}{\text{positive de-territorialization}}$$

will be totally different both in nature and in rhythm according to the strata within which it operates (strata of energy, biological strata, semiotic strata and so on).

There will be a positive speed when an action becomes relatively de-territorialized, and a negative one when it is relatively re-territorialized. In the latter case, it is as though positive energy were spinning round on its own axis, and the organless body of the stratum would then be functioning as a kind of anti-black hole, while the plane of consistency could be defined as the area where positive de-territorializations might happen.

B. STRATA PROPOSITIONS

Proposition 5 – The meeting points of intensity

These constitute the points of return, of oscillation between the propositions of positive and of negative de-territorialization. These 'knots' underlie the strata, or more precisely the negative de-territorializing power of the strata, in as much as they force the positive de-territorializations to become statements of abstract virtuality.⁵

Proposition 6 – Redundancies

This brings us to the second-degree knots of intensity that compose the actual fabric of the strata. We can distinguish three levels of stratification:

- (a) The molecular level of the meeting-points of intensity;
- (b) The level of molar redundancy: the organization between the meeting-points, which produces an inter-stratum entity turned in upon itself, an anti-black hole (for example, concrete machines, distinctive feature of 'face-ness'.)

5. Virtuality here becomes 'secondary' in relation to the strata propositions.

- (c) The level of lines of residual de-territorialization, which will serve as coordinates or as a possible connection – either by way of a line of escape, or by way of a line of abolition.

Proposition 7 – Interactions

These represent the reverse of redundancies. From them, the stratifications of the fluxes can be polarized in terms of zones, of a field, an object, a constellation and so on.

In stratified, negative de-territorialization, the opposition between redundancy and interaction represents a reinforcement of the opposition in level A (flux propositions) between positive de-territorialization and negative de-territorialization 'in the pure state'. The propositions of interaction and redundancy will relate to one another differently according to their respective pace of de-territorialization.

The interaction of negative speeds of interaction and negative speeds of redundancy corresponds to a 'cold' stratification (for example, palaeolithic society).

The interaction of negative speeds of interaction and positive speeds of redundancy produces lines of abolition or lines of return (for example, a fascist rhizome: whereas economic and material factors become 'reified', the organless body of the socius is positively de-territorialized, so that the whole thing becomes hollow inside).

The interaction of positive speeds of interaction and negative speeds of redundancy produces lines of escape (for example, capitalistic societies that become re-territorialized and archaic in proportion as they are de-territorialized).

The interaction of positive speeds of interaction and positive speeds of redundancy produces machinic actions which get beyond the opposition between redundancy and interaction (a revolutionary society that will function on the basis of flux and schiz).

As we shall see further on (proposition 17), the abstract machines will also be defined as a rapid system of connecting up fluxes, for the relation between abstract machine and machinic agency operates around the 'effective' taking over of the strata.

C. PROPOSITIONS OF TOTALITY, OF OBJECT AND OF SPECIES

Proposition 8 – Polarizations

These result from the counter-effect of machinic interaction propositions on systems of stratified redundancy. We talk of polarization when speeds of

de-territorialization pointing in opposite directions coexist in any given agency. Bi-polarization is one example of this, but there can be an indefinite number of thresholds of speed from which polar zones emerge.

Proposition 9 – Breaking-off

The effect of a redundancy relating to polarized forces.

Proposition 10 – The arenas

These result from the counter-effect of breaking-off propositions relating to polarized strata.

Proposition 11 – Totalities, objects and species

These result from the counter-application of a breaking-off proposition – second-degree breaking-off – to fields which thereby take on a referential position.⁶ A system of specific – stratified – coordinates is then set up; the double articulation becomes a defined reality. This brings us back to the point we started from: the analysis of different modes of encoding and semiotization.

Proposition 12 – The effects

These are the reverse of object propositions. We return to the homologies referred to earlier between

- (1) positive and negative de-territorialization at the level of the fluxes;
- (2) interactions and redundancies at the level of the strata.

But here we have a further factor of inertia, of second-degree stratification. Objects, totalities, species reproduce themselves on their own through processes of moulding, catalysis, crystallization, etc., whereas the intrinsic redundancies of the strata were inseparable from the extrinsic interactions among the strata. With *effects*, a new formalism is stratified, a new principle of stratification is established. The form and organism and so on of this proposition will have a certain kind of retroactive effect on the 'origin' of the strata.

Proposition 13 – Processes

This refers to effects involving a link with an escape line of positive de-territorialization.

6. Concrete machines establishing relationships along the lines of surface/depth, organ/organism, etc.

Proposition 14 – Encodings

These result from the interaction of strata whose speed of de-territorialization is negative and which bring into operation effects of objects and totalities.

Proposition 15 – Encoded reproductions

These are a system of redundancy that results in the production of species functioning on the basis of a negative de-territorialization.

Proposition 16 – Diagrammatic processes

These result from the conjunction of strata propositions with object propositions having de-territorializing speeds of opposite tendencies, dominated by positive escape lines and leading to the production of objects, totalities or species with two characteristics:

- (1) they are reproduceable;
- (2) they themselves constitute a fresh stratum that is more de-territorialized than the strata and objects of the original organization.

Here we once again find the paradox of the linking of propositions into a rhizome: the diagrammatic reproduction in fact appears to depend on the encoded reproduction, despite being more 'innovative' and 'creative', because the surplus values of encoding remain dependent on the strata. But there have to be stratum and object propositions if the positive de-territorialization of the diagrammatic processes is to introduce its semiotic mutations into the machinic agencies – and vice versa. Nor must we forget that 'diagrammatism' is to be found just as much outside semiotic encodings (in genetic mutations, for example).

Proposition 17 – Abstract machines

These result from the conjunction of positive processes of de-territorialization.

Thus, abstract machines have a twofold origin: a 'natural' origin at the level of propositions of flux (no. 3); and an 'artificial', diagrammatic origin, at the level of propositions of object (no. 16), which 'implies' their being extended over all the systems of stratification.

In reality there is no 'before' or 'after'; like diagrammatism, the abstract machines cut across the systems of coordinates, of strata and of objects from all directions.

