The Social and Semiotic Stratum

Deleuze and Guattari finally reached the "third" and most discussed "grouping of strata": the social and semiotic one. They immediately rejected its definition "by a human essence" and proposed to define it, like the other main strata, as generated "by a new distribution of content and expression" (p. 60). In this stratum, content (the myriad human bodies with their technological extensions), which in the organic stratum (the myriad cells) knew only of mere reproduction, became both transformer and transformable, while expression, which was limited to the implementation of genetic code, became linguistic, that is, operating "with symbols that are comprehensible, transmittable, and modifiable from outside." Instead of benefiting from the imaginary stability of an essence, the social stratum was therefore defined on both sides content as well as expression, populations of human bodies and tools as well as populations of symbols as modifiable.

Form of content becomes "alloplastic" rather than "homoplastic"; in other words, it brings about modifications in the external world. Form of expression becomes linguistic rather than genetic; in other words, it operates with symbols that are comprehensible, transmittable, and modifiable from outside. (A Thousand Plateaus, 1980, trans. B. Massumi, 1987, p. 60)

To support their claim, Deleuze and Guattari discussed André Leroi-Gourhan's (1911-1986) ground-breaking book Le geste et la parole. Vol. 1 Technique et langage (1964) [1]. What the French archaeologist and paleoanthropologist called "the properties of human beings," mostly "technology and language," and the bodily features related to them, "free hand and supple larynx, 'gesture and speech,'" were in fact only "properties of this new distribution" of expression and content (p. 60). But, at the same time, Leroi-Gourhan's study gave us "an understanding of how contents came to be linked with the hand-tool couple and expressions with the face-language couple" (p. 60).

Here we must make a new parenthesis. Leroi-Gourhan's book had been largely acclaimed, throughout the 1960s and 1970s, as a state-of-the-art reconstitution of the origins and history of man. He first dismissed the idea that humanity was based on "the size of the brain," as had been shown "by the discovery in Kenya in 1959 of the remains of Zinjanthrope, a large Australopithecinian accompanied by his stone implements" with a "very small brain" (p. 18). The development of the brain was only "secondary" and occurred very "late" in the human phylogeny (p. 19). The criteria "common to all humans and their ancestors" derived, according to him, primarily from "erect posture," which had resulted from deforestation and life in a new milieu, the steppe. This new posture had freed the hand and provoked both the reduction of the face and the absence of fangs. Freedom of the hand and change in the face, by making it possible and imposing it as well as a necessity, had triggered the development of tools and simultaneously, most probably very early, the development of language.

Based on physiological evidence linking hand and facial organs in the same brain areas and on neuro- and psychological evidence concerning the involvement of gesture in language, Leroi-Gourhan claimed that language was "as characteristic of humans as [were] tools, but also that both [were] the expression of the same intrinsically human property," which he did not define yet.
A link therefore exists between the hand and the facial organs, and the twin poles of the anterior field attest their equal participation in the construction of communication symbols. [...] To put it another way, humans, though they started out with the same formula as primates, can make tools as well as symbols, both of which derive from the same process or, rather, draw upon the same basic equipment in the brain. This leads us to conclude, not only that language is as characteristic of humans as are tools, but also that both are the expression of the same intrinsically human property, just as the chimpanzee's thirty different vocal signals are the precise mental counterpart of its use of several sticks to pull down a banana hanging overhead—in other words, no more a language than fitting the sticks together is, properly speaking, a technique. (A. Leroi-Gourhan, *Gesture and Speech*, (1964), 1993, trans. Anna Bostock Berger, pp. 113-114)
Although he recognized that there was no direct evidence to prove it, based on the neuro-physiological evidence and also on the pragmatic need to use language to transmit technology, he suggested that tools and language had probably originated at the same time, that is, already by the oldest *Australopithecinae* known in his days (1.75 million years).

There is little hope of ever recovering the living flesh of fossil languages. One essential point that we can establish, however, is that as soon as there are prehistoric tools, there is a possibility of a prehistoric language, for tools and language are neurologically linked and cannot be dissociated within the social structure of humankind. [...] Throughout history up to the present time, technical progress has gone hand in hand with progress in the development of technical language symbols. [...] The organic link appears to be strong enough to justify crediting the Australopithecinae and the Archanthropians with language at a level corresponding to that of their tools. Where comparative studies of tools and skulls tell us that the rate of development of industry corresponded to that of biological development, language must have been very primitive indeed, but it undoubtedly amounted to more than vocal signals. (A. Leroi-Gourhan, *Gesture and Speech*, 1964, 1993, trans. Anna Bostock Berger, p. 114)

