

GENERAL ANTHROPOGENY

SECOND PART – FUNDAMENTAL ACCOMPLISHMENTS

Chapter 14 – DETAILED IMAGES

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GENERAL ANTHROPOGENY

SECOND – FUNDAMENTAL ACCOMPLISHMENTS

Chapter 14 - Detailed images

The Anthropogeny encountered the notion of image as early as the bifaces of *Homo erectus*, and perhaps even as early as the choppers of *Homo habilis*, both being *massive images*, holding in a simple contour and volume, without internal details <9>. The notion of massive images proved useful in the semiotic of textures <13N>. But *Homo* has also elaborated myriads of *detailed images*, with external and internal details.

This proved a fateful moment. Since 50 tY in Australia and 30 tY in Brazil and Europe, detailed images abound, while paleoanthropologists have not yet found any from much earlier eras. Could it be that *Homo* started producing them all at once, after 1,5 MY or 2 MY of producing massive images ? Or were there, before this 50tA well-known period, detailed images that were destroyed because of perishable materials, or that lie in ignored or inaccessible locations? More generally, is there any evidence somewhere of a gradual shift from the massive image to the detailed image, or is it an abrupt emergence?

Two attitudes clash. Proponents of slow processes believe that many detailed images, at first sketchy and then subtler, had to prepare the ones we know, which seem at first sight very elaborate, as at the Chauvet cave, 31 tY ago. On the contrary, proponents of revolutionary modifications opt for a few simple and precise jumps, "quantum" <21F6>, of which the development of possibilizing *Homo* provides multiple examples. The triggering mutation would then have taken place within the imagery itself, or in another domain, for example in language <16-17>, or in gesture <11H>, or in the modalities of the encounter <3>, within *sapiens sapiens* groups, or even by a distinctive reaction between Cro-Magnon, *sapiens sapiens* groups, and the last Neanderthals, from which consequences would have spread to the image. We shall come back to this on the occasion of the phonetic revolution hypothesis. <17G1>.

These problems of dating and revolution are no stranger to the anthropogeny. But it is even more important to know what the detailed images have introduced globally into the structures, textures, and growths <7F> produced by *Homo*. Which did not only concern the imagery, but also, as effects or causes, writing, language, gesture, logic, music, mathematics, etc. It is these structures, textures and growths that we will try to identify.

14A. Structure, texture and growth of the detailed Paleolithic image. Exergy. Mythemes

The detailed Paleolithic images found in caves or in the open air fall into four main groups. (a) Some are content to depict tools and utensils: assegais, harpoons, throwers, pendants, washers. (b) Others constitute an almost autonomous - and often considerable - part of a tool or utensil. (c) Others still are genuinely autonomous objects, small statues or amulets. (d) The walls of some caves also wear painted frescoes. Those of some rivers and passageways too.

Did these different genres follow one another in succession? Leroi-Gourhan tried to distinguish periods according to the fineness of the models. But can we expect linear successions when we consider that about 15 tY separate the Chauvet cave (31 tY) and Lascaux (16 tY)? The latest carbon-14 dating showed that Leroi-Gourhan's stylistic criteria are not consistent. We shall content - let us repeat it - to observe the structures, textures and growth of Paleolithic images in their generality.

The Wandjina Man frescoes in Northern Australia offer our work an excellent introduction, even a backdrop <PP,151>. They are amongst the earliest known; some dating put them back at 50 tY. They often represent Homo himself, and not only animals, like in so many French caves. And, they perceive him as an interlacing among interlacings, in a grasp that, as opposed to the *energy* that the Greeks imposed on us (*en-ergeia*, forces within), one could call *exergy* (*eks-ergeia*, forces circulating between inside and outside) ; the mouths are wide open, and the sexes, or what masks them, too. As befits such a diffusion in all directions, these interlacings are almost always powerfully colored. And, the color is more diffusive, generative and communicative than the line.

Perhaps above all, transversalization, which characterizes Homo for an anthropogeny <1>, constitutes the figurative theme of some images. Not only are the arms and legs of the figures seen from the front very opened, very elongated and stretched, but their faces are surmounted by vast aureoles with rays that confirm the sentiment of their cosmic expansion. Circulating around the bodies, large “amoeba” (objects or forces) confirm the generalized interlacing. Now that many studies have given us a better understanding of the shamanism of today and yesterday, we understand that more and more people talk about a Paleolithic **shamanism** (Clottes and Lewis-Williams - *Les Chamanes de la préhistoire*), i.e. a grasp of things where the currents and strata (aerial, subterranean, earthly) of the universe communicate with each other. At least for painters and spectators, probably initiated, who still feel largely quadripedal, bipedal, reptile, volatile, as well as hominid, animal, vegetal, all at the same time. The many markings by torch in the Chauvet cave for instance, where the plastic gesture coincides with a burn, go well in this direction.

It is consistent that the detailed Paleolithic image did not represent overall actions. In France, it does not show any pursuit, battle, coupling, nesting, suckling of animals. It sticks to “totem” instances <3E>: Bos, Equus, Cervus, all intensely animated. If there are indeed myths, they do not tell a story, but only propose their nodal elements, to which their “exergy” suffices. These elements could be called **mythemes**. As we sometimes call *technemes* the nodal elements of a technique <1B4>, and *glossemes* the nodal elements of a language <16B>.

14A1. The (fine) analogies of certain panoply and protocol segments. Their economy

Massive images have taught us what is essential in semiotic images: it is analogies between an imaging and an imaged, observing that such analogies do not take place between purified indexes, as is the case in a mathematical figure <5D,19>, and that they are intentional, which is not the case for the natural indicium <4A>. Also, in the massive semiotic image, the analogy intervenes in some overall contours between object and environment, between object and artisan, whereas in the detailed semiotic image, it intervenes between multiple distinct segments. Thus, the sculpted segments of the *Venus of Lespugue* are in analogy with the segments of her body that are calves, thighs, belly, breasts, arms, neck, head.

One of the lessons of the detailed images of the higher Paleolithic is that the segments used to establish the analogy can vary very much. No details of the face in the *Venus of Lespugue* and the *Venus of Willendorf*, while the *Lady of Brassempouy*, that dates from a time that does not seem to be later, has two eyes and a nose, even though she has no mouth. No neck for the *Venus of Willendorf*, whereas the two other women boast a very long neck. We thus find this property that Homo - transversalizing, orthogonalizing and lateralizing – is able to deploy panoplies-protocols where the manageable segments inter-thematize technically and semiotically, for instance by being indicia and indexes of each other, in such a way that they do not have to be constantly all present for their sets or sub-sets to be identified. In other terms, it is enough to have just a few panoplic-protocolar segments in order make that things-performances-in-situation-inside-the-circumstance-over-a-horizon, which make up the Hominid *woruld <1B3>, should appear and be represented globally, whilst at the same time specifying, triggering and distributing themselves according to the choices made. We will see that this idea of *specification* within an environment pre-distributed by technique and semiotics also plays a fundamental role in the strengths and limitations of spoken language and gestural language <17A>.

At the same time, insofar as the panoplic and protocolar elements are operative, they were perceived with great pertinence and acuity very early on. When we see the images of Lascaux and Foz Côa, we sense that the authors exactly pinpointed the useful characteristics of the animals that they awaited during such season in such passageways, and then trapped, killed, kept, ate and perhaps made take part in some rites. Sometimes, ethologist even believe, starting from the traits of anatomy and behavior figured there, that they could identify the imaged species or even sub-species (large breeds) <R.nov96>.

14A2. Substitutability of the retained segments

At the same time, in the *Venus of Lespugue*, the Paleolithic image proposes a certain sequence of imaging segments which, despite a global isotopy, does not correspond exactly to the sequence of the segments in the imaged. At least between waist and knee.

This phenomenon is not a failure or negligence of the imager. It is due to the capacity of the substitutive brain and body of Homo technician and semiotician, as early as the Upper Paleolithic, to handle and maintain a panoply-protocol by more or less inverting its terms. A great horned owl in the Chauvet cave is engraved frontally for the head (eyes and beak), and from the back (feathers) for the bottom of the body. The exercise of this synodic availability <2A2c> can be found even in the smallest fragments. There is nothing astonishing or marvelous in the disproportionate rectilinear horns of the *Unicorn* of Lascaux, or in what some prehistorians have sometimes conveniently but abusively called *monsters* or cave *ghosts*. This is a property of hominian perception, which is confirmed in several writings (Archaic Sumerian, Egyptian, Mayan, Aztec <18B>), where the written words of a phrase are placed in a free order insofar as it is signaled that they belong to the same semiotic package, the sentence.

14A3. Perceptive-motor image-based field effects : Kinetic (Rodin effect), dynamic (Michelangelo effect), excited

Paleolithic images still show what could be called the Rodin effect, according to which, in order to render the walking or running of an animal in a still image, one must show the bottom of a hind leg at time t1, the top of the leg at time t2, the hindquarters at time t3, the trunk at time t4, and so on up to the muzzle at time tn. In this case, the elements of an image produce **kinetic** perceptive-motor field effects <7B>, where a curvature is activated marking a succession, sometimes an acceleration in time, all the more intense as they are captured in a single instant. Since the cave art, the distortions of this type have made horses, bulls, bison and hinds run.

These kinetic effects go hand in hand with **dynamic** perceptive-motor field effects <7C> in what could be called the Michelangelo effect, exploiting the ability to capture through an image not only the movements of the image but the forces (weight, gravitations, energies, efforts) from which these movements proceed, in short motions or movements <2B1>, according to the curvatures (and not only curves) to which lines and stains of the image force the eye of the spectator. From these resources, the Paleolithic Venuses swell and are literally gravid (gravis, weighting) to the extent of proposing to their spectators Gravidity in general; the Chauvet lions show an irresistible impulse, *impetus*, *Hormé* (first assault, originating impetus). In the Medici Chapel, visitors don't usually see that the limbs of Michelangelo's figures are unequal, and consequently anatomically incorrect. It is that, in images of motions, perception can choose between two graspings: either in a Euclidean space, i.e., three-dimensional and with fixed measurement standards, see twisted limbs, either see normal limbs

in a twisted space. The second solution is generally adopted by the spectator's nervous system, as it only finds that Michelangelo's figures are "very dynamic". Thus, the perceptive brain, when put in the presence of attractors belonging to more or less diverse spaces (since they intervene in diverse instants) creates a resulting curved space. Cave images demonstrate that this was the case from the Upper Paleolithic. The absence of plants in cave images is probably due to many reasons, partially ritual; but it confirms an imagery by movements and by motions.

Finally, the viewer of Paleolithic images also perceives that, in many cases, static, kinetic, and dynamic perceptive-motor field effects are so abundant, so mobile, so interdependent that they result in **excited** field effects that are *de facto* even *de jure* incoordinable <7G>, but compatibilizable (*pati, cum*) by the rhythm, with its eight characters of alternation, interstability, accentuation, modulated tempo, self-engendering, convection, strophism, gravitation by nodes, envelopes, resonances, interfaces <1A5>.

