Michel Foucault: The Epistemology of the Human Sciences

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Translated by Alexander Ferguson

Premise — It certainly cannot be said that modern epistemology presents us with an entirely satisfactory picture of science. If on the one hand it appears reassuring, on the other, a minimum of reflection shows that it is also self-stultifying. Two factors enter into the constitution of a science: words and things. The first factor is linguistic. It defines the formal objects of the science, its pure semantics or, synonymously, its formal ontology. The second factor is independent of the first, and therefore extra-linguistic. Its concern is to determine which things pertain to scientific objectification in the concrete. A science can only be so-called if it has a material ontology that corresponds to its formal ontology. The trouble lies in the definition of this correspondence. No matter how hard one tries, it is not possible to reduce it to formulas. Even if one succeeds, it would become another linguistic fact and would not account for the other factor. Therefore, the relationship between words and things is governed (if at all) by an essentially metaphorical use. The problem of the relationship between form and content (or between language and reality) is a source of scandal for modern semantics.

Only superficially does Foucault's recent book[2] appear to deal with semantics in the sense spoken of above. True, indirectly he does offer a contribution in this regard. But Foucault's purpose is different. As the subtitle indicates, he aims to define the epistemology of the human sciences (psychology, sociology, ethnology, hermeneutics, history) and to locate their profound epistemic aim in the eccentric position that they assume with regard to all the other sciences. The book's final thesis relates to the critique of anthropology, which to a greater or lesser degree is tacitly presupposed by every human science. Of great interest is the reinterpretation of the Nietzschean thesis of the 'death of God' and the complementary advent of the *Übermensch*, made plain as an imminent threat to culture and modern civilisation. From an epistemological point of view, it is clear that the object 'man' only has a meaning if it can be individuated in the context of a formal ontology, of a pure semantics, or, in more analytical terms, of a frame of reference defined implicitly by the interrelations between all of the human sciences. Beyond such a conceptual scheme, man remains a brute and meaningless fact, or

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[2] M. Foucault, *Les mots et les choses. Une archéologie des sciences humaines*, « Bibliothèque des sciences humaines », Paris, Gallimard, 1966, p. 400.

he becomes something else, something inhuman: animal, god, or superman, it makes no difference. Now, the human sciences cannot be founded on man as such, because it is up to them to determine his conditions of objective possibility. Nor, on the other hand, can they infer their criteria of objectification from other sciences, because then 'man' would not exist as a human fact.

Within the current epistemological framework, the human sciences are capable of finding neither a foundation (or even at the very least an autonomous position) nor a coherent semantic expression. The anthropology that they presuppose has as its basis a concept derived from nineteenth century biology, economics, and historical philology. This species of man, born at the beginning of the last century, is threatened with extinction. With the crisis of eighteenth century anthropology, 'man' seems destined to disappear, just as astral influences failed to outlive astrology. In the absence of any such infrastructure, the semantics of 'man' and consequently its ontological status would be reduced to a condition similar to that of horoscopes today.

Bringing this crisis into focus means at the same time rediscovering the meaning of the human sciences. Foucault's analysis points us towards the initial conditions, the conceptual archaisms that made the objectification of human experience possible. We will begin by straightaway talking about method, about the presuppositions inherent in the type of reading that the author invites us to engage in. It will then be necessary to summarise the principal exegetical theses, reformulated with a view to a second reading. At this point, on condition that the reader is already familiar with the book, we shall conclude with some points of discussion.

1. SEMIOLOGY— Foucault's study is essentially semiological. Semiology deals with the modality of the use of signs. The concept is intended in a very broad way; it is not only linguistic, but also behavioural, not only theoretical, but also practical: it includes everything that functions as a vehicle of a 'mediated' — that is, symbolic and therefore vicarious — experience of the world. The concepts of sign, symbol and symptom do not need any explanation. A more difficult problem concerns the determination of their mediating function, i.e. their modality, or better, *modalities* of use. These functions or modalities are the dynamic factors of semantics and are thus responsible for the image of the world that we produce through science, art and everyday praxis.

Thus the underlying approach is of a neo-Humboldtian kind, in a sense that can encompass Cassirer, Weisgerber and the so-called 'Sapir-Whorf Hypothesis'. As is well known, the hypothesis has given rise to a series of objections, above all methodological ones, which may be grouped under the common charge of unverifiability: in short, the hypothesis rests on a fallacy of *petitio principii*. However, this objection to Foucault does not seem altogether to hit its mark. In the first place, his analysis is always concrete; it is precisely his utterly scrupulous adherence to his object that constitutes one of the hurdles to giving his analysis a second reading in a theoretical key. The 'transcendental' regression therefore

depends on the exemplary character of the empirical datum, and not vice versa: one has the impression that the texts themselves, and not their interpretation, recommend *a posteriori* the hermeneutic *a priori* according to which they are read. The *petitio principii*, if there is one, is therefore phenomenological rather than transcendental, and thus difficult to rebut. Secondly, the framework that Foucault presents is pluralistic. The modalities of the use of signs are diachronically diverse, in the sense that there are various semiological eras. But they are synchronically diverse too, since the more archaic functions are also preserved in new structures. In general, circular arguments stand in the service of some unexpressed monistic requirement, and serve to invalidate exceptions to the rule. Instead, Foucault makes the pathology of signs the most important criterion for understanding how they function. The exception, not the rule, thus becomes the key for understanding semiological norms.