By way of consequence, the difference between animals and humans was not related to the number of tools and vocal expressions they could use, which could be quite a few in certain species of ape. Due to lack of evidence, whether record of speech or study of the larynx of prehistorical men, Leroi-Gourhan did not take into account the articulation of human language. This difference depended, with respect to tools, on the capacity of humans to "anticipate the occasions for their use" and to "preserve" them, and with regard to words, to "symbolize" concepts with words and to "memorize" them, instead of simply responding by practical means or by vocal signals to an external stimulus. Just as tools were meant for future uses and carefully preserved, words were memorized and available for ever new uses. Psychologically speaking, humanity was based on intentionality and memory, from behavioral viewpoint on purposeful action and preservation of means.

The characteristic trait of the "language" and "techniques" of the great apes is that they are resorted to spontaneously in response to an external stimulus and are just as spontaneously abandoned, or fail to appear, if the material situation triggering them ceases to exist or does not occur. The making and using of choppers or bifaces must be ascribed to a very different mechanism since the operations involved in making a tool anticipate the occasions for its use and the tool is preserved to be used on later occasions. The same is true of the difference between signal and word, the permanence of a concept being comparable to that of a tool although its nature is not the same. (A. Leroi-Gourhan, *Gesture and Speech*, 1964, 1993, trans. Anna Bostock Berger, p. 114)

Still free of the semiotic excesses of the 1970s, Leroi-Gourhan fell short of claiming that words were like tools and that tools were kind of words, but he noticed that production of tools and production of language were based on similar operative chains organized "by means of a 'syntax'" that necessitated memory and elaborated neurological processes.
Techniques involve both gestures and tools, sequentially organized by means of a "syntax" that imparts both fixity and flexibility to the series of operations involved. This operating syntax is suggested by the memory and comes into being as a product of the brain and the physical environment. If we pursue the parallel with language, we find a similar process taking place. (A. Leroi-Gourhan, *Gesture and Speech*, (1964), 1993, trans. Anna Bostock Berger, p. 114)
Leroi-Gourhan concluded that tools and language had probably developed, from the *Australopithecinae* to us, in a strictly parallel manner from very elementary to highly complex forms.

On the basis of what we know of techniques from pebble culture to Acheulean industry, we could adopt the hypothesis of a language whose complexity and wealth of concepts corresponded approximately to the level of those techniques. The language of *Zinjanthropus* with his single series of technical actions and small number of operating sequences, would then have had a complexity and wealth of symbols scarcely greater than that of the gorilla's vocal signals, but, unlike the latter, it would have been composed of already available and not totally determined symbols. The operating sequences of the Archanthropians with their doubled series of actions and their five or six different tool forms were already much more complex, and the language we may credit them with was considerably richer, though probably still limited to expressing concrete situations. (A. Leroi-Gourhan, *Gesture and Speech*, (1964), 1993, trans. Anna Bostock Berger, p. 115)

Contrary to most of his colleagues until recently, Leroi-Gourhan claimed that Neanderthals (130 000?40 000 years ago) had most probably already a language similar to ours. [2]

The early Palaeoanthropians were the direct inheritors of this situation, but their possibilities became gradually extended. The exteriorization of nonconcrete symbols took place with the Neanderthals, and technical concepts were thenceforth overtaken by concepts of which we have only manual operating evidence: burial, dyes, curious objects. This evidence, however, is sufficient to establish with certainty that thought was being applied to areas beyond that of purely vital technical motor function. The Neanderthals’ language probably differed only slightly from language as we know it today. (A. Leroi-Gourhan, *Gesture and Speech*, (1964), 1993, trans. Anna Bostock Berger, p. 115)

As a matter of fact, Neanderthals were able not only to form operative concepts used “during the performance of activities” but also concept used “for post facto transmission of the action in the form of narratives” and finally “to express sentiments of a less precise nature, of which we know with certainty that they were to some extent religious.” He suggested that he would “discuss these new aspects extensively later on,” that is, in Chapter 6 to 15, in which he largely elaborated on the role of memory and rhythm.

Let us get back now to Deleuze and Guattari. The comparison shows a very big difference in approach. Whereas Leroi-Gourhan reconstituted from hard archeological, paleontological and botanical evidence the transformation in Eastern Africa of a certain number of animals into protohuman beings able to produce tools and, most probably, to use language, Deleuze and Guattari dismissed the question itself of “the criteria of humanity.” There was no doubt, for Leroi-Gourhan, that the protohumans separated from the animals once they were forced to stand upright by a change of their environment from forest to steppe. This new posture allowed the release of the hand and provoked the shortening of the face, which in turn allowed the development of tools and language, and simultaneously, the slow parallel building of intentionality and memory, as well as purposeful and preservative behavior.