14A4. The fantasies of thing-performance, *woruld, partition-conjunction, presence-absence

If we then define, as we have done, fantasies as perceptions and as imaginations haloed with field effects - particularly excited ones - we can say that the detailed Paleolithic images offer a very complete panoply of non-compulsive fantasies <7I>.

(a) *Fantasies of thing-performance* <7I1>, where Bos, Equus, Cervus appear with the aura that predestined them to their shamanic or totemic vocation, as myths.

(b) *Fantasies of the *woruld* <7I2>, engaging the surrounding nature as it is appropriated by technician and semiotician Homo on the occasion of his things-performances. In particular, Paleolithic figures are mostly proposed in germination. Germination as to their support: they prefigure in the rock or ivory, where they are grasped as pre-existing, in emergence and immersion simultaneously. Germination amongst themselves, as they are always in overlapping. And these explicit and implicit intrications are so radical (related to roots) that they have no aversion to superimpositions, the new images naturally (without violence) inscribing over and in anterior images. Earlier on, we broached the exergy (vs energy) of the Wandjina Man <14A>.

(c) *Fantasies of partition-conjunction* <7I3>. The latter is active in the Paleolithic imagery in its *sexual* form everywhere, when we see the reproductive sculptures (pregnant vulvae since Chauvet), and particularly if we accept, even in an attenuated form, the masculine/feminine symbolic of Leroi-Gourhan, that we already encountered on the occasion of tectures, and that we shall approach soon, sub 6. In any case, the *generalized* partition-conjunction invades everything, as the frequency of superimpositions confirms.

(d) *Fantasies of presence-absence* <7I4>. What usually strikes the most in these originating productions is their strength of apparition, phenomenality, i.e., a certain thematization of the presence, absence, the indescribable presence-absence <8A>, to which

superimpositions also contribute. Whence the stupor of the current spectator, but also, undoubtedly, of those who made them.

14A5. Macrodigitalization implied by detailed analogy

Until now, we have followed the analogue dimension of the detailed images of the Upper Paleolithic. But macrodigitalization <2A2e> also intervenes, i.e., some traits are inevitably perceived as *not being* the others, and are thus designable oppositively by the exclusion of these others in closed panoplies and protocols. In the *Venus*, the limbs, once segmentarized, are necessarily non-trunks; the upper limbs, non-lower limbs; the calves, non-thighs; the right calf, non-left calf. And this insofar as segments, even before being semiotic, are technicized in the “female body” panoply-protocol according to a status that the liberties taken by the *Lespugue Venus* already suggested through the isotopy of limbs.

14A6. Latent schematization under imagery

Thus combining an analogue aspect (proportioning, participative) and a macrodigital aspect (oppositional, exclusive), the Paleolithic detailed image had fatally, for transversalizing and possibilizing homo, to inaugurate this very particular imagery, that of the *schema*, from the root *sekH designating the manner of being, and that we find in the Greek *ekHein* (having as a habitus, *habere*).

The schema has two essential resources. (1) It reduces the number of elements of the analogy - often to very few - which allows it the consistency of panoplies and protocols <14A1>. (2) It reduces the subtle forms of the analogy to traits, points, trait-points. (a) These traits-points are easily indexable, as they are themselves purified indexes; (b) they are very opposable, which makes them excellent objects of designation by exclusion at the heart of a panoply, thus a macrodigitalization <14A5> ; (c) they are very substitutable; (d) they provide the starting point of mathematics <19A>.

These remarks enlighten about what is schematic through the higher Paleolithic. And they invite us to stop before these “abstract” signs that can frequently be found in caves in south western France and that were grouped - rightly or wrongly - in two collections: (A) more or less straight lines often bristling with oblique traits , (b) freely rectangular forms, either isolated or associated. There are two classical interpretations. The first, inspired from near or far by Abbé Breuil, sees assegai or harpoons in the bristly traits, and sometimes traps or huts in the squarings, all at the service of hunting rituals blending imagery and magic. What we know of today’s shamanism, and the complicity that it provides between the eater and the eaten, adds to this reading (R.95,417), whilst recognizing that it is shaken by the fact that in Chauvet it is not the dominant animals in the biotope that are dominant in the figuration. A second interpretation developed by Leroi-Gourhan since 1956 believes to see an image of the penis/vulvae couple in the stem/rectangle image. This identification goes hand in hand with the

supposition that, in a few French caves at least, the animals figured were distributed in “masculine” (Equus) and “feminine” (Bos) species <13D>. The statistical elaboration - one believes then - would demonstrate that penis signs accompanied above all masculine animals, while the vulvae signs accompanied feminine animals. Around such themes, we can easily imagine liturgies with sexual cosmic components. From a pictorial perspective, these images - which were very analogical at the beginning - progressively became more schematic, the slit triangle of the vulvae becoming, for example, a rectangular latticework, with or without central trait.

Once again, it would be comfortable for an anthropogeny to have this debate settled, but the essential is already assured. (A) In some caves, perhaps in most, there is *some system*, although fluctuating according to locations and times, and not just some random accumulation of images. (B) The magic, symbolic and shamanistic functions of the produced signs do not exclude one another. (C) As soon as images lend themselves to it, they sometimes schematize themselves, playing with the reducibility of their elements, their substitutability, their reduction to traits-points <19>. (D) Schematization allowed the figured to be subject to all sorts of rotations without stopping being recognizable, which from this moment announces one of the fundamental resources of writing <18B2b>. (E) There is no reason to envisage a global history of the Paleolithic leading from poorly detailed images to more detailed images, or from scantily “realistic” images to more “realistic” images <R.dec.1999,107>.

In particular, one should not imagine in Homo a unidirectional, orthogenetic passage from analogue to digital. Despite uncertain dates, we believe that we observe recurrent thrusts of the digital underlying the analogical, or of the analogical underlying the digital, depending on the opportunities of the moment (social or climatic) privileging one of the two terms (digital or analogical). In any case, as early as the Paleolithic, one can sense how the image is potentially full of writing. Better still, how the technical object (including the technicized prey) <1B>, is in continuity with the image and the writing in the transversalizing primate.

14A7. Logico-semiotic field effects. Handprints

Already, logico-semiotic field effects arise from the fact that in Paleolithic images multiple levels of abstraction exist side by side. Thus, in the *Venus*, the imaged is a technicized and semiotized anatomy of woman by its segments; then it represents a fertile woman; but also, by its perceptive-motor field effects of motion, the imaged is turgidity and pregnancy; or again, by its fantasies of *woruld, it becomes the celebrated universal fecundity; or, by its fantasies of sexual partition-conjunction, it realizes the opening to the generalized partition-conjunction; and also, by its magic coupled with a ritual, it achieves the invoked universal fecundity.

On the other hand, every image is an intentional full sign; by which it is not simply an index, i.e. an empty intentional sign, nor is it an indicium, which is a full, non-intentional sign <5D>. When the image is detailed, the underlying and incongruous indicia multiply; and, insofar as it tends to schematize, the indexations become more acute. This is already propitious

to the production of logico-semiotic field effects being static, kinetic and dynamic, but also excited, between different aspects of the sign.

But, to these logical tensions inherent in any image, Paleolithic images add their own logico-semiotic effects. It is the archaic astonishment in front of their latent prefiguration in the materials that supports those added effects: suggestions of forms, colors, textures, even growths of the rock (limestone) for painters; suggestions of teeth (ivory), horns, harder stones for the sculptor. Whence a rich instability between natural form and artificial form, between semiotic thematizations and technical thematizations, where Homo brings a sense, his sense, to what already had one, prior, expecting it and protecting it. Magic of the hunt, or of fecundity, or of fraternal eating, and certainly parts of magic along parts of the cults, cults turned towards the *woruld, and by that bearers of presence-absence <8B9> and ecstasy (*st, eks); what we vaguely cover by shamanism.

We then measure the violence of the logico-semiotic field effects activated between all these levels and these aspects. (a) Between images and indicia. (b) Between indicia and indexes. (c) Between analogy and digitality. (d) Between imagetic graspings (detached, contemplative, considering), and magic (involved and effective). (e) Between figured species and environment. Let us repeat that the stupor triggered by the images of the higher Paleolithic is not only related to their perceptive-motor field effects, but also to the tensions of their logico-semiotic field effects. There are so many originating tensions here that Origin is activated-passivated as it will never be again.

That Paleolithic Homo had glimpsed, at least implicitly, the stakes of the image emerging from the indicium and the index is undoubtedly thematized in these isolated or grouped **hands** that he multiplied everywhere. Creating thus a visual image, but also tactile to the extent that it shows the privileged organ of tact. It is both the most analogical, and yet the most macrodigitizing image, showing fingers (digitus) spread out, especially the thumb, digital per se. The imager is there, both taking and being taken. The specification/thematization barely emerges from the thing-performance, which barely emerges from the situation, which itself only emerges from the circumstance over a horizon. How to mingle more the indicia (imprints) and the indexes (up to the index finger), and also the intentional and non-intentional signs ?

We cannot ascertain the part of the voluntary and the accidental, of the semiotic and the magic (shamanism), in these hands, in positive, in negative (in reserve), in simple contrast. But the fact that they are numerous, that they should be found in Australia and in France, and also that, even for Leroi-Gourhan, they should not distribute according to the strict topography of caves, like “sexed” species, but more freely, like some fat red dots, suggests that for their producers, they had a scope prior to particular significations. This preliminary semiotic character does not exclude the trace (chance or sought?), sometimes very apparent, from the marker Homo as particular biological specimen. In Chauvet for instance, ochre positive hands produced by the same person do not only allow grasping the many aspects of his singularity where they are grouped, but allow also following his interventions in several distant points where they are recognized.

14A8. The destinies-choices-of-existence of the detailed image

All that has just been noticed in the images is due to the gesture of the performer, and thus realizes to some extent his destiny - the global part of his existence (his topology, his cybernetics, his logico-semiotics, his presentivity <8H>) - that one could just as well call here his **work subject** <11I3>, and according to the case his **pictorial subject**, his **sculptural subject**, his **engraver subject**, which comprises, in addition to the fantasies of thing-performance, of *woruld, of partition-conjunction, a fantasy of X-same <11K>.

Assuredly, in order to perceive and define these **plastic work subjects** of the Upper Paleolithic, we do not have enough situational and circumstantial elements concerning the period; and above all, our plastic intelligence is not acute enough. Saying that these “subjects” are clannish or tribal would prejudice of a social organization about which we know nothing, not even if we should draw similarities between them and these assemblies of colorful parietal rectangle that we metaphorically called “blazons”, which then would have distinguished “ethnic groups” <28> of blood or culture. We can only suppose that they had to be very grouped, according to hominid, animal, vegetal, even mineral fusional groups, that it is difficult for us to imagine.