Concrete Machines¹

What is it that is operating in what one sees as the *features* of a face, a landscape, a body? How do we account for the mystery of a particular look, a thing, a street, a memory? What is actually there to see seems to be concealing something else. What sort of line of escape gives us the sense that some extraordinary encounter might occur? What exactly are these potentialities of some other world, operating by different rules, different codes? The entry of memory into perception is undoubtedly vital in this effect of 'mysterization'. Memory combines de-territorialization and re-territorialization. On the one hand it selects specific features of representation, and on the other it reassembles a whole that can be presented as one thing, on which one can take one's stand, so to say, yet which is in fact wholly subjective and, in a sense, will never be able to elude us as reality has. Memory's lines of escape are always false ones, images of escape, escapes to play at being afraid.

Some memories take on special weight, acquiring the function of matrixes, a function of organizing the mode of subjectivation; it is these that we classify as the features of faciality, animality, bodiliness and so on. In fact, memory here is not quite a single whole, because it operates at the level of things themselves; it might be better to talk not of memory but of block: a childhood block, unlike a childhood memory, is still in the present. The features of faciality, animality etc. form constellations or masses which are machines of the kind that actualize the intensities. I want to describe all these various kinds of blocks generally as concrete machines.

The function of these machines, at least those that operate in terms of symbolic semiotics, is to associate two types of redundancy:

(1) Redundancies of representation that underlie the semantism of images and of the syntagmatized paradigms of signifying semiologies.

(2) Diagrammatic redundancies that put the de-territorialized elements of sign machines to work on reality itself. An example of this would be the blueprints – the physical and mathematical specifications – for Concord: what is noted at the semiotic register is the de-territorialized articulations of the various things that go to make up the aircraft – aluminium, electrical

fluxes, semiotic fluxes as expressed materially and so on. But such a blueprint is only of interest in so far as its articulations are sufficiently de-territorialized and can be made to correspond with the de-territorialized articulations of the materials of expression. Diagrammatization consists in this interchange, at the most de-territorialized level, between these two sorts of de-territorialization. If the high points of de-territorialization of the semiotic systems are to be able to combine with those of the material systems in this way, the relevant features of the materials of expression involved – their raw materials, we might say – must be compatible with the nature of the articulatory features of de-territorialization of the material field. The semiotic level of expression must be able to 'support' the type of machinic consistency of the material (or social) system, and not abandon it in any way. To take a simple example: you cannot make a mould for a key out of just anything – you need a particular kind of wax; if you were to try doing it with mashed potato, you could not hold or transfer the diagrammatic outline that makes the key what it is. If you want to reproduce that outline on paper you need a brush that is not too broad, and ink that is neither too thin nor too thick. In other words you must choose materials of expression suited to the features of the machinism you want to transfer. Diagrammatic redundancy thus depends, on the one hand, on the de-territorializing articulations of the various material and semiotic strata that are to be connected together (aluminium, steel, information, equations, etc.) and, on the other, on the capacity of the materials of expression to use, to activate, to organize that system of connection.

What I have called the redundancies of representation do not function on the basis of such diagrammatic conjunctions, nor do they work for any and every machinic agency. For instance, a picture or a portrait organizes no machinic conjunction between the element of de-territorialization of the subject reproduced in it and the material of expression; a portrait always adds something to its model, as well as transforming its materials into the substances of expression. A picture produced by a computer, for example, would be very different: it would correspond to a convention, quite independent of the 'creative' idea of the person who programmed it; in this case anything added would be superfluous, for the ideal of such a diagram is to allow for the least possible inertia on the part of the means of expression, and to transmit a message basically reduced to a binary encoding. In diagrammatism, semantic or signifying residual substances either of the object or of the means of expression are always superfluous. Semanticism or significance will be tolerated only temporarily, and the expectation is always that they will be reduced with the advance of technological and scientific progress.

The concrete machines of actual faces, scenery, etc. bring both types of redundancy into play (redundancy of representation and of diagrammatism).

1. Unpublished.

They relate to mixed semiotics; they activate a negotiation between different semiotic and material registers. At the level of the plane of consistency, that negotiation is made possible (possibilized) by abstract machines; at the level of real forces, it is organized by concrete machines. Just as one may say of consciousness that it represents the impossibility of absolute de-territorialization, so one can now define abstract machines as indicating the impossibility of any quantic, positive de-territorialization.² Abstract machines exist not in some transcendent reality, but only at the level of the ever-present possibility that they may appear. They represent the essence of the possible, a possible whose only impossibility is to exist as a substance. Similarly, one cannot think of a substance of de-territorialization, or a dualism between being and becoming.

Faciality as a concrete machine demonstrates the impossibility, in the field of representation, of any *becoming* independent of the formalism of contents. Contents are nothing apart from power formations, apart from the diagrammatic operators that function in particular stratifications. The features that compose a face present a real micro-authority. One might even say that in capitalist systems, based on signifying stratifications and stratifications of subjectivation, no authority could be established without these machines of 'faciality'. A capitalist does not have power in a general sort of way: he controls a specific territory, a specific factory, in a particular country, and in each one he depends on a certain number of those transformers of signification – concrete machines.³ In each of these situations, the dominant facial features – those of the mother, father, teacher, cop, judge, pop-star, boss, etc. – determine the possible survival of the other, more 'archaic' concrete machines: the being of animals, scenery, etc. which are connected with the deep-seated territorialized forces of action belonging to childhood, the countryside, primitive societies and so on. Establishing these concrete authority machines is the only means whereby a capitalistic system can tolerate, and turn to its own advantage, the lines of escape inherent in the development of productive forces and the de-territorialization of production relations. Its power as icon would be nothing without the diagrammatic potency of those re-territorializing concrete machines.

Concrete machines diagrammatize the strata; they are the point of interaction between abstract machines and the strata of power. The various *becomings* of desire – homosexual becoming, child becoming, growth becoming, etc. –

2. Thus, not totally seriously, one could define consciousness as being the organless body of the abstract machines, as opposed to the plane of consistency which cannot be defined either as the totality of all totalities, or as the organless body of the organless bodies.