By contrast, according to Deleuze and Guattari, the only significant question was that of the relation between “expression and content.” One should not look for primordial traits that would be specific to humans as opposed to animals, but compare the relation between human bodies with their technological extensions and linguistic expression, with the relation between cells and genetic expression. By comparing the same ontological relation in two different strata, they wanted to avoid the issue of the separation from animals and replace the question of humanity...
within a larger naturalistic frame. Compared to the organic stratum, the social and semiotic stratum was characterized by a much more important degree of distribution among individuals (territorialization) as well as much more powerful dynamics of change in this distribution (detrimentalization).

This ontological perspective allowed Deleuze and Guattari to avoid any anthropocentrism but it had also a negative consequence: the unnecessary reduction of the aspects taken into account by Leroi-Gourhan. Only technology and linguistics were actually significant; physiology and psychology were left unaccounted for.

Strangely, concerning \"content,\" human bodies could be reduced to their free hands which were \"a general form of content,\" that is, a general form of the new transformation and production power specific to the third stratum. Tools were only extensions of the hand and products extensions of the tools. The physiological and neurological data mentioned by Leroi-Gourhan were ignored. As a result, the third stratum was dominated only by \"manual formal traits\" whose actualizations in various technologies and products were in turn both stratified into \"parastrata and epistrata\" and subjected to \"detrimentalization and reterritorialization\" dynamics entailed by the fundamental disrupting power of the hand.

Whereas manual formal traits constitute the unity of composition of the stratum, the forms and substances of tools and products are organized into parastrata and epistrata that themselves function as veritable strata and mark discontinuities [...] With the hand as a formal trait or general form of content a major threshold of detrimentalization is reached and opens, an accelerator that in itself permits a shifting interplay of comparative detrimentalizations and reterritorializations. [...] Not only is the hand a detrimentalized front paw; the hand thus freed is itself detrimentalized in relation to the grasping and locomotive hand of the monkey. (A Thousand Plateaus, 1980, trans. B. Massumi, 1987, p. 61)

Similarly, concerning \"expression,\" Deleuze and Guattari eluded any psychological consideration and concentrated on language. The latter was in turn distributed into various languages, just as the content was into various technologies. The fact that language was made of \"symbols\" referring to \"concepts\" organized by a \"syntax\" was ignored.

On the other hand, language [le langage] becomes the new form of expression, or rather the set of formal traits defining the new expression in operation throughout the stratum. Just as manual traits exist only in forms and formed matters that shatter their continuity and determine the distribution of their effects, formal traits of expression exist only in a diversity of formal languages [langues formelles] and imply one or several formable substances. (A Thousand Plateaus, 1980, trans. B. Massumi, 1987, p. 61)

But at the same time, Deleuze and Guattari introduced a few innovative views. They defined language primarily by the \"vocal substance\" it was based on and which involved the whole face, especially the mouth and the lips, but also the supple larynx. This should be noticed because it showed a new sensibility towards sound issues in language that echoed Meschonnic's contemporary work, although they did not mention him.
The substance involved is fundamentally vocal substance, which brings into play various organic elements: not only the larynx, but the mouth and lips, and the overall motricity of the face. (A Thousand Plateaus, 1980, trans. B. Massumi, 1987, p. 61)
Most important was consequently the "articulation" of sounds, made possible by supple larynx, mouth and lips.

The steppe, once more, seems to have exerted strong pressures of selection: the "supple larynx" is a development corresponding to the free hand and could have arisen only in a deforested milieu where it is no longer necessary to have gigantic laryngeal sacks in order for one's cries to be heard above the constant din of the forest. To articulate, to speak, is to speak softly. (*A Thousand Plateaus*, 1980, trans. B. Massumi, 1987, p. 62)

Naturally, these physiological traits could be accounted for by a dynamics of "deterritorialization" of the animal body. Similarly, words were kinds of deterritorialized "food and noises" which was a striking expression if one remembers Aristotle's implicit comparison in his *Poetics* between a good poem and a good meal (see Michon, 2018a).