To what extent were the authors of engravings, sculptures and paintings singular? We shall recall about this that, in yesterday's non-westernized Africa, plastic productions were perhaps very coded from a group perspective (in a clan, a tribe) but their executers were often recognized and named by the other members of the group. So we should not hastily exclude that there was, in Chauvet or in Lascaux and elsewhere, some “great” painters of bulls and “great” sculptors of Venus, in the same way that there were probably “great” hunters of bulls and some “great” chiefs by dint of being “great” hunters. In any case, some “great” initiates, being more shamans than the others.

What is certain is that these productions supposed an elaborated degree of the technical and semiotic passage from hand to hand and from brain to brain <2B9> characterizing technician and semiotician Homo, whilst excluding the extreme form of truly collective work that some totem masts show in Polynesia, in the early twentieth century. Because the movement, the motion, the fantasies linked to the image of a cave reindeer presupposes a gushing unit (impetus) of the producer that the Polynesian mast does not have.

14A9. Plastic cells

Because it is detailed, i.e., it has internal articulations, the image of the Upper Paleolithic does not propose a unique field, like the massive image, but a set of local fields. Thus it already updates a property that will be that of all detailed images with strong excited fields, namely that, if one distinguishes sufficient portions, each of them shows a certain overall plastic "weight", with a relatively equal *rate* of plastic gravitation and inflection, equal *rate* of

logico-semiotic torsion, equal *rate* of presentivity, etc. In such a way that, taken from anywhere, they support a layer of static, kinetic, dynamic and excited tensions and compatibilizations that is sufficiently homogeneous to ensure an intense transitory rhythmization of a brain.

Each portion of the image, sufficient to determine such an effect, can then be called a “plastic cell” (Wladimir Weidlé, "Diogène" 18, 1957). The term is well-chosen insofar as these portions contain, each, the essence of the information of the system, like cells do for a living organ, and that, besides, their interstability has something of the properties of life.

14A10. The two standing-in-place of the detailed image: reference and significance. Resemblance

The detailed images of the higher Paleolithic are so rich that they certainly maintained in their producers and spectators/users the double orientation of the “standing-in-place-of” that we have perceived in the massive images of the lower and middle Paleolithic. (a) orientation to be *referential*, the imaging disappearing in front of the imaged; (b) orientation to be *autarkic*, the imaging being sufficient as such <9E>.

Above all, they make us see how imagetic referentiality takes the form of *similarity* or *resemblance* (similis, sem, re-), and that this referentiality certainly holds in the *analogy* and *proportion* of some segments of the image <9A>, but also in the representation of its static, kinetic, dynamic, excited field effects, perceptive-motor and even logico-semiotic. This is what a cartoonist plays with when he makes us grasp a *whole* character in a *few* strokes, none of which, however, can be found as such in the picture.

14A11. The fervor of the pre-frame

There is, however, a property that almost all later detailed images will share and that the images of the Paleolithic do not have: the frame and the framing. In fact, the eventual tracings that intersect at right angles in the caves work like grid patterns (which made us think of traps), they don't enclose anything, they don't frame anything. The remarkable line (of a spine, a belly, etc.) from which some animals are build and differentiated is indeed a referential, a pre-frame, but it is not a frame. The true frame, a quadrangular geometrical figure surrounding a figure, is an invention of the Neolithic, as we have already learned in the tectures <13E>. So let's be careful before we talk about *perspective*. In the strictest sense, perspective supposes the referential of a veritable frame, which is absent here. But some elements prepare it, given the characters that we recognized in the hominid vision in general <1C1>: animals becoming smaller as they move away; positions that make some parts of the bodies appear in front of others, from the front or three-quarters. The very strict consideration of angles and distances of shots in the Chauvet surveys will have had the merit of showing how much each figure varies depending on the position of the observer, and thus also of the producer,

determining each time diversely intense graspings around a maximal intensity (plastic, magic, shamanic).

In all cases, in the same way as the frame delimits as much as it accentuates, this situation of pre-frame was a springboard. It perfectly fitted the mythemes (without history), and the exergy (that sufficed to tie them together) <14A>, particularly amongst the echoes of the cave and its fleeting shadows, those provoked by the tallow lamps that were found in Lascaux. With, as consequence, an overvoltage of presentivity <7I4>, here pure and native to the point that it triggered stupor.

14B. Paleolithic plastic dimensions: engraving, sculpture, painting

The detailed Paleolithic images developed in Homo the engraver's, sculptor's and painter's faculties enabled by the Hominian three-dimensionality <1A2>. An anthropogeny must start off from their differences.

14B1. Engraving

It is appropriate to begin with engraving, because it is particularly originating, being there since always in the state of nature in the cracks of the stones, in the lineaments of the bones and the ivories, as separation, as outline, by traits-points, by contrasts of color, by nuances of grain of materials. The accidents of stone, particularly in limestone, were a potential imagery, which endlessly combined structure, texture and growth <7F>. In the Chauvet cave, in the painted vulvae whose base is filled in black, the vertical vulvae slit is engraved through the black, then through the ochre of the surface of the rock, right up to the rocky white.

To make natural slits semiotic, thus intentional, to trigger perceptive-motor field effects, it was enough that the intense glance of the hunter, the sorcerer and the panoplic and protocolar shaman should espouse them, reinforce them, ease them, complete them eventually, thus creating an endless crossing between nature and artifice, between indicia and indexes, between chance and intention, and thus also between the semiotic thematizations and technical thematizations depending on the wish of magic. With all the logico-semiotic field effects triggered by these ambivalences.

On the other hand, taking a relatively rigid point (spike), fixing with this point or edge a starting point, pulling by pressing until another point, the point of arrival, may seem a naive action. Yet, this elementary action is the trait (line). And even the **trait-point**. Which is the graphic choice per se. Possibility of all analogies and all macro-digitalities. In the Universe, the entry of the trait or trait-point probably proved as important as transversality. The trait-

point contained the schema, writing, mathematics and logics. It particularly initiated detailed sculpture and painting.

14B2. Sculpture

The sculptor of massive images, who has started producing detailed images, also started tracing. By splintering, by scraping, by polishing, he traced and carved technicized segments of bodies. And at the same time, he discovered the **volume** as volume, that is to say, he saw, in his plane hands in bilateral symmetry, and in front of his transverse stature, objects that occupied the expanse by thematizing this occupation (capere ob, grasping with across hold, taking in advance). Thus exalting the expanse in general, as a result and container of volumes. Exalting the volumes of technical objects peopling the ambient environment. Privileging volumes inhabited by the presence of animals and their hunters-watchers-sculptors. These three types of containers and contents (expanse, object, inhabited volume) communicated their properties to each other and added them up. The *Venus of Willendorf* and the *Venus of Lespugue* testify to the wonder of their authors, preceding ours, in front of the field effects born on this occasion.

At the same time he is astonished by volumes, picker-hunter-sorcerer-shaman Homo becoming sculptor is astonished by the latent energy of the material he cuts. Through resistances, textures, rasterizations. The Aurignacian and Magdalenian *Venus* are as much parturient by these supposed energies of materials as by their forms. And if the latter sometimes fall within the scope of “good forms” (lozenges or hexagons), it is to comfort these material densities – such as the hexagonal alveoli confirms the density of the hive – and not to flatter a geometry that does not yet exist at the time, and that painting ignores. In this context, smallness can be an adjuvant. The 12 cm of the *Venus of Willendorf* concentrate its latent forces all the better that it holds in the hand (Herbert Read).

The volume and particularly the density always maintain a reserve of ungraspable, and hide a central, inaccessible mystery, that is however there and present, and sometimes obsessing with presence. On the other hand, sculpture only shows one side at a time, and the sculptural perceptive-motor field effects, that allow - to Homo's binocular vision - anticipations and retentions of sculpture invisible sides in its visible sides, reinforce its mystery instead of suppressing it. One day, some hominid specimen will call this type of characteristic the transcendence (scendere, trans, going beyond). Often, Homo will divinize sculptures, not paintings - except icons, which precisely have sculptural properties.

In the same way as the massive sculptures of the lower and middle Paleolithic were ready to become steles (Chinese), xoanon (Greek), Lingam (Indian), the detailed sculptures of the higher Paleolithic began to have what they needed to become the support of a religion. Not already supporting articulated gods, but at least supporting a "divine-sacred" diffused through the fantasies of thing-performance, of *woruld, of sexual and universalized partition-conjunction, of presence-absence, enveloping the animal species and undoubtedly also the

seasons. Calling for first ritual speeches and gestures. Perhaps the unguents and holy oils announcing the buttered lingams of today's India.

14B3. Painting

Detailed cave painting proved even more revolutionary. It is true that it continues to exploit the relief and other accidents of the form, crack and preliminary color of the rock, and thus retains something of engraving and sculpture. But painting offered Homo an almost limitless process of abstraction provided by a fluid substance that is diversely spreadable and colorable and from which any form can be born and be transformed in exotropic productions that have almost as much agility than the endotropic productions of the brain (imaginary, notional, conceptual). The Paleolithic *cosa mentale* used as **dyes** : blacks and greys (olive), especially from manganese oxide; yellow ochres (clay and iron oxide), which once heated also gave red ochres; white from kaolin; various additions of bone or vegetable powders. As **vehicles**: animal fats, water all the more stable as it was calcareous, as in Lascaux. As **applicators**: fingers, sticks, even stones.

Thus, the **trait-point**, a revolution in the Universe, signaled by engraving, reached its speed in painting, without losing any of its strength. On the other hand, Homo painter settled decisively in the **two-dimensionality**, confirming himself as a transversalizing, frontalizing, lateralizing primate <1A1>. For the first time, technicized segments are spread out, seizable at first glance, under the eyes, without anything hidden or anticipated, except for what is due to the speed of visual course, which is considerable. Nothing confirmed Homo more as an endotropic and possibilizing primate <6>. Especially since it is in the two-dimensional plane that symmetries, which are fundamental to techno-semiotics, best appear; due to the demands of manipulation, especially between thumb and little finger (empan), many technical objects have a plane of symmetry (Thom). One day, pure drawing will be the best illustration of the brain at work.

As much as sculpture escapes the gaze by its true three-dimensionality, inducing a *transcendence*, as much painting proposes itself (ponere, pro) entirely, spread out, virtually intelligible. Inducing what will one day be called *immanence* (manere in, to remain in oneself, at man's height).

14C. The environmental factors of the Paleolithic detailed image

Paleolithic engraving, sculpture and painting supposed the refinement of the body of Cro-Magnon, particularly of the distal commands of their plane, symmetrizing hands with a thumb more agile than strong, and that the contemporary Neanderthals did not seem to possess

<1A1>. But they also supposed, in order to transform technician Homo into plastician Homo, environmental availabilities that the anthropogeny must at least overfly.