2. ARCHAEOLOGY — The analysis of the presuppositions that regulate a certain modality of the use of signs constitutes what Foucault calls 'archaeology'. The term was already used by Husserl in this special sense to indicate the *archai* (the *Mütter*, the Goethian memory, that presides over the phenomenological constitution of experience) and, in a very similar manner, by Ricoeur in his recent work on Freud and interpretation. Archaeology must respond to the following problem. In any work of interpretation, the task is to make the 'codes' of a culture or civilisation explicit: namely, the underlying matrices, for the most part unconscious, that regulate its language, schemes of imagination, myths, ritual behaviours, basic institutions, technical practices, exchange of goods, values and so on. To this end, one usually resorts to a scientific or philosophical theory, it does not matter which, that is extraneous to its referent. The theory must explain why a certain culture or civilisation has those particular codes rather than others; or vice versa, why a particular system of codes gives rise to that corresponding culture or civilisation. Well, such an explanation presupposes the use of an ulterior, second-order code, to which is attributed a mysterious 'explanatory' power, whether this is by virtue of a metaphysical decree or the result of an arrogance steeped in meta-historical misunderstandings is unclear.

Archaeological research proposes to reverse the procedure, or better, to make the explication of the phenomenon in question immanent to its description. For this reason, it can be compared to phenomenology, and in general, to those methods of understanding which aim at the paradigmatic, the exemplary, and the ideal type in Weber's sense; and which, consequently, do not allow for differences in meta-theoretical levels, since they identify the transcendent with the concrete and reduce it to a first order code. Alternatively, one may also think of Freud's metapsychology, especially as presented by Ricoeur. After all, Foucault attributes considerable importance to psychoanalysis in the context of the human sciences. Either way, it is clear that the object of archaeology must be situated halfway between the conscious and the unconscious, between the known and the unknown, in the so-called twilight zone of the semi-conscious. Thus, we cannot identify it with

Jung's 'archetypes', since these make up an integral part of the codes to be explained. But nor can it be identified with Lévi-Strauss's 'deep structures', since these, being unconscious, require an interpretative 'model', i.e. an extrinsic code of objectification.

The investigation proves to have a structural character, above all in its diachronic aspect. The development of semiology appears to be essentially discontinuous, syncopated in time by a genuine periodisation. Between one structure and another, there is no imperceptible transition or gradual evolution, but rather an unexpected catastrophe and at the same time palingenesis through the *bricolage* of the resulting fragments. Archaeological analysis highlights two great breaks or interruptions. The first concludes the Renaissance and inaugurates, with the Baroque and the new science, the age that Foucault calls 'classical'. It runs from the first half of the seventeenth century to the beginnings of the nineteenth century. At this point the second break falls; it marks the beginning of the 'modern' age that is still with us today. Consequently, there are three ages of semiology.

3. HERMENEUTICS — The *terminus a quo* is provided by the Renaissance, with which the archaic age ends. In this regard, it is not clear whether Foucault considers ancient and mediaeval culture to be homogenous with Renaissance culture, or whether he simply thinks that they merge into it. This uncertainty makes it impossible to assess precisely his concept of the archaic age, which, as it is, appears more apt for expressing an ideal-typical contrast than for describing a historical reality. At any rate, the criterion is clear. Archaic semiology strictly depends on a triadic theory of signs, on the basis of which semantics is entirely swallowed up by hermeneutics, and for this reason constantly threatens to short-circuit tautologically.

In the triadic theory of signs one must distinguish (I) the sign understood as 'signifier'; (II) that which the sign designates, namely the 'signified'; and (III) the designation taken as such, that is, the operation of 'conjunction' between the two. So far, the doctrine appears identical to that of the Stoics. Except that, taking our cue from the use of allegory, designation is interpreted as that character or 'signature' that makes it possible to perceive something as the sign of some designated item. The signature is therefore a second order sign, namely, the sign of the conjunction between a (first order) sign and what it designates. It consists in the 'resemblance' between the two terms of the relation. It is possible to distinguish four species of resemblance and therefore four species of signature: (a) *convenientia*, which is the visible link exhibited by signs or between things, each within its own sphere; (b) *aemulatio*, which is the mimetic relation by which a sign becomes a signature of the exemplar that it signifies, whether visible or invisible; (c) *analogia*, which is the proportion according to which the invisible signifieds evoke one another in the act of understanding; and (d) *sympathia* and *antipathia*, which are the principal motors of the hermeneutic dynamic. As Foucault says, if by 'semiology' one understands the individuation of signatures and by 'hermeneutics' their decipherment, then it seems clear that until the end of the sixteenth century

semiology falls within hermeneutics, since there is nothing that does not carry a signature. Consequently, everything assumes the character of a motif, a cipher or a hieroglyph; even when every positive interpretation appears barred, hermeneutics descries the meaning of an enigma.

The system is founded on the infinite repetition of similarities. Magic and knowledge, *divinatio* and *eruditio,* things read and things seen, all stand on the same level. Snakes, according to the naturalist Aldrovandi, are not only big and small, poisonous and harmless, etc., but also objects of heraldic consideration, of amusing anecdotes, of ominous predictions and of verbal prevarication. For ancient semiology, in other words, language is itself an integral part of the ontology of nature and stands on the same level. The semantics of similarity, once dissolved into hermeneutics, takes the *suppositio materialis* as its archaeological modality.

4. THE BAROQUE — Beginning from the seventeenth century, semiology is identified with the theory of representation and therefore distinguished from hermeneutics. Even before the arrival of the new science, thought ceased to move in the medium of resemblances. Francis Bacon's critique of the *idola* and Descartes's critique of *ressemblance* have in common their rejection of the ancient 'homo-semanticism'. Previously, every resemblance enclosed a meaning; now, each becomes instead the signature of an illusion. Illusion, therefore, defines, in its conscious unreality, the purely poetic space of language. Art exploits to its own advantage the knowledge that the senses and their allusions are misleading, turning it to poetic use. This is the period when metaphors, comparisons and allegories proliferate, but always alongside the full cultural awareness of their imaginary value, as is made clear by the thematic 'chimera of resemblance' that reappears in every work of art: the *trompe'l'oeil*, the play on words, the *quid pro quo*, the play-within-the-play, the dream and the sleep of reason.