Once again, a whole intensive map must be accounted for: the mouth as a deterritorialization of the snout [...]; the lips as a deterritorialization of the mouth (only humans have lips). [...] What a curious deterritorialization, filling one's mouth with words instead of food and noises. (*A Thousand Plateaus*, 1980, trans. B. Massumi, 1987, pp. 61-62)

Compared to the linearity introduced in expression by the genetic lines (instead of the spheric expression of crystals), language involved a "superlinearity." *[3]* Whereas genetic lines developed in space and required only "end-to-end connection, local regulations, and partial interactions," without necessitating any "emitter, receiver, comprehension nor translation," language relied on a temporal succession that required a synthesis power and a pragmatic cycle relating emitter and receiver trough comprehension between them and translation from "all the other strata" into its own. All this, as we shall see, was in tune with the latest pragmatic and poetic theory of language and literature.

Vocal signs have temporal linearity, and it is this superlinearity that constitutes their specific deterritorialization and differentiates them from genetic linearity. [...] The temporal linearity of language expression relates not only to a succession but to a formal synthesis of succession in which time constitutes a process of linear overcoding and engenders a phenomenon unknown on the other strata: translation, translatability, as opposed to the previous inductions and transductions. Translation should not be understood simply as the ability of one language to "represent" in some way the givens of another language, but beyond that as the ability of language, with its own givens on its own stratum, to represent all the other strata. (*A Thousand Plateaus*, 1980, trans. B. Massumi, 1987, p. 62)

Any "science"and by the same token, any philosophy was dependent on this linguistic capacity to translate any form of any stratum into the ultimate deterritorialized semiotic stratum.

The scientific world (*Welt*, as opposed to the *Umwelt* of the animal) is the translation of all of the flows, particles, codes, and territorialities of the other strata into a sufficiently deterritorialized system of signs, in other words, into an overcoding specific to language. (*A Thousand Plateaus*, 1980, trans. B. Massumi, 1987, p. 62)
This particular situation of the language should not however, Deleuze and Guattari contended, drive one to “naively” advocate “certain imperialist pretensions on behalf of language,” and finally “state the obvious,” which was an ironical and severe dismissal of Benveniste’s view on the issue. As in Serres’ particularly dishonest account already commented above, Benveniste was presented, more than rapidly, as a naïve theoretician, imbued with an outdated imperialist view of linguistics, telling banalities about the relationship between semiotic systems.

We will see later on how this situation gives rise to certain imperialist pretentions on behalf of language [du langage], which are naïvely expressed in such formulas as: “Every semiology of a nonlinguistic system must use the medium of language [de la langue]. (...) Language [la langue] is the interpreter [l’interprétant=the interpreting system] of all the other systems, linguistic and nonlinguistic.” [4] This amounts to defining an abstract character of language [du langage] and then saying that the other strata can share in that character only by being spoken [in language - phrase added by the trans.]. That is stating the obvious. (A Thousand Plateaus, 1980, trans. B. Massumi, 1987, pp. 62-63)

What was at stake behind this rather surprising way to discuss a theoretical position by mocking its author was naturally very important. As a matter of fact, as we shall see in the next chapter, not only did they misunderstand Benveniste’s view which involved a comparison between semiotic systems and not between language and world strata, but Benveniste stood firmly in Deleuze and Guattari’s way towards a general naturalistic view in which language would be only a domain secondary to physis, bios and forces. Since his perspective, which involved a resolute pragmatic view without indulging in pragmatism, could not be easily deconstructed, Benveniste himself should be discredited. We will return to this crucial issue very soon.

The third stratum was dominated by two “machines”: one was “a technical social machine” that imparted its “state of force or formations of power” to the populations of human bodies what sociologists more simply called societies the other was “a semiotic collective machine” that “overcoded” the other strata what semioticians simply called semiotic codes. The intended difference with sociologists and semioticians, however, was the mechanical and pragmatic nature of these two aspects of human life. Each one of them exerted a power by organizing human bodies or by overcoding the other strata of reality.

Content should be understood not simply as the hand and tools but as a technical social machine that preexists them and constitutes states of force or formations of power. Expression should be understood not simply as the face and language, or individual languages, but as a semiotic collective machine that preexists them and constitutes regimes of signs. (A Thousand Plateaus, 1980, trans. B. Massumi, 1987, p. 63)