14C1. Ice age promiscuity

According to the last terrestrial climate cycles long of 100 tY, where 80 tY of ice age and 20 tY of interglacial periods alternate - in a sawtooth-shaped manner - cold reigned with a few fluctuations up until 10 tY ago, i.e. during the entire Upper Paleolithic period.

We should then note that the Hominian habitat surrounded by frost, particularly in Europe, forced Homo to live in relatively stable shelters, in prolonged confinements which must have had the effect of surrounding him with a more measured space, of a first *extent*, consequently of a *duration*, and thus favoring a greater attention to the bodies of the congeners, available for inspection, meditation and consideration <8A> by the standing position and the various forms of encounter <3>. Between the perception of the congener at close range and the perception of the prey aimed at as a target, stimulations for reciprocal detailed explorations could be established. Moreover, the respites from the cold, by problematizing the choice of housing, had to have a stimulating effect on the hunting conditions, on the relationships of collaboration, community, companionship, education, and thus also on the perception of the articulations of "things" (causes).

14C2. Natural prefigurations

During cold periods, the walls, constantly nearby, of the place of refuge must have been subject to a more attentive observation, even a certain contemplation and meditation of their virtual images. For segmentarizing and transversalizing Homo, who for one or two million years had exploited hair, bone and flint for his first utensils, there may have been, when he became a meditative technician, a shift from the natural tracings of habitat materials to the technical and semiotic tracings of engraving, itself leading to the tracings of sculpture prepared by the massive images of the tools, and leading finally to the *medium* of painting.

14C3. Clothing

The same rigors of the cold inevitably led to clothing, and to the attention to clothing, which is an amplifier and fixer of the gesture <11H2>. Yet, clothing has some of the same characteristics as the detailed image. Like the detailed image, it *analogizes* in relation to the body, insofar as it is close to it, while remaining distinct from it. Also, like detailed image, clothing *macrodigitalizes* in that it divides the body diversely into two, three, or four essential segments, to the point of globalizing it into a panoply-protocol of mutually exclusive parts, at the same time as partially substitutable. Clothing is simultaneously an indicium, an index and an exotropic - even endotropic - image of the body.

14C4. The mask

In the Paleolithic paintings that we know, human figures are extremely rare, and are often confounded with the animal figures, particularly in faces. There are two readings. (a) We speak of masked men. (B) We speak of an imagetic ambiguity crossing anterior animality with hominid animality, or better still, showing the latter as still immersed in the other, just like engraving is in the fiber of the rock.

In any case, the two readings suppose an extreme continuity and participation between both animalities, even a solely inchoative emergence of the second out of the former. This is confirmed by Homo's capacity to designate then animals through their motion, fantasm, and consanguinity in the *woruld. As also does the fact that here, field effects are much more powerful in the animal figures than in human figures, as we can see in Lascaux in the elementarity of the famous ithyphallic figure laying stiffly in front and under the deployed forces of an animal overhanging. Here again, the animal is the animator of man, not the contrary. And, as shamanism and totemism will confirm, the distancing of the covering of Homo by the animal may have contributed to induce the distancing of the covering of Homo and the animal by the image.

14C5. The grave

Because of the upright position, the corpse of laying Homo retains a characteristic of the living and vertical body of Homo: that of being evident in its orthogonal articulation. And the increasingly upright and uncluttered face created an increasingly unbearable ambiguity between life and death. As a distancing thematization, the image was then able to come to the rescue of the technical and semiotic rout of the dead hominid body. Overall, cave art is contemporary with the tombs of Homo sapiens sapiens of the Cro-Magnon type; also with those of his Neanderthal cousins.

14C6. Language and music revolution. Shamanistic perception

Finally, to embrace the cultural seism that was the profusion of detailed images, and perhaps their blossoming, 30-35 tY or even 50 tY ago, we should consider their relationship with detailed language and detailed music. And we should also envisage on this occasion a possible concomitance and reciprocal causality between the pre-frame of the image, the pre-tone of music, the pre-phoneme or proto-phoneme of language. But this will require our next three chapters <15-17>.

However, we shall probably adhere to the thesis of several of today's paleoanthropologists who see in the multidirectional and mysterious echoes of vocal or instrumental sounds through the meanders of Paleolithic caves a privileged incitement of the

shamanistic vision of things <10A>. A vision where parallel worlds (subterranean, terrestrial, aerial) get in contact, where the animal scream and cave scream intensify one another, and consequently where the rites of brotherhood between animals and men, who did not feel very distinct - the ones feeding brotherly on the other - managed, at the same time as they looked for musical and perhaps danced expressions, massive or already detailed, to look for iconic expressions, which were also massive or detailed depending on the eras and locations.

It is often pointed out that we will never be able to deduce the system of the Paleolithic world from its images. Leroi-Gourhan liked to imagine these archaeologists who, ten thousand years from now, will exhume the crucifixes from our churches, and will come to the conclusion that we spent our time on human sacrifices, against the background of a metaphysics of universal blood. Useful warning. But when seeing the remains of shamanism in the Inuit or Siberians, we can ask ourselves if it really matters to know what exactly were the bison, the reindeer, the lion or the horse for the imagers of the rock; or to know about some of their abstract signs: male/female symbols or the marks of a clan, or even a craft guild? Wasn't the essential thing, in this case, precisely the generalized exchange of *mythemes*, in a general *exergy*. And this would then be because in caves, we only perceive the essence – the exergy, the mytheme - that we would be so radically moved.

14D. Neolithic framed images. Generative schematism

As we have seen from lectures, the Neolithic was a major anthropogenic event with the emergence of the frame <13E>. Paleolithic images show approximative rectangles, they even juxtapose them in lattice shapes in their “blazons”, but they do not put anything in them, nor refer anything to them. In contrast, the sanctuary of Çatal Hüyük, which has already proposed its *tectural framing* of floor and wall, also erects on one of its walls an *imaged frame*, i.e. a sliced rectangle containing a figure, in this case a parturient female figure above three heads of bulls, and serving as a frame of reference for them.

Thus really framed, square (quadrata), firmly referenced, the detailed image, instead of being only a stronger and more intense place of the *woruld <1B>, what it had been in the Upper Paleolithic, is now taken *in* the environment (not yet *on* the environment, as in Greece) to build a *woruld of its own. Analogies and macrodigitalities between imaging and imaged have now a stabilizing referential, and they will be able to develop with a distinction and seriation unknown until then. In the face of such images, Homo started squaring and framing himself. Now framer, framed, and framing its entire existence.

The first result of this global frame was a sort of internal framing of the figure. The arms of the pregnant woman in Çatal Hüyük form a horizontal line; her opened legs too; her hands and feet are the extremities of a stretched horizontal rectangle; the vulva and the head are of the same size and over a vertical line. Thence, the whole of the figure is obtained using “good forms”, but also by their countable repetition, two choices that the Upper Paleolithic

ignored. With their horizontal and parallel horns, the three almost identical bull skulls confirm the same grasping, which is both framing and counting.

Everything happens there as if Homo, becoming somewhat a farmer and breeder under the effects of an environmental or demographic pressure, perhaps also because of a genetic mutation of sapiens sapiens, had started perceiving things and their images as recurrences of the Same with some variations. This is what we have called a *schematic generation*, or more strongly a *generative schematism* <13Eend>, corresponding to the framing of herds and edible plants whose counting tokens of the time confirm a grasping that gradually becomes numerical, even surveying.

This generative schematism will spread across the vegetable and animal ornamental patterns, even abstract, traced on the baked earth of the statues, and also on the utensils when the Neolithic, after its pre-pottery phase (PPN, pre-pottery Neolithic), will shift to the pottery phase (PN), particularly in the civilization of the Old Europe, which - particularly from the VIth to the IIInd millennium before our era - covered a territory whose edges are formed by Romania, Yugoslavia, Sicily and Crete.

In all these cases, they are traits, points, tracings, laces that move, repeat themselves, come back unto themselves, drawing their variations from their identity, particularly playing with all the reversals and possible returns of the spiral. Generative trait-points, not ornamental in any way, as we can see in their continuous or dotted invasion on the generator penises. Developable paths, but at the same time punctuated, almost in kinds of paragraphs, with pre-scriptural "line breaks". As though the entire *world emerged now from the schema (which was only underlying in the Paleolithic <14A6>) and its punctuations. As if the *schema* became *scheme* <11B>, and thus also rhythm, this one erecting in universal principle all its usual components of metronomic alternation, interstability, accentuation, self-engendering, convection, strophism, gravitation by nodes, envelopes, resonances, interfaces <1A5>. Here, particularly underlining self-engendering.

Thus, as the Neolithic advances, and while Homo settles in his first villages, the diffuse Divine-Sacred of the upper Paleolithic, while continuing to prowl, starts settling down somewhat in sorts of Nodes: pregnancies, erect and sometimes brandished penises, and particularly the omnipresent (self-)generating spirals. Relays sufficiently physical and plastic, sufficiently punctuated, to give rise to first rectangular temples (Çatalhöyük) and ossuaries (Azor). We can even ask ourselves if, amongst these generative laces, the predominance would not shift from the vulva, which matches the Paleolithic superimpositions, to the more organizing, more sequential penis.

In *The Goddesses and Gods of Old Europe* (Thames and Hudson, 1974-82), Marija Gimbutas assumed that the Neolithic that she calls "Old Europe" experienced a peaceful matriarchal organization. She invokes that the figures show neither warriors nor combats; that the number of goddesses is higher than that of the gods; that the thematic of fecundity is obsessing. But isn't it dangerous to conclude too much from an absence? Indeed, plants and male bodies are absent or nearly absent from Paleolithic representations! But, the ecstasy of the generative schematism was perhaps strong and rich enough to monopolize the imagery of

the Neolithic. In any case to content with the omnipresence of the generative penis and to dispense with the themes of combats, which only took their social and cosmic sense with the primary empires <14E>.

Tectures had questioned us on the resemblances between the Neolithic age and the current civilizations devoid of writing <13Eend>. The same question arises about images, since the recent detailed images of Africa and Oceania also experienced a certain generative schematism with the same turgors and local depressions in Homo's body; with the same proportions of the parts according to the nodes of strength: eyes, hands, necks, sexual organs, trunks, feet, widened or elided. Particularly, on both sides, we see each part engender its neighbors in a more or less pulsating manner, by propagation of vibrations, which are often born from the belly in Africa, where the drum is applied <15D2>.

14E. The sub-framed images of primary empires

When the hominid groups of shepherds and farmers, who had domesticated wild cereals, grew and went from the village to the town, the tectures not only framed but sub-framed themselves. Detailed images too. In other words, they introduced *composition*, or the art of posing together (ponere, cum) several elements. Composing is not repeating the Same varied, as the pre-pottery Neolithic (PPN), and the pottery Neolithic (PN) framing had done, in its generative schematism <14D>. It means ordering and inserting (serere, joining, serializing, in) by storing, by towering, by interlocking, or still, by procession <1C1c> to activate the slippages and overlapping of rows that are before or behind one another, and this from a motionless overhanging principle. With its characters aligned in lines and columns, writing was called by this grasping, and in turn comforted it. In any case, the body of Homo shifted from its Neolithic status as a *Node* among sequences of vital intensities and depressions <30A> to the status of a *portion*, or a *part*, strictly articulated in a justifier universal order, at once physical, vital and political.