Language no longer has its own way of being. If one excludes the imagination, it is identified purely with its representative function and reduced to what Foucault calls 'discourse'. Resemblances are excluded from discourse, since they are illusory, confusing or irrelevant. What matters are the identities and differences of the things denoted. Resemblances must therefore retreat into the subjective sphere and give themselves up to a poetics of illusion. This is how *littérature* arises. It addresses the obscure side of discourse and has continued to do so right up to the present day, providing a countervailing radical alternative, the only one able to express the non-representative function of language. From now on, literature has the task of conserving what Foucault calls the *être vif du langage*, its original hermeneutic power. At the margins of legitimate projective systems, or in the cracks between them, there is always a space that is not only free for the poetic use of language, but also for a different form of knowledge. To reserve this game a margin of freedom for does not so much mean to safeguard the rights of the archaic in a new context, but rather to justify their contradictory function, according to which the *logos* of resemblances may appear as 'vain' as it does 'fundamental'. In this way, rhetoric can be presented entirely naturally as the organ

par excellence of the philosophy of literature. In the age of discursive representation, only rhetoric can help us to comprehend those functions of language that the logic of the system expunges as a brute, irrational and subjective fact. Although Foucault mentions Vico only in passing, his observations on rhetoric ought to spur a reconsideration of the Vico's thought.

5. DON QUIXOTE — Moments of crisis exhibit a more acute awareness of background antagonisms, which, even though they remain unresolved, can subsequently appear to have been overcome. For Foucault, *Don Quijote* is the paradigm of the first crisis. By disassociating poetry and prose, illusion and discourse, the book describes the inverse of the world of hermeneutics. Resemblances mislead, since reality remains extraneous to poetry in a sort of ironic alterity. The meaning of the critique is unmistakable: in univocal prose representation, sheep are not armies, serf girls are not gentle handmaidens and hovels are not castles.

If instead one takes the point of view of rhetoric, one must agree with Unamuno: the critique becomes ambivalent and turns into a disguised apology. Unlike the ancient heroes, Don Quixote cannot be satisfied with living the epic; he must relive it, for it no longer exists as it once did. Don Quixote has to retrace the journey, but in the opposite direction: rather than living it as a hero and leaving the mythic celebration of his accomplishments to the poets, he must fulfil the likeness by means of a conscious philopoetic activity whose mythic content is absent. In the second part of the story, Don Quixote becomes aware of this fact: he meets the readers of the book he has lived, and they recognise him as the hero of the fiction. The contrast between reality and the imagination can be tragic or ridiculous, according to one's point of view; what is certain is that in itself it is dramatically real.

For Foucault, *Don Quijote* is the first modern work of art. For the first time, modern art avails itself of a language that decisively breaks its ancient kinship with things. The novel relies solely on the resources of discourse for its foundation. The non-representative functions of language do not appear except as conscious literary fictions, alienated from the reality that lies beneath the garb — or better, the uniforms — of rhetorical figures. The hero of the story must pose therefore as a 'madman' in order to fulfil with impunity language's poetic, archaic, and homo-semantic way of being. The poet, conversely, in order to rationalise his use of language, must ironically take up a position contrary to it, and, by using the figure of 'allegory' in an inverted way, perform the role of the moralist. From Cervantes to Artaud, with the complicity of irony, folly and poetry, two complementary opposites are formed.

6. REPRESENTATION — The 'classical' age establishes the primacy of representation. The Port-Royal *Logique* inaugurates it by reducing the previous ternary system of signs to a binary one. With this innovation, the plane of signs and the plane of signifiers become entirely heterogeneous. The connection between the two is no longer mediated by resemblance, but by a rigid system of identities and differences. The separation of language and things, instead of compromising their

relationship, is what allows discourse to be at least partially isomorphic to reality, in the same way that the separation of the mind from the body facilitates the concept of a psycho-physical parallelism. There is a double isomorphism. On the one hand, language represents thought just as thought represents itself in reflection. On the other hand, thought reflects reality, and so, to the extent that the former is reduced to 'discourse' governed by an internal principle of order, language is made capable of representing it. The system of identities and differences is thus logical and ontological at the same time. The fact that this is presupposed but not justified by the semiology of representation, accounts for what Gadamer calls the *Sprachlosigkeit des neuzeitlichen Denkens*, namely, the notable absence of a true and proper problem of language throughout the entirety of the classical age. Only quite late in the nineteenth century, with the logical-linguistic crisis of representationalism, will the question of sense, meaning, and reference reconstitute a ternary theory of semiosis, this time without the issue of homosemantic short-circuiting.

In the classical theory of discourse or language-representation, the criterion of resemblance is replaced by one of comparison. A comparison admits of only two forms: I) 'measurement', which holds in the quantitative realm; and II) 'order', which holds in the qualitative one. The concept of measurement presupposes that of order, which is more primitive. Every order, in turn, requires a preliminary 'analysis', which isolates the elements of discourse as absolute proper names. Order and measure are therefore the two fundamental categories that comparison requires in order to establish, on the basis of its elements, a calculus of identities and differences. In this way, the acknowledged arbitrariness of the sign, that is the institutional character of its signification, becomes the best guarantee of the representative function of language. By reducing every discourse to a calculus, whether qualitative or quantitative, and interpreting its signs as names of elements, the theory of representation ensures that every science can appear to be a *langue bien faite*.