3. Revolutionary analysis must be particularly concerned with detecting and neutralizing the re-territorializing effects of the concrete machines that make people attached to hierarchies, male dominance, individual ownership, a clinging to dependence, etc.

are obliged to proceed by way of these non-abstract machines that are hierarchized in such a way as to make some kinds of becoming depend on others, particularly the machines of invisible becoming of Oedipal guilt, and of female becoming in relation to the sexed body. How does this hierarchization of the concrete machines become apparent? Both by the conjunction of machinic propositions at a molecular level, and that of the capture and interlinking of extremely varied lines of escape at a molar level. Concrete machines do not in fact belong specifically to the molar or the molecular order, any more than do abstract machines, precisely because they represent the possibility of articulating the two. A concrete machine does not belong to a particular stratum, but indicates possible politics of inter-stratification. It presents a practical 'either-or': either an action will close in and become stratified, or it will open out onto diagrammatic lines of escape. The concrete machine opens up the possible, either in the form of signifying circles, centred perhaps on the features of faciality, or in the form of post-signifying spirals that let the lines of escape go off at a tangent. In the first case, the concrete machine develops heavy, figurative territorialities, operating on at least two dimensions; in the second, it disperses a de-territorialized line in particle-signs that tend to elude the dimensions of time and space altogether. Consider the practice of transcendental meditation now so fashionable in the United States: we may find it developing into an organless body opening desire out onto an a-signifying outside world, or, equally, closing in upon a signifying activity that alienates individuals in line with the values of authority. In most cases transcendental meditators are doing both things at once. (It is worth noting in passing that the signifying text of a ritual does not necessarily require the existence of a written text like the Buddhist scriptures; it can just as well be a 'spatialized text', like that of the Japanese tea ceremony.) In Hitler's fascism, for instance, at a molar level, there were concrete machines – military, police, aesthetic, etc. – managing the conjunction of a longstanding, indeed an archaic, stratified authority with abstract machines that were still 'feeling their way' along highly de-territorialized paths: thus such modern themes as State capitalism and science came paradoxically to be associated with completely regressive ideas like 'rapacious Jews taking over the world', 'purity of blood' and so on. Similarly, we can see the conjunction between Stalin, the little father of the people, Ivan the Terrible, and the running of a bureaucratic planned State. The concrete machines metabolize the conjunction of semiotic, material and social fluxes independently of the relationships of causality or genealogy that may belong to the various strata redundancies. Things can thus be happening on several different levels at once. One can say of Louis-Ferdinand Céline, for instance, that his writing had nothing to do with fascism and everything to do with it. It had nothing to do with it in that his machine of literary de-territorialization was part of a set of abstract

machines, of a phylum of literary expression quite unconnected with the political and social battles of his own day; and it had everything to do with it in that it was only because of a particular concatenation of identifying characteristics, especially racist ones, that his literary machine existed at all (for instance, the role of the concrete machines of familialism and the workers' movement in his writing). Consequently, it is not a matter of our having to make a distinction between good facial features operating, for instance, as sign-points, and bad ones operating on a more territorialized iconic mode; one can find fascist re-territorializations in both kinds.

Let us make a further distinction: redundancies of representation can be micro-redundancies or macro-redundancies.

In any signifying stratum, the totality of local expressive redundancies relates to the macro-redundancies of the effects of signification. A signifying stratum cannot directly engender lines of escape, unless it is on the way to destruction. In the case of symbolic semiotics or non-signifying semiotics, it is different. There is not the same type of centring or encircling. Pre-signifying symbolic semiotics are territorialized around a multiplicity of centres, forming a kind of semiotic segmentalization in which no one of them is pre-eminent, whereas a-signifying (post-signifying) semiotics escape the systems of territorialization and of binarized linear encoding. Thus, neither subjects the lines of escape to a system of centring that would over-encode them and turn them into outside lines that could be projected onto systems of coordinates. The line of escape is part of the territorialized diagrammatism or the machinic diagrammatism in just the same way as the other elements of the rhizome. For instance, the line of escape of a madman in a primitive society is part of the territorialized collective force of utterance. The line of escape of an unexpected activity on the part of a particle which is out of line with the theoretical/experimental organization is part of the development of science. Thus concrete machines are established directly from the lines of escape without going by way of the particular mediations and over-encodings of the systems of signifying semiotics – especially not the second-degree systems of signification. We can therefore contrast concrete machines that metabolize lines of escape diagrammatically with those that re-territorialize a signifying authority. At every level, then, concrete machines will be the negotiating point between the diagrammatism of the active forces and their falling back into systems of analogy, significance, etc. That negotiation will constitute the concrete politics of de-territorialization: either the formation of de-territorializations is organized under the domination of a quantic, diagrammatic de-territorialization; or else it will end in an empty re-territorialization, in the form of an empty consciousness, a facelessness, that over-encodes all the becomings of desire and is expressed in a transcendent, monotheistic God, perhaps, or the abstract Lady of courtly love, or a system

of general equivalence of money capital. The great, supposedly symbolic, operators of second-degree signification – the Signifier, Capital, the Libido, etc. – never exist in themselves, but operate only in dependence on concrete machines. Thus, it is not enough to say that a certain form of de-territorialized monotheism, of the type codified by St Paul and St Augustine, is to be seen in relation to the influx of capitalism that appeared after the first industrial revolution of the twelfth century. One must also note the production of new significations, of new interpretative coordinates at the level of the accompanying constellations of characteristics, the things that actually made the system go in one direction rather than another: with the Desert Fathers, there was a risk that it would disappear altogether in pursuit of the spiritual; with other heresies, the son was territorialized at the expense of the father; at another time, it had to choose between seeing Mary as mother of God or mother of humanity; at another, the decision had to be made not to venerate images of Christ for their own sake; and so on. It was via all sorts of concrete micro-political 'negotiations' of this kind on the part of the theological machines that there came to be defined the right to life, the possible survival of animal-becoming, child-becoming, female-becoming, body-becoming, all the intensity-becomings (of music, for example) and so on. The macro-redundancies of capitalistic representation can never be validly described in terms of a single dualistic logic – based, for instance, on the symbol of the phallus. The phallus became a general operator of authority only to the extent that it remained dependent on collections of actual realities, 'masses' of events, produced by concrete machines – and the same can be said of all the other part objects of psychoanalysis.