This anthropogenic leap has known variants in Egypt, Sumer, in the Chang and Tzu China, in Chavin de Huantar, in the Olmec, Maya and Aztec. But the anthropogeny will focus preferably on Egypt. Because the imagetive sub-framing contains a decision of contour and sub-contours, by opposition to the Neolithic continuities, and it is in Egypt that this decision was exacerbated because of the destiny-choice of existence of the men of the Nile.

The Egyptian miracle was probably due to the influence of a unique landscape and climate, with the collaboration of a certain dialect, and then soon a writing <18B2a>. The Nile has regular and legible flooding. The dry air of the all-encompassing desert gives everything (animals, plants, men) an absolute sharp edge under a Cyclops and falcon sun ("A knife of sun, a sacrifice of birds", Dellisse), triply divine, depending on whether it is seen in the evening, at noon, in the morning. Everything is orientated like the river, in a horizontal and two-dimensional procession under the bright sun. No confusion, nor separation of figures, but the

omnipresence of a tense, absolute tracing. Where the detail, sub-framed, sub-surrounded, is as striking as the wholes. Where the ibis and the papyrus are cut over the bank like the falcon in the sky. Edge-to-edge juxtaposition of the splendid luxuriance and the splendid desert. So much for the environmental provocation.

In this intensity, the mental and imagetic representation consisted in taking every element according to its most speaking angle and contour; the most writeable, written. Thus, in a character, the *profile* for the head, for the front of the bust, the arms, the legs; the *frontal position* for the eye, the shoulders, the back of the bust; the *three-quarters* for the navel. In such a way that the eye of the spectator constantly circulates from essential to essential, from contour to contour; these contours that the Gods can recognize in each being; what in everyone can lead to the divine. To the eternity of the Egyptian X-same <30B1>, suffices the eternity of its contour, that is fixed by mummification. Eviscerated from its brain and entrails - except the heart - the mummy is as much surrounded, and surrounding as a hieroglyph, and as an image in frescoes. This is why the hieroglyph, the image and the mummy refer to each other so well here; contour for contour, only more analogue or more digitalized depending on the case. We wondered whether natural mummifications that were sometimes operated on human or animal cadavers by the dryness of the sun were not, for the passer-by that they captured by their truth, the first trigger of this illumination.

The contour of the Egyptian image was then of such acuity that the outline refers to the inside and the outside equally. In such a way that the compositions are somewhat reversible, offered to a reading where, in exemplary cases, form and background have equivalences. The full and the empty topple over into one another. Therefore, figures float, are not leaning on the ground, while being infinitely consistent. Each set is strictly transversal and strictly frontal, without any obliqueness, which would allow a progressive, totalizing approach. Only a sort of lightning strike. The living is already its shadow, dead, and its shadow, dead, is still alive. The function of perceptive-motor and logico-semiotic field effects consists in boosting the slice of the cut, which does not oppose full and untied.

Never and nowhere has Homo felt so justified-imagined-written. Along this river, in this light, this imagery will go on for two thousand years almost without changing, without deviation, without loss of identity. The diffuse Divine-Sacred, "exergic", of the Paleolithic, the Vital Nodes of the Neolithic have mutated into Instances and Roles of eternal cycles for immortal hominian specimens, in person or by the Pharaoh's power of attorney. Nowhere have the written character and image, writing and profile - thus also digitality and analogy, death and life - been identified to this extent. Fischer does not exaggerate when he corrects previous Egyptologists, who understood the "logicality" (Gardiner) of this art like simple correspondences between image and writing, and when he affirms: "Egyptian pictorial art is so intimately related to the hieroglyphic system that it virtually *is* writing" (*The Orientation of Hieroglyphs*, MOMA, 1977) <18B2a>.

Other Primary Empires, China, India, Olmec, Maya, did not push the decision of the traced as far, and thus the sub-frame in the frame, by the image-writing. However, all those Empires were for Homo the moment of a *complete* cosmic-social justification, in an existential assurance that situated like so many essences the "kings", the scribes, the rich, the animals, the

plants, the river, the forest, the Sun, the Moon, sometimes the subsoil, but also the artisans and the poor. It is the absolute (solvere, ab) of this justification that goes from the whole to the detail and from the detail to the whole through the sub-framing that allows understanding imagetic productions that are everywhere so strangely constant in quantity and in quality during millennia.

14F. The images of WORLD 2 in Greece

As lectures taught us, Homo, now a sailor, started looking at his environment, in Greece and on the Aegean sea, in a “just” distance, characteristic of the distant-continuous WORLD2 <13G1>. Things (causes) appeared then to him as wholes made up of integral parts, i.e. whose parts directly refer to the whole before even referring to the adjacent parts, with as consequences: the scenic grasping, the analytical-synthetic approach, the mechanic, anatomic, physiologic, geometric mind, the political independence, the permanent astonishment, the logical heroism, the prevalence of the convex over the concave, etc. These wholes were fatally standing out of their background, and subordinated their material to their form. In this chapter we will only have to verify, for the images, this revolutionary vision that in the West pursued its existence for more than two thousand years.

14F1. The prevalence of sculptural envelopment

Being scenic, the Greek program had to privilege sculpture, exalted by the *skènè*, and stimulating it in return. And, in this sculpture, the volume had to be more important than the mass, since the mass is blind, it hides, whereas the volume ostensibly occupies the extent, dilates it, breathes, creates a distance, and thereby totalizes the glance, creating clear and defined resonances. The *ronde-bosse* (full relief) was then the exemplary sculpture, since the volume manifests itself as one turns around it. For Spengler, the Greek destiny-choice of existence was “stereometrics”. The word conciliates *metron* (measure) and *stereos* (solid), related to the Latin *strenuus* (vigorously active) and to the English *stare* (to stare intensely or intensely).

But to become appearing (pHenomenon) in Helladic’s white light, the volume required new perceptive-motor field effects. Those of the Egyptian sculptures had the aim of compatibilizing the transversal grasping and the frontal grasping, insisting on the contour. Those of the Greek sculptures, with an integrative pretension, sought that each side should pre-contain the following side, while retaining the previous side, in such a way that the sculptural envelopment should realize the movement and the motion in immobility, but also should have for effect that a foot, shoulder, nose and mouth should end up, in a general shift, referring immediately to the whole every time. Whence the undulating character of the figures that,

according to Rodin, was due to the fact that, seen from above, Ephebes and Venuses placed shoulders, hips, knees and ankle in alternating plans.

We questioned the role played there by enamels, glasswares and precious stones reviving the eyes and mouths. Seeing the Charioteer of Delphi, one of the few well-preserved Greek bronzes, more than realism, it was a question of obtaining a brightness of the figure, a surge outward, in particular of the volume, and at the same time that first vital impulse which was called *ormé*. In any case, in this system, the material of the work is only a support or receptacle of the forms, and it no longer has the magical value that it had in non-scriptural WORLD1A, and even in the scriptural WORLD1B. The form became so important that next to its morphism, rendered by *morphè*, it was also *eidos*, who will make the idea.

14F2. The stereometric perspective of painting

We cannot fully situate Greek painting, which did not reach us, but it did not seem to have had the same importance as sculpture. When Aristotle exposes his theory of the four causes, he invokes the sculptor, not the painter. On the other hand, the anecdotes that we have concerning Zeuxis of Heraclea, a contemporary of Phidias, and Apelles of Kos, a contemporary of Alexander, do not speak of the modules of the bodies engaging macromicrocosm, as about the statues of Miro and Praxiteles, but only of virtuoso realism: how wonderful it is to render, on a two-dimensional support, raisins that have three sides, and in such a realistic manner that birds could peck at them! But then, shouldn't this simultaneous grasp of something (cause) offered only by painting, and not by sculpture, have seduced the Greeks, analytical and synthetic tects and architects? Apparently not, probably because their analysis and synthesis were precisely stereometric, and by no means already projective, as will happen much later.

The stereometric option is confirmed in the Greek conception of pictorial perspective, which we can envisage through the engraved scenes at the back of Etruscan mirrors dating back to -430, certainly of Greek influence, because of their Homeric themes. There, it is not a question of placing objects according to lines fleeing to the back as will be the case in the Renaissance, but to give birth to a certain depth out of the dilatation and the thrust of the volumes, each object invading the space by its internal expansive thrust until its dilating, spinning and spread out field effects encounter those of the adjacent objects. Greek-Roman mosaics of the Bardo confirm this vision six centuries later. The shadows that made the volumes turning were so much the essence of this painting that “painting” was also said “skiagraphēin”, i.e., tracing-writing shadows. All in all, the *bas-relief*, as it culminates in the frieze of Phidias in the Parthenon, was the supreme practical and theoretical exercise of this choice of existence, combining the properties of sculpture and painting of the era.

14F3. The macromicrocosmic Greek Anthropos

Sculpted and painted in this way in Greece, Homo's body, rather convex than concave, masculine more often than feminine, stereometric, mechanical, physiological, geometric, gymnastic, swimmer and musician, became the *Anthropos*, microcosm of the macrocosm.

In a first while, we can be struck by its vulnerability, as it is redoubtable to feel isolated in the “just” distance, from where we totalize each thing. It is remarkable that, as soon as -700, the sculpture and figures of the Greek vases should display bodies as though lifted by risk taking, a sort of provocation, an isolation unknown until then to which the Heroes of Homer echo, as they were conceived in that same era, then the lyrical cries that the Threnodies of the tragedians will confirm.

But the brilliance is equal. And the Greek scenic Anthropos coincided so well with the new macromicrocosmic view (Kranz) that the gods in turn became anthropomorphist in their appearance, and in their sentiments. It is now over for the plastic arts to simply concentrate a diffuse Divine, as they did in the Paleolithic, or Vital Nodes, as they did in the framing Neolithic, or the ordering instances and roles, as in the sub-framing primary empires. Here are Gods, with bodies integrated with integral parts, incarnating each one major hominid virtues (aretè) : wisdom (Athena), luminous harmony (Apollo), the hunt (Artemis), power (Zeus), love (Aphrodite), belligerent ardor (Arès), craftsmanship-sorcery (Hephaistos). And then forming on the Olympus a deliberating Aeropagus, like the non-dependent citizens (eleFtHeroï) formed an Aeropagus on the Agora.

Having become *Anthropos*, Homo perceived himself, according to the formula of Protagoras, as the rhythmical measure (musical) of all usable things ("pantôn kHrèmatôn metron Anthropos"). With only a few Dionysian, subterranean, Chthonic touches that only rose roughly once or twice a year, on the occasion of the small and large Dionysia, these days when each poet competing presented three tragedies and a satirical drama <22B4-5>.