The most perfect kind of representation is the Cartesian representation of order and measure; it covers size and constitutes a *mathesis universalis*. It presupposes that analysis is able to individuate elements of nature which are utterly simple and from which algebra can then produce a calculus of connections. From this point of view, it makes no difference whether the elements are real or fictional, atoms or infinitesimals, or all of them together. The most conspicuous result of the *mathesis* is the foundation of rational mechanics and, therefore, of modern physics and all that directly or indirectly depends on it.

But there is also non-quantitative comparison. The very rigour of the *mathesis* ensures the opening, beyond any mechanics, of the *espaces d'empiricité*, which could not have existed during the Renaissance; nor can they exist any longer in our own day. They are the realm of the empirical-descriptive sciences. Here, the analysis is not able to isolate elements, since every representation is complex at the outset. However, discourse will be no less objective if its calculus is reduced to a

syllogistics interpreted as a *taxinomia* or general science of ordered classification. In the non-measurable realm, taxonomies offer rational criteria according to which the discrete, observable characteristics by which the fundamental continuity of nature is articulated can be ordered according to identities and differences.

Both *mathesis* and *taxinomia* enter, with equal right, into the 'general science of order', whose semiological philosophy is representationalism. Foucault illustrates its paradigm with reference to Velasquez's *Las meninas*. In the painting, one observes the reverse side of the painting itself while Velasquez works. He paints two figures, who are not directly visible; his gaze indicates that they occupy exactly the perspectival position of the person observing the painting. In the foreground, next to Velasquez, appear the *meninas:* the companions of the infant Margherita, who, together with governors, servants, courtiers, jesters and dwarves, have come to visit her illustrious parents. The parents are Philipp IV and Queen Marianna; they are glimpsed only fleetingly in the reflection of a mirror in the background. Thus the 'mirror' reproduces all at once the painted figures, their gaze, the perspective of those looking at the painting, and the point of view of Velasquez as the author of the painting: the mirror is the whole painting and yet only one of its parts. Velasquez expresses the paradox of representation in an iconic manner. It is the same paradox as the one that is found at the end of the classical age in the discourse on *idéologie*, in which language-representation reduplicates itself to account for its own representative function.

7. GRAMMAR — The task of the *grammaire générale* in the Port-Royal *Logique* is to justify the logic of representation. In a *langue universelle*, understood as a Cartesian *mathesis*, the problem is resolved with the mathematical analysis of space. But the question is more complex for *taxinomia*. To explain the representative function of language when it is employed as a *discours universel*, the analysis must take into account four fundamental categories that cannot be reduced further. In the first place is (I) the 'proposition', which requires an autonomous theory of verbs. The logic of representation holds that every verb can be translated into the form of a copula and a nominal predicate. Thus, a theory of the verb 'to be' will be sufficient. Now in a taxonomical system, the copula and its negative complement tell us whether or not an individual belongs to a class, whether or not one class belongs to another class, and if it does, whether it does so partially or entirely: in short, according to a syllogistic calculus, we have a network of identities and differences. The analysis of the copula leads to the definition of the internal structure of the proposition, namely, the theory of (II) the 'articulation' of the elements which are represented by the proposition. But the verb 'to be' also performs another function in the proposition, a modal one. The 'normal' modality in representation is the assertive one: being expresses a timeless presence. More precisely, it asserts that normalised discourse and the reality it is used to represent coincide at at least one point, where semantics and ontology are identified with one another. If an assertion is true, this is equivalent to saying that the state of things described exists. The articulation of the proposition guarantees that each state of

things has a corresponding name. But at this point it becomes necessary to distinguish between the two different senses to which the semantics of names is subject: a) the extensional and denotative, and b) the intensional, connotative or global. To the extensional sense corresponds the theory of (III) 'designation', which must establish proper names as well as the conditions under which a name, understood as a general term, becomes 'common', that is, is substituted for a collection of proper names. Conversely, to the intensional sense corresponds the theory of (IV) 'derivation', which must also account for the shifts in meaning that certain terms are subject to, especially when they appear as adjectives or as nouns formed from adjectives. It is obvious that the four categories are only distinguished *sub specie rationis;* materially they are always combined.

The system exhibits its most telling anomalies in the theory of derivation, from which follow the symptoms of a representational pathology. The theory of designation cannot resolve every problem of meaning, since it must limit itself to analysing the denotative parts of discourse: names and demonstrative pronouns. For the analysis of the non-denotative parts, the theory of the derivation of words must intervene, which in the last analysis refers to 'rhetorical figures' and to their formative (but not representative) function. The anomalies of derivation cannot be explained, therefore, except by means of a theory of metaphor. This is articulated according to the three fundamental schemes of 'synecdoche', 'metonymy', and 'catachresis' whose formalism is extraneous to the system of representation. In this way, rhetoric, having been expelled from *mathesis* and *taximonia*, is reintroduced into science in a clandestine fashion and with grammar's complicity.

8. NATURAL HISTORY — The first grand fulfilment of a science of order occurs with natural history, namely, with the taxonomy of living beings according to strictly morphological criteria. Morphologism explains why botany appears more scientific at this point in time than zoology does. With respect to form, plants lie halfway, so to speak, between crystals, whose form is reproduced from their internal structure, and animals, whose form is a function of environmental adaptation and has nothing to do with their structure.

Morphology grants a difference between 'system' (Linnaeus) and 'method' (Buffon). Method proceeds by differences and disregards identities; one tries to define the whole framework inductively beginning from the former. The more general the methodical classification becomes, the more uncertain it is. System is the mirror image of method, and it begins by establishing the more relevant identities in advance. Systematic classification offers a clearer framework, but thereby makes the role of empirical research secondary. Although they follow different procedures, system and method are complementary with respect to the theory of representation. The systematic principle responds to the problem of the articulation of taxonomic propositions; the methodical principle responds to the problem of their denotative and connotative reference.