The reason for considering concrete machines is that they should make it far harder for us to try to describe history in terms of significations, above all of significations similar in nature to a particular level of a major power formation. What one has to examine here is the whole genealogical perspective; indeed there is probably no genealogy that can account for madness, illegalism, shutting up children and so on without reference to concrete machines that came into being independent of the relationships of molar forces, concrete machines existing independently of large-scale balances of power, of the diachronic implications of the machinic phylum in the sphere of the economy, of demography, of war machines, etc. Would it be legitimate to believe that one particular poetic madness, one molecular folly, might have originated the diseased strain of courtly love? You may object that this is not a vital problem, or perhaps that the time was ripe for the thing to happen. But surely it is at the level of such individual madness, and at that level only, that we can hope to discover the links, the inter-relationships among the various concrete machines that have metabolized the significations of the period, as much in terms of the literary, the erotic and the aesthetic as of the military, the

technological or the architectural. To describe the machinic rhizomes would make it impossible to split up homogeneous strata at the molar level. Is it reasonable to suggest that at every period, systems of concrete machines infiltrated the perceptive semiotics, sensitivity, memory and so on in such a way as to cause the socius to crystallize human relationships in a particular way? What concrete machine led the collective perception to hold that not merely are all men equal – and women too – but that all stages of human development are equal as well? Whence come the systems of overall equivalence of men, women, children – an equivalence which, incidentally, has merely reinforced the dependence of women on men, of children on adults, of the primitive on the civilized, etc.? What sort of molar machine has enforced the setting-up of libidinal equivalences as between useful work and useless activity, value in desire and value in use, value in exchange and value in desire, and the rest? At the level of macro-redundancies, power would be nothing without the diagrammatic operators that empty the micro-redundancies of their substance and make them work against de-territorializing connections. (To take an example: the way the emotion of love was puerilized in the romantic era, coinciding with a loss of childhood for children themselves, as they were massively swept into schools and factories.) Capitalism's general interchangeability of values is achieved by means of non-abstract machines. Its homogenizing of personological areas has been inseparable from the homogenization it has effected in the infra-personological area, at the level of molecularizing the concrete machines. Indeed it is only this that has prevented its development from collapsing under the weight of the contradictions that should – according to Marx – lead it inexorably to destruction. The power of the bourgeoisie over the working class is not just a general relationship between two classes; it operates from the countless molecular points of authority established by those concrete machines, as they 'negotiate' the various modes of de-territorialization and manipulate both molecular multiplicities and mass stratifications.⁴

To sum up: concrete machines coincide with the existence of a twofold articulation of strata:

- in the meta-strata, the lines of escape and the abstract machines of the plane of consistency, they realize the possibility inherent in quantic positive de-territorialization;
- in the inter-strata, they stratify a differential negative de-territorialization.

The abstract machine – or diagrammatic condenser – draws together the code, the quantic positive de-territorialization, and the flux, the differential negative de-territorialization, and thus in a sense must be thought of as

4. Thus concrete machines can be said to be molar in their stratifying aspect and molecular in their diagrammatic de-territorializing aspect.

existing prior to differentiations of fluxes and encodings, and to differentiations among natural, symbolic, signifying and a-signifying codes. My distinction between macro-redundancy and micro-redundancy, in the specific instance of semiotic encodings, in fact covers that of signifying semiotics and symbolic semiotics, but we shall go on to use it in a more general way, applying it to the totality of a-semiotic formed matter; its main interest will then consist in the problem of whether the effect of diagrammatic concrete machines can be transferred outside the particular case of non-signifying semiotics to which we have up to now restricted it.

It goes without saying that the foregoing considerations in no sense imply any primacy of the molecular over the molar economy at the level of concrete machines. Indeed, though it may be necessary for a very powerful molecular machine to exist (a revolutionary movement, say) in order to produce a diagrammatic line of escape within a molar stratification, it may on the other hand be necessary for a vast molar concrete machine to be set up to produce the tiniest diagrammatic effect (such as a poetry machine). Most of the time, in any case, such 'effects' will work in both directions: for example, the whole of La Borde must function as a concrete machine in order that, at a given moment, some peculiarity, a way of taking a cigarette or of handing someone a dish, can relate to the level of conjunctions effected by psychotics' modes of semiotization. Conversely, however, those same psychotics must be able to function as concrete machines to make La Borde the kind of *agencement* that it is. To produce a concrete machine, then, can involve tremendous forces, a kind of semiotic Pierrelatte extracting from territorialized ore the de-territorialized molar substance upon which in turn the production of de-territorialized molecular particles depends. A productive force can thus be considered as much from the viewpoint of what it specifically produces as from that of its macro-scope organization.

There are always two aspects to the presentation of a face: one turned towards micro-redundancies, open to a rhizomatic deployment of semiotic systems, and the other towards redundancies of representation, which is where connections can always be effected with the hierarchy of power formations – the actual face one sees then becoming equivalent to the public presentation of the face of authority. That public face is a mask, for the true face of power, in a capitalist system, is ashamed, and must keep hiding the hollowness of its principles; it has to clothe, to represent, to produce analogies for the diagrammatism it territorializes in an arbitrarily chosen system of class and caste. This contradiction accounts for the fascination of the figures of the judge, the cop, the teacher and so on, and the mystery of their diagrammatic counterparts – the thief, the prostitute, the delinquent. The key to the mystery of the face presented by capitalism and the individuation of subjectivity is undoubtedly the way it is continually oscillating between the