As in previous cases, these two machines could actually be accounted for by the expression of a superior ontological principle that Deleuze and Guattari called “the abstract Machine.” As they already mentioned, the whole world was mechanical and subjected to this principle. Consequently, the “third stratum” was not the last and most perfect stratum; it appeared once again as a mere “intermediate state” between a state in which the machinic nature of the world, the abstract Machine, still remained “enveloped” in the stratum (the ecumenon), and a state in which it “developed” in its own right on the destratified plane of consistency (planomenon) according to a scheme associating enveloping/developing movements that came directly from Deleuze’s study on expression in Spinoza and Leibniz. However, they did not specify the nature of this “destratified” or “planomenic” state, especially, if it could be actualized in the future or if it should remain, for ever, virtual and “unaccomplished” as Meschonnic would have put it.
The third stratum sees the emergence of Machines that are fully a part of that stratum but at the same time rear up and stretch their pincers out in all directions at all the other strata. *Is this not like an intermediate state between the two states of the abstract Machine?* The state in which it remains enveloped in a corresponding stratum (ecumenon), and the state in which it develops in its own right on the destratified plane of consistency (planomenon). (*A Thousand Plateaus*, 1980, trans. B. Massumi, 1987, p. 63)
One significant consequence of this mechanization of the world was to get rid of the concept of "man," that was declared an "illusion." Deleuze and Guattari here radicalized Foucault’s demonstration in *The Order of Things* (1966), who had emphasized the historicity of the concept. In their opinion, the anthropocentric illusion had much deeper sources than the 19th and 20th century “episteme” or structure of knowledge. Man was the name of the fantasy of domination entailed by the capacity of language (and technology) to overcode (and transform) the whole world put technology and transformation between parentheses because Deleuze and Guattari did not explicitly mentioned them although those two concepts were obviously implied by the rest of their narrative and an implicit competition with Heidegger’s own critique. This illusion manifested, in fact, only an unfinished or maybe an ever unfinishable “unfolding” or “uprising” of the “abstract Machine” out of its envelop. However, Deleuze and Guattari did not explain if this illusion had started right with the origin of language and technology or only very recently when those two features had become dominant discursive characteristics, as Foucault claimed.

The abstract machine begins to unfold, to stand to full height, producing an illusion exceeding all strata, even though the machine itself still belongs to a determinate stratum. This is, obviously, the illusion constitutive of man (who does man think he is?). This illusion derives from the overcoding immanent to language itself. (*A Thousand Plateaus*, 1980, trans. B. Massumi, 1987, p. 63)

Deleuze and Guattari then associated Leroi-Gourhan’s description of the production of the very first graphic signs found by prehistorians by mere repetition of manual marks without though mentioning the crucial role played in it, according to Leroi-Gourhan, by rhythm and Martinet’s description of the double articulation of language into phonemes and morphemes, in order to prove the idea that, in the third stratum, each one of the two articulations was itself double and systematically exchanged content and expression. Content, that is, tools and gesture, “radiated,” according to them, on their own and produced symbolic expression “not to be confused with unilinear verbal language,” while expression, that is, phonemes formed “a radiating content specific to the expression of monemes as linear significant segments.” This was supposed to show, once again but now from the third stratum perspective, the intricate logic of expression and content, content and expression, that dynamized the whole world.

Yet we find that the most general of movements, the one by which each of the distinct articulations is already double in its own right, carries over onto this level; certain formal elements of content play the role of expression in relation to content proper, and certain formal elements of expression play the role of content in relation to expression proper. In the first case, Leroi-Gourhan shows how the hand creates a whole world of symbols, a whole pluridimensional language, not to be confused with unilinear verbal language, which constitutes a radiating expression specific to content (he sees this as the origin of writing). The second case is clearly displayed in the double articulation specific to language itself, since phonemes form a radiating content specific to the expression of monemes as linear significant segments (it is only under these conditions that double articulation as a general characteristic of strata has the linguistic meaning Martinet attributes to it). (*A Thousand Plateaus*, 1980, trans. B. Massumi, 1987, p. 64)

[1] Yet, they did not mention the second volume devoted to *Le geste et la parole. Vol. 2 La mémoire et les rythmes* (1964). Both volumes have been translated in 1993 by Anna Bostock Berger under the title *Gesture and Speech*. 

Next chapter
Since this could not be proved by lack of direct evidence, this idea has been dismissed for decades by most paleoanthropologists, who claimed that only *Homo sapiens* could speak. But we may notice that very recent paleontological, archeological and genetic evidence seems to prove that *Homo neanderthalensis* had already a language. See Dediu D. and Levinson S. C., (2018) "Neanderthal language revisited: not only us," *Current Opinion in Behavioral Sciences.* N° 21, pp. 49-55.

Whence the rejection by François Jacob, duly noted by Deleuze and Guattari, of any comparison between genetic code and language (p. 62).