Anomalies emerge here too. They are symptoms of a taxonomical pathology. From a methodological point of view, fossils and teratological forms

resist classification. The proposed hypothesis of 'transformism' ought to justify taxonomy's exceptions, but ends up threatening its presuppositions. *Idéologie* performs an analogous function with regard to the theory of representation. New discoveries come along, and throw pre-established systems into crisis. In both cases, the meaning of so-called 'technical' terms must necessarily be altered and used metaphorically. But, the semantics of metaphor is not susceptible to morphological treatment: thus, synecdoche, metonymy, and catachresis represent a rhetorical threat at the very heart of taxonomy.

9. THE ANALYSIS OF WEALTH — In the archaic age money serves a threefold function. It is at once (I) a measure of the value of the exchange of goods; (II) a substitute for a good's intrinsic value or use; and (III) a 'precious' good in itself that has its own price. One need not underline the strict parallel with the homosemantic idea, or the fact that the resulting system dissolves the trinity of functions into an undifferentiated unity.

With mercantilism the system becomes binary. Money is no longer a sign (a sign without a signature) representing wealth. On the contrary, wealth is defined as anything that is susceptible to monetary representation. Paradoxically, absolute monetarism requires that money be excluded from the circle of goods. Silver or gold have no intrinsic value in themselves; they are only precious because they serve as money. The value of money only depends on its representative function. The incorruptibility of metal guarantees the constancy of this function in time, but it does not constitute the value of what it represents any more than a name does with respect to what it designates. The mercantile system is therefore established on the value of the exchange of goods and on the postulate that it can always be represented and measured by means of money. Thus, there is no wealth that cannot be 'monetised', since it can only receive a value and enter into circulation on this condition.

As for the system's anomalies, one does not have to look far and wide to find them. Humanity has always known that the purchasing power of money varies with time, that it depreciates, and not only nominally. For this reason, money can also be considered a good in itself. The question becomes particularly significant in the eighteenth century. If money can once again become a good, the articulation of exchange ought to be founded on a less unpredictable, more natural constant, one that is independent of the vagaries of the moment. The physiocrats identify it with the annual income of agricultural production. However, in this way, the analysis of wealth comes to depend on its mode of production, whose proceeds are thought to be constant. It is enough to vary this factor for monetary valuation to become incongruent (and not just nominally) with the representation of wealth. Physiocracy is the chrematistic homology of ideology.

Secondary and tertiary activities, the transformation and exchange of products constitute another exception. If one does not accept the physiocratic hypothesis, these activities appear to create wealth. This is the point of view of the Utilitarians, according to whom the value of goods is founded on the articulation

of exchange. But monetary designation is equivocal in this way too, because it comes to depend on what derives from it. In a nutshell, the utilitarian conception ends up falling into the rhetoric of consumption.

10. HISTORY — The classical theory of representation enters a crisis thanks to the problem of the 'genesis' of complex notions. The problem emerges at the very core of the system, and constantly forces a regression from statics to dynamics. The object of knowledge exceeds the order of identities and differences, since its form is nothing but a provisional state of equilibrium, or better, the result of a subterranean parallelogram of forces. The determination of traits, to be objective, demands knowledge of the process of metamorphosis. Forms are explained by their history, not by the shape that they periodically assume. The general science of order, whose ideology must justify projective systems, is replaced by particular (epistemological) and general (philosophical) 'critique', namely, the 'genetic-transcendental' analysis of the production of knowledge. In this way, the *nouvelles empiricités* surpass taxonomic tables: comparative and historical philology replace general grammar; 'biology', which is no longer morphological, but at once anatomical and physiological, replaces natural history; and 'political economy', examining the production of goods, replaces the analysis of wealth.

In contrast with the previous semiological leap, this new one demands an archaeology of what one might call *poiesis*. Even if we take poetry in its strict sense, as Foucault suggests, we may consider the classical age as ending with the work of de Sade, interpreted as the mirror image of *Don Quijote*. While Cervantes carefully feels his way forward, Sade appears to be engaged in a rear-guard action. Threatening and prophetic, the modern age declares itself with the turbulence of its repressed dynamic. Sade attempts to oppose it with a poetics of the repression of unconscious impulses in order to neutralise its subversive potential and ultimately to rationalise it conclusively by means of the rigid succession of the *scenes*. The recklessness of desire is subordinated to the rules of representation, and it ends by exhausting itself in a crescendo of excess. Blanchot defines this as the 'stoicism' of the libertine. *Juliette*, which is desire fixed in representation, corresponds to the Don Quixote of the first part of the book; *Justine* corresponds to the Quixote of the book's second part. By feeding the resurgence of desire with her reluctance, in reality, Justine, with her perverse innocence, compromises the representative recuperation of the threatened order. Thus in the end she must be *foudroyée* [struck by lightning], just as Don Quixote must recognise his own *locura* [madness].

The crisis of representationalism opens the 'modern' age with a new notion of 'history' obtained by metaphorical derivation: no longer is it an investigation into *naturalis historia*, nor research into *pedigree* or into the adjudication of *causae* or original responsibility, instead it concerns the genetic analysis of the dynamics of events. The metaphysical, or better, 'ideological' problem of the foundation of representation is reduced to a merely formal question. In its place, the essential problem is given by the appearance of 'man' in his double aspect: as the foundation

of the 'analytic of finitude' with which the new empiricities (work, life, and language) inaugurate modern knowledge, and as the origin of a redoubling whose nature is no longer that of representation. Grammar does not hold the secret of representative logic, since it is only a secondary manifestation of a hidden communicative power. The same holds for the morphology of living beings in relation to biological impulses and the value of things with respect to the power of work.