14F4. The emergence of the artist and the work subject

We will agree that this imagetic program of WORLD2 is very demanding. Producing wholes made up of integral parts, making them stand out adequately from their background and assuming, without waste, their matter in their form (eidos), using perceptive-motor field effects creating volumes that spin in light and shadow is an exceptional success. This is why, as much as during the sub-framing of primary empires Homo enjoyed an extreme justification of his situation allowing for a continuous, equal, visually judgeable creation, as much the really completed images of WORLD2 proved really rare and an object for discussions. We started speaking of master pieces for some privileged products, and of geniuses for their producers, a few artists. This gave way to underground or declared critics making the distinction between bad, mediocre, good, or emblematic artists and works.

By the same token, the subjects of works <11I3> that were sculptural subjects, pictorial subjects, plastic subjects, i.e. topologies, cybernetics, logico-semiotics, presentivities, realized through structures, textures, sculptural or pictorial growths that had until then been clan-tribal or regional-urban, or theological-sectarian, became at the time increasingly individual. One started recognizing “a” Praxiteles, “a” Miron. And when the same hominid specimen produced works in several areas, such as Phidias, the friend of Pericles who combined sculptural, pictorial, architectural and political preoccupations, one could recognize the same destiny-choice of existence, and therefore also the same “subject of work”. We knew it.

Thus, the anthropogeny began to give rise to a **history of art**. This means that plastic subjects, having become risky, improbable as subjects of works, were no longer transmissible. They gave way to sequences where the successor was fatally brought to contrast with the predecessor, to oppose him almost, dialectically. Artistic productions both expressed and confirmed destinies-parties of existence in which everyone had to stand out, to excel, i.e. to be something unique, not to be confused with others, inside the risk of his or her *praxis*. Thus was prepared a first status of creator (create, active of crescere), that itself will inspire soon that of the God Creator.

14G. The images of WORLD 2 after Greece

As we have seen, textures have evolved a lot during the two and a half millennia of WORLD2, since the temples of Paestum to the Cupola of St Peter’s Basilica in Rome and the Garabit viaduct. Conversely, the anthropogeny will observe the stability of the detailed images: Zeuxis and Apelles would have recognized and approved at first glance the portraits that the young Louis Pasteur drew of his parents, Miron and Maillot would have immediately understood one another, whereas Ictinus, the architect of the Parthenon, would have seen the Eiffel Tower as a gigantic grimace. This is because the distant-continuous of WORLD2 does not allow fundamental variations of the detailed image. There are not one hundred manners to cause a portion of a body or a thing to perceptively become an integral part of a whole, sculpted or painted. However, inside the constant imagetic Greek solution, western dialectician Homo introduced, over two and a half millennium, a few major steps that the anthropogeny must raise.

14G1. The imaged face and eyes

Textures have shown us that the Romans developed, at the same time as their clavages (keystones) and their oblique pressures, an *animus* and especially an *anima*, two modalities of the breath (animare), pleasing themselves to the elastic balance, to the vastness, to the indefinite, and finally to the Stoic interiorization <13H>. Thus the sculpted and painted images of the face passed from the Greek *ormé* to the *adfectus* (ad-ficere), to the ability to be affected,

touched, felt (feel, feeling with an intimate resonance), smoothing the emotions. The plastic envelopment inaugurated by the Greek WORLD2 was put at the service of the returns, even the modesty of interiority.

This Roman interiority, becoming Neoplatonist, only had then to dig itself of the transcendence and of the mystery of apocalyptic Christianity <13I> to produce the no longer indefinite but properly infinite gaze of the small portraits on plates of woods that the rich Egyptians-Romans of the Fayum made slip, in the 2nd and 3rd century of our era, to the level of the face of their mummies, with eyes whose lowered palpebral slit created, by freeing the lower part of the white of the eye, a suspense of the iris and the pupil.

The rest followed. From 1050, as Homo started perceiving himself as co-creator in his images and tectures <13J>, the hominid face-eye became proversive but modest and subject to the portico of its basilica and cathedrals. Then he was the face-eye of local mastery, when exact science began, in Piero della Francesca's *Federico da Montefeltro*. Then face-eye of absolute mastery, in Frans Hals' *Descartes*. Finally, a corporate face-eye, when the industrial revolution of the 19th century made individual political decisions possible, in Ingres' *Bertin the Elder*.

14G2. The linear pictorial perspective

The case of detailed images of utensils and landscapes was a lot less evident. In Greece, they had been of little importance because of the microcosmic primacy of the body of the *Anthropos*. In Rome, and then in the Middle Ages, there were not more important. Indeed the reign of the interiority privileged faces-eyes. After all, we had to wait for the Italian and Flemish Quattrocento for Homo to perceive himself truly as a co-creator, then creator, and that he starts exploiting his environment like the sounding board or sometimes like the fabric of his internal movements. This went from Van Eyck and Rubens to Le Lorrain and Constable for landscapes. It ended with the still lives of the Dutch masters and Chardin for objects.

The general structures of painting ensued. Because there is only one way of interiorizing, in the Christian or rationalist sense, an environment. It is to grasp it in a convergent linear perspective where all its elements are referred to an ultimate point of unit, behind the canvas, this point being correlative, in front of the canvas, with the ultimate point of the western “thought”, and finally of the western “conscience”. Such was the synoptic linear perspective, potentially aided by a certain perspective of colors and values.

The success of this enterprise provoked a new pride. Never had plastician Homo felt such a deep conviction that he was, like plastician creator God, the simultaneous possessor of everything, reaching the substantiality of depth in the instantaneousness (at least virtual) of two-dimensional representation. As a result of technology and science, we were beginning to move from expanse to space, and objects could appear both *in* the space and generated *by* the space. The watcher and the watched coincided even better that, in comparison with the plan of the painting, the objectal and subjectal points (of view and of convergence) were the

geometrical locations of one another. Soon, perspectivist Homo felt ready to conceive Descartes' analytic geometry and Desargues projective geometry.

Yet the system had two fecund limitations: (a) we don't have a Cyclops' eyes and the glance is not really a point, it composes the information of both eyes with their parallaxes, (b) convergence lines are multiply curved by general and local perceptive-motor field effects. For these two reasons, the pure point of the western thought-conscience ("*A ce point pur je monte et m'accoutume*", Valéry) is richer than a simple vanishing point. In any case, the pictorial perspective of WORLD2 was by no means a realistic way of representation, at least among the masters. Sometimes it puts itself vitally at the service of the general zoomorphism, in the Alpine landscapes of Bruegel the Elder, or at the service of a light-substance, transcendental in Angelico's work, Spinozian in Vermeer's work. And, at times this perspective proposes an absolute of the visible, which goes as far as the metaphysical dazzle of Piero della Francesca, author of *De perspectiva pingendi* and the *De quinque corporibus regularibus*.

Piero situates the elements of show on plans staggered in depth, parallel between them and parallel to the surface of the painting. But on this surface, an object (or portion of object) belonging to the plan 2 or 8 or 12 is adjacent, butt joint, to an object (or a portion of an object) belonging to plane 4, 7 or 14. There is no colored or linear transition. The lines of perspective, that may or not cross the plans, reinforce the perception of their discontinuity. Thus, the near and the far have the same presence, creating a sentiment of ubiquitous light-color (Marsile Ficin, Neo-platonist, is barely one generation younger). This is a tremendous accomplishment of the programme of WORLD2, so much totalizing is the look. But obtained by processes that lose nothing of the pulsating character of WORLD1 (particularly Montefeltro's rolling hills). And which announce the discontinuities of WORLD3, those of Hockney's *Grand Canyon*, which will use the same juxtaposition, butt joint, of show elements located in non-contact planes. In Piero's work, there is a sort of overview of the three "worlds" of the image (pulsating, totalizing, discontinuous), unique in the anthropogeny.

14G3. The declining of sculpture in favor of painting

Sculpture could not follow painting in this field. There were still some great sculptors in WORLD2, which Michelangelo summed up in advance, pushing to the limit the only thing that sculpture could thematize in this framework of integrated forms: the progressive emergence of forms in and from within a material, the sculptural subject of his *Slaves* and his *Pietas*. But at the same time such a subject of work, privileging the emerging field effects (those of the St Peter's cupola in Rome) excluded the linear perspective and held on to the Greek perspective by dilatation of the volume, even in its paintings production. When Leonardo Da Vinci wanted to equal Homo's eyes to that of God, he thought to painting with linear perspective. And it is of the latter, not sculpture, which was nevertheless familiar to him, that he will say that it was his *cosa mentale*, thing (cause) mental.

14H. Images between WORLD 2 and WORLD 1

Until now, we have considered the strengths and coherences of the image system of WORLD2 in its straightest branch, that which runs from Greece to the 19th century romantics in Europe. But to situate this choice of existence completely, an anthropogeny must note the resistances it encountered from WORLD1. Tectures have already shown us the compromises that stemmed from such encounters between the “worlds”. What is striking in the case of the image is the limited number of chosen solutions, and perhaps of the possible solutions.

14H1. The imagetic repercussion of Alexander’s conquests India, China, Japan, Islam

Let us start with the Asian territories reached by Alexander’s conquests. In order to adopt a certain detachment of bodies from the background and a certain prevalence of form over matter according to the distant-continuous of WORLD2, without, however, losing the memory of the close-continuous of scriptural WORLD1B, **India** developed a generalized fret working of the trunks and limbs; **China**, abdominal radiation; **Japan**, punctual relay clicks, and the reduction of volumes to striated planes.

Likewise, to introduce the same compromise in the ordering of the show according to the depth, there were only three paths open. (a) Recourse to diverging lines from a central point (not converging ones, as in the West), thus forcing the spectator to participate in a multiplying spectacle rather than dominating it; this was the **Indian** (Hindu) solution, evident in the miniatures influenced by Islam. (b) Distributing plans that are mostly valorist, and therefore blurring, thereby maintaining the general interpenetration of the show; this was the **Chinese** (Taoist) solution, which resulted, among the Song emperors of the 11th and 12th centuries, in one of Homo's highest pictorial productions, around the painter Kuo Hi. (c) Ostensibly drawing oblique lines that barely converge towards a high point located far to the right, outside the painting, and correlatively that barely diverge outside the painting to the left at the bottom, thus preventing the gaze from focusing behind the plane or in front of the plane, and thus forcing it, flush with the plane, to participate in the eruptive spurts of the drawing; this was the **Japanese** (kamist) solution, which gave the illustrative scrolls (12th century) of the *Genji Monogatari*, where the copulatory and orgiastic conception of the body is best manifested.

As for **Islam**, a modality of WORLD1 that began in the seventh century when much of WORLD2 had already taken place, it is apart. The absolute divine transcendence led Islam to be a civilization devoid of images, since the fall of Baghdad in 1250. But before that, combining Hellenic, Iranian and Byzantine influences, he created, according to his destiny-choice-of-existence, images characterized by the lateral opening of the surface and the lateral overlapping of the figures, a mixture of horizontal perseverance and vertical lightning strikes, as shown in the illustrations of Al Hariri's *Maqamat* <moods, modes>.