revelation of an invisible binary-phallic power and the wild explosion of desire in all directions that follows the disruption of the old territorialities. It is not a question of two 'facialities', but of two aspects of a single concrete machine that pushes desire to the extreme of abolishing all 'faciality'. All that is preserved of the face is the barest minimum of redundancy that will keep the system functioning; an artificial face is continually being reassembled by the media. But the system is under threat on all sides from an invisible *becoming*; this in itself represents the final point of fascination, capturing all the energy of desire and making it a desire for annihilation. Why are the machines of 'faciality' essentially bound up with the individuated mode of subjectivation? Why are they not linked to animality, or some mode of creating bodiliness? The diagrammatism of territorialized agencies tends to reconstruct territories, or emblems (like those on tee-shirts, an updated version of tattoos), whereas the production of facial features is an operation that produces de-territorialized signifying formations. The relevant elements of the presented face are there to enable the system to gain semiotic control of individuals, to connect them with a decoded flux of work. The face is never recognized as a multiplicity or a territorialized emblem, but only in that it makes it possible to universalize the significations of power – significations of general human equivalence. The animal totem, the tattooed body, was not a way into a universal language like that of the exchange economy. With 'faciality', the distinctive features of the face and body are used to serve a specific mode of diagrammatism that de-territorializes whole constellations of desire machines and connects them up with production machines. The face is *par excellence* the substance of expression of the signifier. We may say here that the human profile is like the outline of a key: what matters is not its unique characteristics, but the effectiveness with which it unlocks the code. Capitalist 'faciality' always exists to serve a signifying formula; it is the means whereby the signifier takes control, the way it organizes a certain mode of individuated subjectivation, and the collective madness of a machine that creates consciousness without any content, and of a *becoming* that cannot be perceived. Consequently it is impossible to think that the written word could have any function at the level of the body: before there was a face, there were features of bodiliness, a syntax of bodiliness; after the face, we come to an invisible becoming, a blurring, a sense of shame over the bodily elements which are now merely tolerated as left-overs, since the essence of the laws of Power are based upon the interpretable elements of a script.

Meaning and Power¹

The structuralists' ideal is to be able to capture any situation, however complex, in a simple formula – a formula that can be expressed in mathematical, axiomatic form, or handled by a computer. The modern computer can handle extremely complex problems, for instance it can 'formulate' a picture. The question is whether that picture is not fundamentally different from the images we perceive in the 'natural' world. The picture produced by the computer has been reduced to the state of a binary message, a formula that can be transmitted in the same way as electricity; it has lost all the depth and warmth, all the possibilities for re-organization, of the original. It seems to me that the reductions of the structuralists produce a similar result. What they give back to us is comparable to a kind of technocratic vision of the world; it has lost the essence of the background from which it came. By 'essence', I mean all that relates to desire. Whatever the complexity of the situation it is looking at and of the way it proposes to formalize it, structuralism assumes that it can be reduced by a system of binary notation, to what is called in semiotics digitalized information, which can be transferred to the keyboard of a typewriter or a computer. The human sciences think to acquire scientific status by following what was the path of the pure sciences. (As for example when mathematics sought to make itself totally axiomatic by making algebra, topology, geometry, etc. all dependent on one and the same fundamental logic, a single basic writing.)

Linguistic analysts, by analysing all the different sounds and signs, have tried to produce a series of symbols capable of encompassing the structure of all languages – but in fact all they end up with are the features shared by language in general. The life of the language – what it means, and how we use it – eludes such formalization. In the realm of psychiatry, too, people have for a long time been proposing the use of scientific descriptions, systematic tables of symptoms and syndromes, but what happens in real life never quite fits in with this sort of classification. There are too many borderline situations: one can never say for certain whether one is dealing with a hysteric with certain paranoid features who behaves not unlike a schizophrenic, though there is an

1. A talk given at the Douglas Hospital, Montreal, first published in the review *Brèches*, Montreal, 1976.

element of the depressive; and so on, *ad infinitum*. It is one thing to analyse a structure; it is a very different matter to put forward a structuralist philosophy, a structuralist interpretation that can account even for the movement of objects, for power relationships, political situations and investments of desire. Obvious, one would say; yet it is precisely this that Freudians do, and frequently Marxists too, when they talk of unconscious structures or economic structures. They would have us believe that they have found the definitive atomic formula, and that henceforth all they need do is to intervene with an interpretation or a word of command based upon that structure, that formula. This would give them considerable power and importance. I think our answer must be that their structures exist not within things, but *alongside* them. The structural approach is one praxis among others, but perhaps not the most fruitful or the most effective.

It is a question of re-defining the problem of meaning and signification – not as something imposed by heaven or the nature of things, but as resulting from the conjunction of semiotic systems in confrontation. Without such a conjunction there can be no meaning. One type of meaning is produced by the semiotics of the body, another by the semiotics of power (of which there are many), yet another by machinic semiotics – which are those that use signs that are neither symbolic, nor of the order of the signifying systems of power. All these different sorts of meaning are continually intertwining without its ever being possible to say that they represent universal significations.

One may say that there are two types of political conceptions relating to desire. On the one hand, formalist reasoning seeks clues from which to gain access to its interpretation, to a hermeneutic; on the other, an apparently mad reasoning starts from the notion that universality is to be found in the direction of singularity, and that singularity can become the authentic basis for a political and micro-political organization that is far more rational than what we have at the moment.

Let us take as our starting point the example of the patient Carlo Sterlin has told us about. Three months before her birth, there was pregnancy vomiting by the mother; at six months, she developed food allergy; at three, widespread eczema; at six, problems at school; at twenty, attacks of anxiety; at thirty, non-specific vaginitis; at forty, she attempted suicide more than once. Different semiotic components would seem to have been at work at each stage of this clinical history. In the case of the mother's vomiting, the disturbance was expressed not by a localized subject, but was passed from one person to another – like the old saying that when the parents drink the children get drunk. I should say that this is a case of a semiotic organization taking over from a symbolic functioning. Such symbolic semiotics do not involve a distinguishable speaker and hearer. Words do not play a major part, since the

message is carried not via linguistic chains, but via bodies, sounds, mimicry, posture and so on.

Food allergy at six months. I cannot define the difference between the semiotic elements involved in this allergy and those involved in the mother's vomiting, but one thing seems clear: in the case of the allergy they become far more important. From birth, noises, sensations of heat and cold, of light, of contact, of one face responding to another, have begun to form the child's world. It remains to be seen why that new world should stay attached to her skin – is it that she is refusing to enter it, or to have anything to do with it?

At six years old, school problems. These obviously relate to the use of language in some way – not just language in general, but the language of the teacher, of adult power. Many people's future fate is sealed in primary school. There is no need to administer an IQ test to predict in advance that some children will never go to university. The school machine makes its implacable selection. We are now in the realm of signifying semiotics, for with school, the child becomes subject to social laws that did not touch upon such things as vomiting and eczema. One could not reasonably punish a child for having eczema – but no one thinks it wrong to punish her for being unable to get her sums right. A series of micro-social powers takes shape – family, school, local authority – eventually the State power. Any therapist who took no interest in the child's everyday life, at home and in outside relationships, and concentrated only on pure structures, pure signifying chains, complexes, supposedly universal phases of development, would be simply refusing to see the essence of what was happening at the level of reality and of the economy of desire.