11. WORK — Political economy is born when Adam Smith recognises 'work' as the principle of chrematistics. It is only on the basis of the work necessary to produce goods that a natural and constant measure of their exchange value can be established. However, this presupposes that the quantity of work necessary to produce something is equal to the quantity of work that can be acquired through exchange. Therefore, every good represents a certain quantity of work, and all work represents a good. Work is at the once the activity of production and an exchangeable good. Rather than being called dynamic, Smith's system ought to be called kinematic: it presents the aforementioned defects in another form.

Ricardo's analysis intervenes at this point. Ricardo distinguishes two aspects of work, the static one that reduces work to a good, and the dynamic one that makes it a creative activity. Only in the latter sense, as productive potential, does work become the source of wealth. The analysis demonstrates that the quantity of work is not a measure of value, since it varies according to the forms of production. Progress in the latter is directly proportional to the division of labour and technological progress. For Ricardo, two constants alone allow for the evaluation of the economic dynamic. The first is given by (I) the 'real salary' of the worker, as it may not descend below the minimum level indispensable for survival. The other is given by (II) the maximum cost of production of subsistence goods. The 'grain' of the least fertile terrain, and therefore the least remunerative, determines the cost of grain in general, even of that which does not require very much work. The difference between the maximum and the minimum costs of production, divided by the cost of work (granted that this remains at its minimum), thus defines the maximum profit. Now, in a market economy, profit must tend towards a maximum level or otherwise it is reduced to zero. The law of the accumulation of capital therefore determines the functioning of the economy. The profit margin measures its degree of rationality.

With the genesis of wealth, the history of civil and economic development becomes comprehensible. Based on the concept of profit, two different interpretations are possible according to whether or not the dynamic is regulated by an internal equilibrium. For Ricardo, history has a homeostatic and self-regulating course. Demographic stability, the division of labour and optimal technology define the point at which it halts. Marx, however, diagnoses a species of Parkinsonism. Rather than equilibrium, the capitalistic rationalisation of the forms of production produce the paralysis of motor activity and, ultimately, a catastrophic reaction. In this case, the revolutionary *millennium* constitutes history's conclusion.

From a structural point of view, the difference between the two interpretations is immaterial. Both make use of an 'analytic of finitude'. If there did not exist something like a minimum salary and a maximum cost in absolute terms, that is, a defined interval on the measure of man and his environment, it would not be possible to determine either the laws of economic development or the material dynamic of history. Since it is founded on finitude, history has a beginning and an end. History is nothing but the expression of a finite mode of being.

12. LIFE — With the foundation of physiology and of comparative anatomy accomplished by Cuvier, taxonomy loses its original morphological connotation. The criterion of classification is given by the concept of the 'organ', in which structure and function are intimately correlated and form an indissoluble totality. This leads to the *decalage* of morphology into the plurality of relations of which it is an expression; they include the 'coexistence' of the whole's parts, their internal 'hierarchy' and their 'dependence' with respect to a global, organising scheme. Thus zoology takes its revenge on botany. Animal forms become the living confutation of morphology, precisely because they are independent with respect to their internal structures. A dolphin is a fish if you examine its form; only physiology and anatomical structure tell us that it is a mammal.

Cuvier has gone down in history as the theorist of the 'fixity' of species, in opposition to Lamarck's transformism. But the two conceptions do not lie on the same level and, therefore, do not constitute genuine alternatives. Cuvier's idea of fixity depends on the fact that, given a taxonomy founded on homologies and analogies and not on exterior morphology, species cannot present themselves in any other way than as stable structural arrangements. Transformism holds instead in the realm of classical morphology; in this context, no biological law prohibits one from conceiving metamorphosis as a continuous transition from one species to another. Thus, one comes to understand that Cuvier's conception does not contradict Darwin's, but rather represents its necessary predecessor. Evolutionism is antithetical to fixism, but not to the biological structuralism that it expresses; it would be better to say that evolutionism is the diachronic integration of fixism.

What we call 'biology' begins by conceiving the phenomenon of life structurally. The discovery of life's laws of organisation and development mean that man, as a living being, must recognise his finitude. This has a double meaning, as something delimited in the present by the invariance of the species, and as something inserted into the course of a biological history — evolution — whose temporary destination he constitutes. In order to take place, evolution requires natural selection and small variations. To enter into the evolutionary mechanism, life had to invent death. In the biological time of the individual, birth, growth, maturity, senility and death are intrinsic parts of life, not accidents requiring a separate explanation. The death of the individual is what allows the species to be reborn rejuvenated and therefore, to change. Finitude and historicity coincide even at the level of biology.

13. LANGUAGE — The linguistics revolution that leads from grammar to modern 'philology' begins with Friedrich Schlegel. Subsequently, Grimm and even more so Bopp bring it to completion. Comparative linguistics demonstrates that the analysis of the structure of a language cannot be derived from the normative criterion of grammar, nor from the logical criteria of meaning or etymological derivation. It demands a new approach to linguistic facts, one that isolates their particular nature and gives them an autonomous treatment. It represents the revenge of spoken, idiomatic language over literary, conventional, and written usage. The point of departure is constituted by phonetics: above all, linguistics studies sounds, not as acoustic or phonological facts, but rather in so far as they are phonetically distinct and articulated according to certain elementary patterns; from here, there follows the study of the variations that these constants undergo in the formation of words, or in any case of plurisyllabic units; and finally, of the laws of transformation that explain their history.

With the emancipation of language from its representative function, what might be called the physiology of language becomes better understood. It cannot be founded on the semantics of ideology, nor on the syntax of mirroring; rather, it requires constant reference to the subject using it and to the various functions for which it is employed. In this way, to understand the expressive function of language, one need no longer contrast it with the representative function: it already manifests the intent and feeling of the speaker perhaps better than any other function.