14H2. Images of apocalyptic Christianity

Other remarkable compromises stemmed no longer from the encounters between WORLD2 and scriptural WORLD1B, but from momentary returns to the WORLD1, at the very heart of WORLD 2. In Byzantium, the divine and political images that the Neoplatonism and apocalyptic Christianity made emanate from the mosaics on the walls were in radical rupture with the Greek forms detaching over a background. And the eye of the Christ Pantocrator switching from the Roman interiority to a fascinating transcendence (that announces Islam) reactivated the spirit of primary empires. In Russia, where Byzantine Christianity continued, the icons kept the density of a mural figure, or at least a sculptural figure. They were kissed, as one would kiss a statue, but not a painting. The Slavic image will always remain an imaging that *is* to a certain extent its imaged; the clear distinction between designating and designated, which has prevailed in the semiotics of the West since the twelfth century, first theological and then philosophical, never had full force in the Near East. This would give way to the extremes of idolatry and iconoclasm until Stalin.

Moreover, in the West, under the combined effect of apocalyptic Christianity and the Great Invasions during the first millennia, the Greek-Roman forms dispersed increasingly into the backgrounds, thus losing their characteristics of wholes made up of integral parts. By the madness of their interlacing (Ireland). By the teratology of their demonic bestiaries. By the gloomy materials that supported them and that made the Carolingian and Othonian metalwork the major art of the era, going as far as influencing its architectures <13I>. There again, at least at that time, the frontiers between semiotic and magical image started floating.

Yet it was on this turbid western potting soil that, due to Homo's re-emergence as co-creator since 1050, the WORLD2 progressively rediscovered its vigor through the Romanesque frescoes, then Gothic sculpture, and finally pre-Renaissance painting, until its culmination in a perspective that had become linear. In the meanwhile, in the twelfth century of St Bernard (1150), the West had settled its dispute of the images by choosing a frank distance between the imaging and the imaged, definitely marked with Thomas Aquinas (*imago alicuius rei non est ipsa res*), without which the continuous-distant of WORLD2 as it resurfaces from the XVth to the XIXth century could not have been envisaged.

14I. The granular images of WORLD 3

It was in 1840 that the first photographs appeared, at least if we leave aside the *daguerreotypes*, which are monotype photonic imprints, whose influence was short-lived, and go straight to the *talbotypes*, obtained by indefinite and re-frameable prints from a negative that can be developed in various ways, and whose protocol still forms the basis of today's photography. Around 1900, such imprints would result in the cinema, when Homo had found the means of uncoiling them correctly. And when the chemical grains became electronic, the video recorder completed Homo's new imagnetic device. Each medium, photograph, cinema, videotaping has its own characteristics. But it would be fruitful for the anthropogeny to raise their common characteristics in a first while.

14I1. Common features

14I1a. Granularity. Switcher Homo. Click. Triggering

Since the dawn of days, all of Homo's detailed images had been produced by voluntary tracing, except in the case of rare and vague imprints obtained on an impregnable surface. They had emerged from his plane and symmetrizing hands, cut by cut, trait by trait - the stain being a freer trait. Whether in the close-continuous of WORLD1 or in the distant-continuous of WORLD2, the images resulted from an imager - thus assimilor (sem, ad) - brain and body, that played the role of mediator between an imaged and an imaging (sem, im), in a suite of decisions where there was, at any time and in every portion, the possibility of going backwards, globally or partially. Transversalizing Homo was thus confirmed in his sentiment of producer and initiator, sometimes of co-creator or almost-divine creator.

On the contrary, with granular images introduced by photography, the imprints are obtained from photons impregnating a sensitive, chemical or electronic, preparation. The possibility of constructing trait by trait is thus excluded. This was a first dispossession for Homo.

On the other hand, in the granular photographic, cinematographic, televisual image, the producer ceases to be *between* the image and the sensor instrument, as were the engraver, the sculptor, the painter. The photographer, the film-maker, the videographer are *along, next to*, obeying a process that takes place largely independently of them, and essentially takes place between the image and the recording device. It is at the sight of the contacts and the projection of the rushes that intervening homo will know a little about what happened. And during the editing, he will know a little of what he would like to see happen.

Finally, the granular imprint, being made of particles activated one by one or in restrained group, lends itself to countless macro and micro digitalization where populations of grains are placed in relief or conversely erased by chemical reactors, by digital or analogue computers, by charges (CCD, coupled charge device), by angles and depth of approach (scanners), etc. But these elaborations, although produced by Homo and obtained by his often very clever artifices, instead of providing him with the sentiment of being the constructor of things or co-constructor of things with a God or a Reason, confirm him in the feeling of being rather a trigger and a switchman, whilst the bulk and sometimes the very essence are played independently from his interventions.

14I1b. The moving window, shoot "taking". Windowing-windowed grasping

The frame was redefined at the same time. Indeed, when during the Neolithic Homo invents the framing, and that in turn the framing contributes to invent Homo, the frame is , itself, a traced of trait-points, - discharged, cooled indexes - resulting from a mastered decision aimed at accommodating and exalting other premeditated traits, points, stains, cuttings. But the frame of the granular image is almost the very contrary of this. It is a preliminary hollowness, a mobile window that in itself has no relation with a defined spectacle and that, strolling over an environment, picks up there “we don't know what” in advance. With field effects related to the action of the four right angles of the sensitive receptor surface, or to the limited depth of focus of the lenses, or to the flattening of the duration of the event according to the instant of passage of the last photon, or to the fact that the eye that aims is always a bit out of step, in time or space, with the finger that “shoots”.

Let us insist on the nature of the “we don't know what” thus grasped. It is reduced by any Hominian specimen to things-performances-in-situation-inside-the-circumstance-over-a-horizon <1A3>. And we have seen that, for Homo's panoplic and protocol brain, very few segments are required to recognize in a detailed image, even a lacunar one, or even only indicial, a "table", a "chair", a "smile". So far nothing very new, ever since the Upper Paleolithic at least <14A1-2>. But what is unsettling is that, in addition to these perceptive constructions and their usual relations, now the perceived relations do not take place *between* previously recognized things-performances, but are themselves true *entities*, giving rise to more or less unknown things-performances. Unspeakable or unnamable relations, which trigger unspeakable or unnamed wanderers. Giving to indicia (crawling in the grain) and to indexes (of the shooting) the revealing and initiating role hitherto reserved to traced images, to music, to languages.

Let us point out that these new relations and things-performances do not juxtapose themselves to those of the traditional worlds, but rather, penetrate them, disturb them, imbue them, redefine them, or de-define them. Thus revealing the little reality of all the former "it is", and even more of all the former "it has been". Moving decisively from the close-continuous of WORLD1 and distant-continuous of WORLD2 to the discontinuous of WORLD 3.

How do you name such frames and framing? *Mobile windowing* feels quite suitable, as long as we insist on the mobility of the adventure, just the opposite of the Renaissance's *veduta*, which was undoubtedly the ultimate achievement of the frame as a mastery of space, since it grasps the outside as well as the inside. *Shooting take* is also suitable, as long as you insist on the active-passive, wandering, adventurous aspect of the *taking* and the *shot*. *Windowing windowed grasping* is both relevant and eloquent.

14I1c. Everyday virtual dramatization. Installations and happenings

Made out of grains, the granular image is indefinitely rebuildable from grains. We might say that, once it has been recorded, it is likely to be re elaborated, analogically or digitally, in a way that is so economical, quick and light, that from an initial environment, an infinity of its possible states, and even other environments, may be engendered. These will often only be accessible in later editing, or will only exist on their occasion. We find the same in chemistry where, from a known or supposed molecule, all sorts of intermediaries can almost instantaneously be explored, but evenly all sorts of results that will only take place a faraway day, or never. And the granular image is inseparable from the virtues of chemistry, from which it stems.

This availability of reconstruction *in infinitum* and *ab ovo*, suddenly gives a precise, palpable, familiar meaning to the notion of *virtual beings*. Bordering on the possible and the impossible. Mingling the exotropia and endotropia of brains. In a new realism of the imaginary, breaking with the ontologism and epistemology of ancient Cosmos-Worlds-Dharma-Tao-Quiq-Kamo. And opening considerably the location, and the habitat related to the location, towards the site, the simple *situs* now gaping under the *situation* <1B2>. Constant titillation of some Real under Reality <8E1>.

Since sound, now also granular (radio sound, techno, disco, etc.), experiences the same windowing as the images, it is the entire hominid environment that is increasingly a virtual inter-gesture and everyday theatre <11H3>, where advertising directs the play and where shopping malls are the bursted stage. It is even up into the museums and art galleries that, by means of photographs, videos and omnipresent sound, the windowing of the real/imagined tends to replace the traditional, naïve, immediacies of painting, sculpture and architecture by happenings and installations, where any visual or sound apparition is endowed with “conceptual” dimensions that question on the nature of the perceived, the representation, the spectator. And this takes place at the scale of a location, a city, a province <14J1b>, with almost always escapements to the Planet, the Evolution, the Universe. To the benefit of a dissolved “me” or more precisely a galactic “me” <30K>. We should never forget this fundamental upheaval during the more particular considerations that will follow.

14I2. Photography: the immobile and fascinating grain

Photography has the specificity, heavy of consequences, of being motionless under the eye and thin in the hand. Thereby, all the shared characteristics of granular images can be seen, touched, and received with full force. Particularly, the grain directly or indirectly appears all the stronger as it is the result of what we recently know to be the “quantal mass effects” of its development <R.jan90>. Whence, when the photography has artistic purposes, the privilege of black and white, where the color does not dissimulate the grain, and finally the light.

Thence, for the solidity of the traditional Cosmos-Worlds-Dharma-Tao-Quiq-Kamo, it is probably photography that is most disturbing, whether it is the image of a galaxy, of a cellular ultra-structure <7F>, or of any common phenomenon. Its immobility and impalpability show bluntly that what *is there* is the encounter between external things-performances, reflected photons, a sensitive plate, a development, a print, or even subsequent prints and reframes. And that if anything *has been*, it was that, and not independent realities, those that the West sought from Greece. By the same token, photography probably favors the primary distinction functionings/presence(s)-absence(s) <8A> rather than the distinction world/conscience.

In other words, it is photography that best allows grasping the Real. The photographic grain results in emergences, widely escaping the Reality, which is the Real tamed in our systems of signs <8E1>. Photography also best allows to grasp that there *are only* statements of Universe. And that in a photograph, the state-moment of Universe grasped is not the "something" that produced the photons, but is the "controlled chemical catastrophe" (Thom) that these photons produced on the film. Throughout cultures, God the creator has been sculptor, painter, architect, even poet and musician. He shall never be a photographer.