At twenty, attacks of anxiety. These could be schizophrenic syndromes that manifest themselves only at a certain point in one's life. Some psychoanalysts nowadays claim to have found schizophrenics at the age of three or four. I do not see how anyone can make such a diagnosis before puberty. The semiotic factors in puberty (new impressions, anxiety towards the unknown, social repression and so on) are enormously affected by such syndromes, and analysis should therefore be directed to considering the power formations that correspond to them: the high school, technical school, sports club, leisure arrangements, etc. At this point a whole new facet of society threatens to clamp down upon the desire of the adolescent, cutting her off from the world and leading her to turn in upon herself.

At thirty, non-specific vaginitis. Once again, the level has changed, and it is undoubtedly marital problems that are in the forefront.

At forty, attempted suicide. This involves her in the whole apparatus of medical power, police power, religious power.

This is a very summary survey of the main directions an analysis must take: the uncharted continent of power formations, in other words the unconscious of the socius itself rather than the unconscious buried in the folds of the

individual's brain, or expressed in stereotyped complexes. The analyst cannot be neutral towards those power formations. For instance, he cannot rest content with acting as a specialist discovering the allergies that cause eczema. It is the whole attitude of specialists that needs questioning, the whole politics of interpretation based on prefabricated codings. To analyse specific elements when dealing with an essential micro-political problem (which by definition cuts across a number of quite different areas) is not just a matter of form: it involves, first and foremost, the practice of what I should define as a micro-politics relating both to the object of study or therapy, and to the desire of those who conduct the analysis.

The structuralists' formalism is reductionist in nature when it comes to the relationship it establishes between what it calls profound structures and manifest structures. Particularly so in the case of the linguistic double articulation, which consists on the one hand of a system of signs that have no meaning as such (phonemes, graphemes, symbols), and on the other, of chains of discourse that convey meaning (monemes, etc.). It seems that for them the formal level takes control of the significations, in some way engendering or producing them. But significations do not come from heaven, nor do they arise spontaneously out of a syntactical or semantic womb. They are inseparable from the power formations that generate them in shifting relationships of power. There is nothing universal or automatic about them.

In an attempt to clarify the status of the various encoding systems, whether or not they pass by way of signs in the sense defined by students of semiotics and linguistics, I suggest a series of distinctions whose entire aim is to identify the practical functioning of what I would call *sign machines*. In reality, however, one is always dealing with an interweaving of several such systems, with a mixture of semiotics. I believe first of all that one must be careful not to confuse natural encodings with semiotic encodings.

This first distinction should prevent our accepting the somewhat magical resemblances that structuralists tend to see between language and 'nature', which rest ultimately on the notion that one could gain control over things and society simply by gaining control of the signs they set in motion (like going back to the ancient madness of witches and cabbalists, with their statues and Golems). Of course there is a sphere where signs have a direct effect on things – in the genuine experimental sciences, which use both material technology and a complex manipulation of sign machines.

But what I should like first to do is to refer again to the distinction proposed by Hjelmslev between the material of expression and the substance of expression. It is the conjunction of different materials of expression that has changed the pragmatic bearing of the message. Is eczema formed scientifically or semiologically? Does non-specific reactive vaginitis, at particular stages of its development, have as its major component the signifying semiotics of

the social environment, or the intervention of an a-semiotic encoding that depends on viruses, bacteria, etc.? How much relates to social situations, to relationships of power, language, money, kinship? To suggest that the signifier is everywhere (and that consequently interpretation and transference are effective everywhere) is to miss the fact that each of these encoding components (whether semiotic or not) can gain power over the situations and objects confronting us. On the contrary, I believe that one should not be dogmatic about which mode of access has priority. Such priority can emerge only from analysing each particular situation.

We thus already have our first distinction between sign machines that function by constituting an autonomous semiological substance – a language – and those that function directly as a 'natural' encoding, independent of language. Perhaps it would be more correct here to talk of signals rather than signs. The difference between a signal, a hormonal signal for example, and a linguistic sign lies in the fact that the former produces no signification, engenders no stable system of redundancy that would make it possible for anyone to see it as identical to any representation.

We then come to a second distinction. The signifying system is punctuated by signified representations and by the objects to which it refers; linguists tell us that the relation between signifier and signified is an arbitrary one. Nevertheless, there are types of signs that sustain a relationship of analogy or correspondence between themselves and the representations they signify: these are called icon signs. An example of these is the symbols on road signs, which do not involve the operation of a linguistic machine. Experts in linguistics and semiotics have gradually come to consider that icons, or diagrams, or any other pre-verbal means of expression (gestural, etc.) are dependent upon the signifying language and are only imperfect means of communication. I believe that this is an intellectualist assumption that becomes extremely shaky when applied to children, the mad, the primitive or any of those who express themselves in a semiotic register that I would classify as a symbolic semiology.

Symbolic semiologies include dance, mime, somatization of feelings (having a nervous breakdown, bursting into tears), all means of expression that take an immediate, and immediately comprehensible, form. A crying child, whatever its nationality, is making it clear that it is unhappy without the benefit of a dictionary. It has been suggested that such symbolic semiotics should be seen as depending on linguistic semiotics, on the ground that one can only decipher, understand and translate them by using language. But what does that prove? Just because we use an aeroplane to travel from America to Europe, we do not say that these two continents are dependent on aviation. All sorts of peoples have survived – and some still do – without signifying semiotics, and in particular without a written language. Their

system of expression (in which words are in direct interaction with other forms of expression – ritual, gestural, musical, etc.) has certainly not been any the poorer for that. It is arguable, in fact, that some peoples resisted the coming of a written language (just as they resisted the intrusion of some forms of technology) because they feared that such a signifying system would destroy their traditional way of life and mode of desire. Children and the mentally ill often express the things that matter most to them without reference to signifying semiologies. Experts, technocrats of the mind, representatives of the medical or academic establishments will not listen to such forms of expression. Psychoanalysis has worked out an entire system of interpretation whereby it can relate everything whatever to the same range of universal representations: a pine tree is a phallus, it symbolizes order and so on. By imposing such systems of interchangeability these experts take control of the symbolic semiologies used by children, the mad and others to try to safeguard their economy of desire as best they can. But the signifying semiology of the ruling establishment will not leave them be: it tells them: 'This is really what you wanted to say. You don't believe me, but that is probably because I am expressing myself badly. I'll go on adjusting my interpretation until I can get you actually to accept the principle that all your symbolic expressions are universally translatable.' For the psychoanalyst, it has now become a crucially important question of power: all expressions of desire must be made to come under the control of the *same* interpretative language. This is his way of making deviant individuals of all kinds submit to the laws of the ruling power, and it is this that the psychoanalyst specializes in.