Nevertheless, the historicity of language has a finite character. Even if they are closely related, there is not a transition between one language and another, but rather discontinuity. A language is like a biological species in Cuvier's sense. Evolution is always internal to a given language and, even then, it does not occur at random or as a function of new requirements, but rather it follows fixed laws; moreover, it also exhibits a beginning and an end. There is no need to emphasise the parallels. It is more interesting to note that if we grant that the evolution of a language depends on its diachronic structure, then the historical recovery of the hermeneutic dimension of linguistic experience becomes possible. Linguistics is also therefore the foundation of 'philology' in the modern sense of the term, according to which it functions as an art of exegesis, that is, of the synchronic and diachronic analysis of texts. In this case, finitude manifests itself in the fact that a historical document is not intelligible save by reference to a closed system of exegesis.

14. THE HUMAN SCIENCES — The *nouvelles empiricités* of work, life and language define, by a qualitative leap, the 'modern' semiological age. To do it justice, the general epistemological framework must be reconsidered from top to bottom. The usual dual scheme of *decoupage*, both analytic and synthetic, formal and factual, linguistic and real, etc. no longer holds. Foucault proposes a three-dimensional scheme, the *trièdre des savoirs*.

A trihedral angle is formed by three faces. (I) On the first face, we place the physical-mathematical sciences, which conserve the original project of a *mathesis*

universalis and therefore, in essence, the semiology of the classical age. (II) On the second face lie the new empiricities: once the *impasse* of the general science of order has been overcome, these sciences establish themselves as biology, political economy and linguistic philology based on autonomous principles of a structural, but non-formal character; mathematics may be applied to these sciences, but only extrinsically. (III) The third is represented by philosophical reflection: it remains autonomous with respect to (I), because it must mediate between formalisation and its opposite: interpretation understood in its strict sense; and with respect to (II), because it revives by transcendental regression the problems of death, alienation and symbolic form.

But, this reformulated picture, no matter how much better organised it is, still excludes the human sciences. They are founded on an implicit anthropology whose object is defined jointly with the new empiricities (II). Nevertheless, philosophical reflection (III) does not permit this identification; on the contrary, it shows that the human sciences cannot perform their function save insofar as they contest — against biology, political economy and linguistic philology — the right to decide upon the form of objectification with which man, to become self-aware, must necessarily alienate himself. If this is true, then the development of the human sciences cannot take place save at the expense of the anthropology that — in the absence of an adequate critique — we have been led to believe in by the new empiricities.

What is the function of the human sciences? In general, it is the destruction of the sclerotic ontology of 'man', which constitutes what Bachelard would call their *obstacle épistémologique*. In particular, then, the function in question is different for each science. For example, Foucault says that 'literature' would be the contestation of philology, just as 'myth' is, according to its psychoanalytic interpretation, with respect to history. Therefore, the study of literature and myth faces the difficult task of demystifying a scientific obstacle (philological and historical) on the one hand and confronting it with a new rationalisation on the other. All differences considered, the same dialectical relationship holds between psychology, above all psychoanalysis, and neurological physiology; between 'sociology', in its new ideological horizon (in the modern sense), and political economy; and between 'ethnology', in its search for an independent structural organisation, and the above-mentioned anthropology.

Due to their peculiar state, by which they constitute epistemic modes *à rebours*, the human sciences do not sit comfortably on any of the faces of the trihedron, or rather, they end up inhering in all of them. In virtue of this all-pervasive property, the human sciences become the *lieu épistémique* of the empirical-transcendental redoubling that belongs to the culture of our time. And it is for this reason that the tendency towards 'psychologism', towards 'sociologism' or, in general, towards 'anthropologism' appears again and again, despite its critiques: it represents the philosophy implicit in their use. This highlights the importance of the human sciences, or rather, their irreplaceability; but at the same

time it also highlights the danger inherent in their aporetic situation. This danger, as stated, lies in the tendency towards philosophical regression, more metaphysical than critical, which manifests itself in modern anthropological ideologies.

The task of the human sciences, for Foucault, consists in making explicit, in a new form of objectification, what remained latent in the analysis of finitude and in the philosophy of its corresponding historicism within the sciences of biological, economic and symbolic 'man'. The problem lies in the form of objectification; Foucault proposes three models for its analysis: (a) psychological, defined by the pair 'function-norm'; (b) sociological, i.e. 'conflict-rule'; and (c) semiological, i.e. 'meaning-system'. The examination of these models, whose formal characteristics remain in any case obscure, would lead us a long way off. Though we flag them as a most important theme of discussion, it suffices to observe that they provide Foucault with what is perhaps the most challenging topic of his work. These models mediate between the conscious and the unconscious and thus establish the premises for a new archaeology. With their use, that disagreeable impression of fluidity, imprecision and limited methodological responsibility that the uninitiated inevitably receive when they enter into contact with the human sciences is revealed to be a superficial reaction. Considered more critically, the phenomenon is no longer misleading: instead of remaining hidden, it manifests the positivity of *savoir* concealed within the dialectic of the human sciences. What the models must make explicit is the dialectic's underlying structure.

CONCLUSIONS — Just as he reaches the apex of his argument, Foucault leaves us in the lurch: he fails to reach a conclusion; or at least he does not indicate how we are to do so. In any case, one thing is certain: the difficulties in which he leaves us are less troublesome than those in which he himself lands. In the first place is the thesis, *unzeitgemäss*, but in no way anachronistic, of the 'end of man'. Then there are many misunderstandings, perhaps external and banal, but no less irritating, that he succumbs to due to the heterodox nature of the language of his critique. One does not need to be a prophet to anticipate the results. In fact, it is clear that Foucault, waiting for a more mature account, entrusts his work's fortunes to the dialectic of predictable misunderstandings of the present. There is a subtle calculus here, but also a moral lesson. If we did not fear the *rire philosophique* with which Foucault promises to welcome the mental reservations of professional *gauches*, by now inveterately *gauchies*, perhaps we would hazard some criticisms. Instead, we prefer to anticipate some misunderstandings that, at least on a first reading, appear not only possible, but also the least illegitimate and the most plausible.