This brings us to the problem of the relation between signification and power. All stratifications of power produce and impose significations. In certain exceptional circumstances people manage to escape this world of the dominant signification – for instance, a person recovering consciousness after electro-convulsive therapy wonders where he is, but then, in a series of jolts, crosses back over the threshold of significations. He remembers his name, and gradually fits back into place all the different aspects of signification of the world.

People resort to alcohol or drugs in an attempt to cross this threshold of dominant significations in the opposite direction. But what exactly is this threshold, this crossing point of all the various systems of redundancy, encoding and signs of all sorts? What is it that we put on every morning when we get up – identity, sex, profession, nationality and so on? That threshold consists of the re-centring of the various components of symbolic expression (the world of gestures, sounds, bodies), of everything in the economy of desire that is threatening to break out on its own. 'Come on now, pull yourself together. There you are, in this particular marriage, this particular job. You

are responsible for your own actions. There are all sorts of things you can do, starting with fucking up yourself and everything around you . . .' Signification is always an encounter between the formalization of systems of values, of interchangeability and of rules of conduct, by a particular society and an expression machine which in itself has no meaning – which is, let us say, a-signifying – that automatically produces the behaviour, the interpretations, the responses wanted by the system.

The system of double articulation, introduced by Martinet, masks the profound disparity between the formalization operating at the level of content and that operating at the level of form. At the latter (which Martinet calls the level of the second articulation), the sounds, the systems of distinctive oppositions or the a-signifying figures of Hjelmslev, form an extremely effective machine, what I would call a diagrammatic machine, that seizes upon all the creative operations of language and imprisons them in one particular syntax. At what he calls the level of the first articulation, of written words, sentences, semantic and pragmatic interpretations, there takes place the conjunction, the re-centring and the hierarchization of all power formations so as to organize a specific type of equivalences and of significations. The linguistic machine is there to systematize or 'structuralize' those power formations; it is basically a tool for the use of the law, morality, capital, religion, etc. From the first, words and phrases get their meaning only by way of a particular syntax, a rhetoric that is territorialized upon each of these local power formations. But only the use of a more general language that over-encodes all these local languages and dialects makes it possible for a social and economic state machine to seize power at a more totalitarian level. It is to the extent that the two kinds of formalization (that of the linguistic machine as an a-signifying machine, and that of power formations as the producers of signified content) become interlinked via a signifying language that we get a meaningful world – that is to say a realm of signification in harmony with the social, economic and moral coordinates of the ruling power.

Structuralists, especially American structuralists, are not interested in social origins underlying the formalization of significations, and claim that they arise from profound semiotic structures. It is hard to say where they think the meaning comes from – it seems to have landed out of the blue. Let me say again that meaning never comes from language as such, from profound symbolic structures or the mathematics of the unconscious. Meaning is determined by very real social power formations that can be identified by anyone who cares to take the trouble to do so. Suppose I come into the room wearing a long gown: in itself it means nothing, but if I am doing it to show that I am a transvestite it does mean something. If everyone else present is also a transvestite, there is no problem; but if, say, a conference of clergy wearing cassocks is taking place, then it will have quite a different meaning.

In a mental hospital, it could be interpreted differently again: 'He's not too well today – wearing a dress again.' In other words for a man to wear a skirt means one thing if he is a judge or a priest, another if he is a lunatic, yet another if he is a transvestite. Signification is always inseparable from the power position. Suppose you were to bring your shit to someone on a dish: ordinary people would find it meaningless and disgusting, but to a therapist it could be a good sign. It would represent a gift, or an important message which the psychoanalyst would unfortunately tend to adapt to fit his own system of interpretations ('He's trying to explain his transference, I am his mother, he is regressing . . .', etc.).

In modern societies (be they capitalist or bureaucratic socialist), all symbolic semiologies are centred upon the educating of the work force. This is a process that starts in infancy: we set ourselves very early on to do battle with the child's own logic and methods of semiotization. The child is continually being driven from side to side by contradictory power systems, starting with his own power over himself, his gifts, his own feelings, his wish to run, his wish to draw – all of which are in contradiction with his wish to become an adult. On top of all this there are the constraints that burden the power relations of the family and indirectly burden him too. There is a whole maze of contradictory powers through which the child must thread his way in order to develop his own semiotic components of desire, to discipline them, to bend them to the direction decreed by the signifying semiologies of the dominant power – in other words, to castrate them. Sometimes the entire system shatters, and there is confusion, panic, neurosis, the visit to the psychiatrist and all the rest.

The third distinction I have suggested is between signifying and a-signifying semiotics. Following Charles Sanders Peirce, semioticians have concluded that the system of images (icons) and the system of diagrams should be brought together under a single heading, since for them a diagram is no more than a simplified image. But an image represents at once more and less than a diagram: an image reproduces a great many aspects that a diagram does not include in its representation, while a diagram includes – far more precisely and efficiently than an image – the articulations whereby a system operates. In my view, therefore, one must separate the two, placing the image alongside symbolic semiotics, and making diagrammatism a semiotic category on its own, a category of a-signifying semiotics – which is of the utmost importance because it is what we see at work in the world of the sciences, of music, of the economy and elsewhere. A-signifying, or diagrammatic, semiotics produce not redundancies of signification, but machinic redundancies (these are what linguists refer to when they talk of relational significations). To explain what he means by a diagram, Peirce gives the example of a temperature curve, or, at a more complex level, a system of algebraic equations. The signs function in place of the objects they relate to,

independently of any effects of signification that may exist alongside them. This is as though the ideal would be for diagrammatic sign machines to lose all their natural inertia, to give up all the manifold values that can exist in symbolic systems or signifying systems: the sign becomes so refined that there are no longer thirty-six possible interpretations, but a single designation with an extremely precise and rigid syntax. In physics, for instance, one can always create for oneself one's own representation of atoms or particles, but such a representation would not figure in scientific semiotization.

Non-signifying semiotics can bring into play systems of signs that, though they may incidentally have a symbolic or a signifying effect, have no connection with that symbolism or signification as far as their specific functioning is concerned. Symbolic semiotics, like signifying semiotics, derive their effectiveness from their dependence on a particular a-signifying machine. It should be made clear that non-signifying sign machines in every sphere tend to elude the territorialities of the body, of space, of the power of society, and the complexus of significations that they contain. They are in fact the most de-territorialized of all. For example: a child wakes up and complains of feeling ill, whereupon his mother concludes that he does not want to go to school. Then, changing key, she decides to call the doctor – who alone can actually say, 'Your child is not to go to school.' She has shifted first from a symbolic semiology operating at the level of the child's body to a signifying semiology at the level of familial power, and then on to a further level where a power machine steps in with formidable social and technical effectiveness. At each of these shifts, one territoriality has been abandoned for another that offers greater scope for non-signifying sign machines. A diagrammatic machine, the presumed science of the doctor, dissolves the diagrammatic machine of the power of the school, which has already partly overridden the power of the family.

The whole fabric of the capitalist world consists of this kind of flux of de-territorialized signs – money and economic signs, signs of prestige and so on. Significations, social values (those one can interpret, that is) can be seen at the level of power formations, but, essentially, capitalism depends upon non-signifying machines. There is, for instance, no meaning in the ups and downs of the stock market; capitalist power, at the economic level, produces no special discourse of its own, but simply seeks to control the non-signifying semiotic machines, to manipulate the non-signifying cogs of the system. Capitalism gives each of us our particular role – doctor, child, teacher, man, woman, homosexual – and it is up to us to adapt ourselves to the system of signification arranged for each of us. But at the level of real power, it is never this type of role that is at issue; power does not have to be identified with the director or the minister – it operates in relationships of finance and force, and among different pressure groups. A-signifying machines do not recognize

agents, individuals, roles or even clearly defined objects. By this very fact they acquire a kind of omnipotence, moving across the signification systems within which individual agents recognize and become alienated from one another. Capitalism has no visible beginning or end.

There is no moment when we are not encircled by power formations. In our societies people must not gesticulate overmuch; we must each stay in our proper place, sign on the dotted line, recognize the signals we are given – and any failure may land us up in prison or hospital. Rather than looking upon the schizophrenic as someone who is paralysed inside his own body and needs to be looked after, it might be better to try to see (rather than interpret) how he functions in the social situation he has to contend with, and what are the transversal, diagrammatic problems he is facing us with. It is not a matter of aping schizophrenics, playing at catatonics, but of discovering how a mad person, a child, a homosexual, a prostitute, etc. shifts the components of desire about in the social arena while we, the 'normal', take care to let well alone. What does it matter to us whether dramas of a symbolic (pre-significant) order or a post-significant order are being acted out in the body of a lunatic, a child or anyone else? Is it our job to 'adjust' such people so that they fit into the world, to 'treat' deviance? What do we mean when we talk of treating a schizophrenic? One wonders whether it is more a matter of his being there to challenge us than of our being there to look after him. When I talk about 'us', I do not just mean us as individuals (though, in fact, if you have a discussion with a schizophrenic soon after a family quarrel, you find yourself starting to think on quite different lines – a therapeutic experience), but 'us' as the whole social context. The schizophrenic is floundering in a world in which relationships of signs, or productions of signification, far outstrip our individual madnesses and neuroses.

Causality, Subjectivity and History¹

1. History and the Signifying Determination

Misconceptions about the subjectivity of history arise from the fact that one tends without noticing it to pose the problem of a subject – whether to affirm or deny that there is one – as the subject that produces utterance of discourse and actions relating to history, rather than envisaging it simply as the subject of utterances as we receive them. That there is a subject of history is not in dispute; it is the subject that is constituted by, and remains the prisoner of, repetitive structures, signifying chains wound back around themselves. The working class, for example, as alienated subjectivity, becomes the class of class words – in other words the class of utterances, producing, in a given area of historic utterance, significations for such terms as ‘class’, and ‘class struggle’ – whereas it should bear within it the historic destiny of *abolishing* the division of society into classes. Indeed, in a certain time and place, there is a special way in which the word is spoken, a reinforcement of the stress, so that the word itself takes on a particular class. In the workers’ movement the word ‘class’ used currently as an abbreviation for ‘working class’ is pronounced quite differently from, say, a class at school.

Every mode of thought thus has its own initiatory code of metonyms, with particular meanings given to ‘Party’, ‘the Old Man’, or even ‘44’.² We might take as a starting point something Lacan said in his first Seminar of 1965–6: ‘One need only say in passing that, in psychoanalysis, history is a different dimension from that of development, and that it is a mistake to try to identify

1. Sections 1, 2 and 3 all summarize lectures with the discussion that followed each one. The first two were given to the ‘Theory Committee’ of the FGERI (Federation of Institutional Study and Research Groups). In October 1965, some dozen groups, working along the lines of institutional analysis, federated within the FGERI: they consisted of about three hundred psychiatrists, psychoanalysts, psychologists, nurses, academics, teachers, urban studies people, architects, economists, members of cooperatives, film-makers and so on.

The CERFI (Centre for Institutional Study, Research and Training), a member of the FGERI, publishes the review *Recherches*, and a series of *Cahiers de recherches*; the CERFI also commissions various public and private bodies to produce specialized studies (on plant, cooperation, health, education and so on).

2. The ‘Old Man’ could apply equally to Lenin, Stalin or Trotsky; 44 rue Le Peletier in Paris is the headquarters of the Communist Party Central Committee.