I) Foucault's framework does not contain his own position. The philosophy by which he establishes the trihedron of knowledges is not the same as the one by which he asserts the subversive function of the human sciences. The justification of the latter would require a fourth age of semiology. But this, for now, is in the 'future'. Consequently, it cannot give a structural foundation to knowledge, but only anticipate it dialectically. In other words, we have Sartre's objection. The success

of *Les mots et les choses* in France (and perhaps elsewhere) is worrisome. The book is objectively difficult, and does not lend itself to the inclinations of a 'well-informed' culture. However, Sartre believes he has identified the reason for this in the book's fundamentally structuralist character; by justifying an antihistorical attitude, this character meets the need for *disengagement* felt by the new generation, who desire nothing else than to insert themselves into the neo-capitalist system with a clear conscience. It is easy to counter Sartre's argument; but it would be a mistake to take it in an exclusively moralistic key.

It is clear that there are historicisms and historicisms. Even Foucault's archaeology wants to be a historicism of a kind. The critique one may direct at him is not that structuralism excludes an understanding of history, but that the species of historicism he proposes, whether strictly structuralist or not, is presupposed by his archaeology, but not justified. Among historians of the structuralist tendency and those of the organicist tendency, Spengler and Toynbee have at least attempted to give a historical justification for their own philosophy of history. Foucault owes us this much; after all, it is true that his archaeology ultimately requires a dialectical justification.

II) Foucault's framework is not exhaustive. There are at least three broad lacunae: law, music and modern physics.

a) Despite the 'function-norm' model, the study of norms certainly does not belong to psychology. In light of the peculiar character that legal interpretation evinces, it is even less relevant to the physical-mathematical sciences. Perhaps law is connected with the philology of prescriptive language, but Foucault does not address it. Moreover, law has a certain relationship to biology and economics, and in the other direction to psychology and sociology. Is it one of the human sciences perhaps? But then, what subversive function does it perform with regard to the rationalisations that already obtain? It is clear that law belongs neither inside nor outside the trihedron.

b) Regarding the history of art, with some legitimate reservations concerning its results, one can readily understand how Foucault's archaeology could encompass the figurative arts. But what about music? If it is true that any variation in semiological modalities changes the entire system, and even man's mode of being, should one not legitimately expect the archaeology to account for the development of music too? Here, our doubts appear well founded. Foucault's diachronic account contains no qualitative jump corresponding to the passage from monophony to polyphony, fundamental to the history of music. Then again, perhaps the music of the classical age is melodrama and *Wort-Ton-Drama* its Sadean *reductio ad absurdum*. If we accept this scheme, we no longer know where to locate the semiologies of counterpoint and sonata form.

c) Insofar as it is relegated to the lowest face of the trihedron, mathematical physics basically remains at the classical level of semiology and not the modern one. But this can at most account for the kinematics of Galileo and Descartes, not for Newton's dynamics, much less the energetics of the last century. Modern

physics, or if one prefers, 'classical' physics (from Newton to Einstein) is founded on a type of explication that, as Carnot's 'cycle' demonstrates, is genetic and not morphological; in other words, it does not enter into the representative *tableau* of the *mathesis*, but requires a proper analysis of finitude. Would we then say that it reveals the historical character of physical nature? The point of crisis, which corresponds to the innovations introduced by Cuvier, Ricardo and Bopp, could be Boltzmann's interpretation of the second law of thermodynamics. But then physics too becomes one of the new empiricities, and this fails to correspond to Foucault's framework. This example could be backed up by others.

III) Foucault's framework is the result of the application of a certain method, but it does not posses a proper metalanguage. That his analysis presupposes a method is beyond doubt. Archaeology is founded on Heidegger's, and more specifically Binswanger's, *Daseinsanalytik*. As stated in the preface to *Histoire de la folie*, it is a question of expressing the precategorical, namely, that moment in which reason and madness, or what is the same thing, language and metalanguage remain strictly correlated. Foucault's method is both rigorous and ironic. He pushes the teachings of phenomenology to their extreme consequences and precisely for this reason refuses to provide them with a theory. The transcendental cannot be abstracted from the empirical data, since this would imply a meta-theoretical regression, but it is co-signified by means of the context of the analysis itself. In its specifics, this method produces a rather irritating proliferation of metaphors. But this is precisely where the irony lies. With his abuse of language, Foucault wants to demonstrate that the meta-linguistic reduplication of neo-positivistic theorising is equally metaphorical. In the end, this metaphorical character remains the same for both, the difference being that Foucault's method does not try to conceal it.

We remain convinced, however, that in view of the book's economy and the requirements of the reader, it would have been better to use a certain meta-linguistic apparatus, and then to criticise its scientific pretensions at the end. The result would have been the same and the critique perhaps more effective. In any case, Foucault's method should be appreciated for its intrinsic, demystifying power, whatever reservations one may have about it. In the wake of Bachelard and Merleau-Ponty, it again offers to continental philosophy a naked language devoid of pseudoscientific clothes and authoritarian pretences, which in the Anglo-Saxon cultural sphere is represented by *Analytical Philosophy* [English in the original]. From an external point of view, it is clear that the style of analytic philosophy lies at the antipode of French phenomenology. But, if one manages to disregard this, one sees that they have in common a much more important assumption: the rejection of a meta-language or, what amounts to the same thing, they reduce their respective problems to a paradigmatic matrix, at once concrete and transcendental, that has the function of giving form, rule and norm to its contents. The foundation of everything is *metonymy*.