The exemplary photographers (the “great” photographers) are those who accepted this new state of things, or rather this state of non-things, and dared to draw the consequences until the end. It was probably Stieglitz who, around 1900, was the first to understand all these implications, and who, for all that, was the first to create a real and powerful **photographic subject (of work)** <11I3>, just as there are pictorial subjects, architectural subjects, etc., i.e. to create a topology, a cybernetic, a logico-semiotic, a presentivity, in short he created a singular and coherent destiny-choice of existence <8H> realized within the specificities of photography.

For the anthropogeny, photography carried a considerable, even founding revolution. It is, crudely, made of *indexed indicium*, and so it invited Homo to become aware of the role of the indicia and indexes in his own constitution. All previous philosophies, inspired by the traced images and the corresponding languages, had believed that Hominian specimens moved immediately among transparent and distinct abstract signs (one day bearers of "clear and distinct ideas"), inviting them to reduce the Real to the Reality, and to believe in the West that Reality was part of a *noûs*, of a thought, of a consciousness. Ostensibly indicial and indexing, photography forced Homo to ask himself whether his origin does not go back further, if he himself is not born from the fact of having triggered in the Universe, through his transversalizing, panoplic and protocolar stature, indicia and indexes, permanent sources, by

their encounter, of every ulterior technique and semiotic. It is enlightening about the ethos of hominid specimen that homo had to wait almost one and a half century, since Talbot (1840), to dare start look in the face what photography suggested as semiotic, epistemological, ontological displacements. The writer of the present anthropogeny would never have conceived it in its present order, based on the ability to index indicia, if he had not first been led to write a book entitled *Philosophy of Photography* in 1983. Viewed without prejudice, any photograph, and all the more ordinary it might be, is the most philosophical object that there is.

The recent digitalization of photographs, whipped by their transport via the internet, pushes to the extreme their character of granular images thematized as such, since the numeric grains can almost be treated one by one. On the web or elsewhere, digital photographs distribute at least three originalities with anthropogenic consequences: (a) the flattening of the depth of focus, which leads, around the singularities of objects, to the erasing of their articulations, thus their composition, in the surround; (b) a hominid body often perceived as fragmented or pellicular, parcels or erratic skins of faces and organs; (c) the frequency of messages proposing bodies like state-moments of a biological evolution rather than apparitions of psychic stabilities; like the new-born whose close or distant family follows week-by-week via email the becoming as singular specimen. This confirms, in all cultures, the passage from defined Worlds to an Indefinite Universe. And in the West, the passage from the classical or romantic substance, and individual Me (indivisum), to a x-same as a state-moment of Universe. Senses of belonging being displaced for other indifferences and other tendernesses.

14I3. Cinematography: the motions under the movements

Another revelation was made by the cinema: the importance for mammalian Homo of motions, that we shall clearly set apart from simple movements <2B1>. For the physicist, **movements** belong to kinematics, while **motions**, called as such by the Anglo-Saxon music theory <15B5>, belong to dynamics. By projecting at a certain speed on a two-dimensional screen immobile granular images taken successively from three-dimensional movements, the film leads our nervous systems <2B1> to recover, through the two-dimensional kinematics of lights and shadows on screen, not only the three-dimensional **kinematics** of the original movements, but also the **dynamics** of the forces from which they proceed, and to thematize those forces. The cinematograph has shown the extent to which one of mammalian Homo's most tireless pleasure is to perceive motions almost for themselves. A sequence filming the sea, or foliage and clouds in a windy sky is almost always infallible. It even serves to symbolize coupling, not only through a detour. The difference between images-motions and images-movements is that which makes the difference between cinema and animated cartoons.

The cinema renders motions extremely well, due to the fact that the referential of the four rectilinear edges and four right angles of the screen highlight, in the movements, the curvatures of the motions, precisely dynamic and stimulating. On the other hand, the shootings hold there in *shots* edited in *sequences*, so that the same thing-performance (the same play of forces) appears discontinuously (here, there, from such an angle, from such another, in such

metonymy, before such metaphor), forcing our dynamistic brains (and not only kinetistic) to a constant perceptive-motor awakening, as well as to a succession in which the kinematics of the event (its transformations) is subordinated to its dynamics (its underlying forces). Combination of kinetic energies and potential energies, where the prevalence of the latter over the former is often responsible for the quality of the result. The gallop of a horse is even more surprising and even cumulative that it is shown in separate apparitions, just like a dialogue bounces back and forth better field against field. We have understood that it is on the occasion of film editing that the thing-performance-in-situation-inside-the-circumstance-over-a-horizon that characterizes Homo <1B2> decomposes the most violently its elements: thing + performance + situation + circumstance + horizon. And also its prepositions: “In” + “inside” + “over”.

The cinematographic motion culminates in the *processional effects* <1C1c>, i.e. this way of making things-performances slide, the ones behind the others, in planes of different depths (like the trees of a forest, the columns of a basilica, the horses of a squadron), and thus intensifying, as they move between themselves, their volumes, their masses, the general space they build and undo, with the eight properties of rhythm : alternations, interstability, accentuations, varied tempos, self-engendering, convections, strophisms, distribution by nodes, envelopes, resonances, interfaces <1A5>. *Rashômon* by Kurosawa is exemplary because of the abundance of the processional effects, not only in the direction but up to the theme of the film, which brings back to life a same event by four protagonists: the rapist, the woman, the husband, the witness, like in four sequences sliding one on top of the other and determining each other in the memory and memoration of the spectator. Movements and processionalities vary according to the filmmakers' **cinematographic subject of work** : metaphorical with Fellini, metonymic with Antonioni, etc. But they impose a constant rule : there should never be an action surrounded by a set, as in the theatre, but an environment whose global field effects <7A-E> are such that any event that arises there gives rise to a feeling of its underlying carrying forces, its motions; where any displacement turns into a procession. The international success of American cinema throughout the 20th century relied on an innate sense of this processional view. The woes of other cinemas are due to its unawareness.

In the cinema, the sentiment and pleasure of the Reality become such (vs the Real of photography) that the director is suggestively called a *réalisateur* in French <8E1>. It is even this "directing" operated by motions, accentuated by replays from shot to shot, that makes the *story* told by a film, if there is one, of little concern to the spectator despite the sometimes redundant explanations of the screenwriter. Admirers of *La Grande Bouffe* took years to notice that it was not a film about the exaltation of food, but about a group suicide with the assistance of a woman representing the maternal bosom of death. And the adapter of “*In search of lost time*”, Schlöndorff, confessed that in the cinema, the textual subtleties of Proust became: “A woman who leaves, a man follows her, when he finds her he doesn't know what to do, she leaves again, he follows her, etc.)”. The practice of the reportage-fiction and conversely of the fiction-reportage is due to the nature of cinema.

The intrusion of cinema had considerable anthropogenic consequences. Since the dawn of time, traced, carved, engraved images - just like spoken and written texts - made Homo believe that his interesting actions were processes leading to ends. Cinematographic motions made him finger touch that he may content very well with pure processes without determinable

ends <13M1>, as shown in *Koyaanisqatsi*. Even the very eventful *Godfather* consists in almost-pure motions and processional effects for the three-quarters of the film. Symptomatically, Fellini's major films do not consist in a narrative, but in "paintings" linked together by musical *leitmotifs*.

By what, less violently than photography, since it plays with Reality, not with the Real, the cinema opens also to the Universe. Because not very finalized processes oppose the Universe to the Cosmos-World, where every action was intelligible by a final ultimate cause actualized in a close final causality, itself accomplished through efficiently subordinated causes. In the imaginary of Homo, just as God will never be a photographer, he will never be a film-maker, except perhaps in India, where the Dharma, which we translate into "order" is mostly a tireless engendering of motions. In Bombay, in around 1990, the directors, operators, actors and audience of films gave the feeling of having inhabited this medium since always, spiritually, like in a fantasy.

Cinema had yet another fundamental anthropogenic consequence. Capable of following for long times and with great details, as though point-blank, the specific motions that are the invasion of a gait, gesture, gaze, skin, by the advances and retractions of passion, whether it is deadly, conquering or loving, cinema powerfully contributed to show that there were no characters or behaviors in Homo, as the spoken theatre, history and even books led to believe, but only idiosyncrasies <26A> combining from moment to moment myriads of factors according to the thousand cleavages and commutations of our neuronal organizations <2A2> and our organic specificities in the presence of environments that are also indefinitely varied. The film director and the film actor probably have specific gifts for the grasping and the awakening of this infinite sheen. There is more than a fortuitous contemporaneity between the views of the multifactorial Evolution <21G3> and the Cinema.

14I4. Video recording

14I4a. Image in emitted light and incrustation

The most striking singularity of the video recorder is that it offers images in an emitted light. From his origins, Homo had only known the emitted light of the sun, the stars, fire, the transfigured, the lights and bodies deemed sacred by their very exception. His images had always reached him in a reflected light, thus making appear the landscape, the house, the furniture, the bodies as being dense location, duration, extent (vs the abstract situs, space and time). However, on the cathodic screen, things-performances, inert or alive, not only emit a light but they seem as though they consist in that light, feeric and fascinating, virtual in the strong sense of the word. The fortune of locution "it's fascinating" to express the contemporary admiration perhaps testifies of this new paradigm.

On the other hand, electronically recorded and emitted images are so granular that they can multiply and leverage, change angle, merge using intermediaries, anamorphose, encrust and appear simultaneously in transparency. Such "metamorphosis of rupture" are a thousand

miles away from Ovid's *Metamorphoses*, consistent and cosmic, and they not only undermine the close-continuous of WORLD1 and the distant-continuous of WORLD2, but they create the true discontinuous of the WORLD3, where the extent (concrete) gives way to the space (abstract) and where the duration (concrete) gives way to the time (abstract).

A new video art was then developed, whose purpose was to thematize the properties of the new medium, - emitted light and metamorphoses of rupture, - by producing **video subjects (of works)**, in the same sense as there are photographic subjects, whose main theme would be the (electronic) appearance and (electronic) transponability of the elementary. Elementary of the gesturality in the theatrical videos of Bob Wilson, elementary of the originating shows derived from simple computer programs with the Wazulka, elementary of the sound in relation with silence, elementary of the information in relation with the sound for John Cage, elementary of the metamorphosis as such with Nam June Paik. Because of this, video field effects have, so far, been more logico-semiotic <7E> than perceptive-motor <7A-D>. And <11I3> video subjects of work too.

14I4b. Television, medium and media

According to the Merriam-Webster, the use of *media* in the singular appeared before the Second World War in the advertising circles to designate mass communication agencies. This use, linguistically impure - since *media* is the plural of *medium* - is convenient for the anthropogeny, because it allows opposing the *mediums*, namely the processes (photographic, cinematographic, radio, television), and the *media*, i.e., the institutions that are Photography (with its exhibitions, its museums, its critics, its "great" photographers), Radio (national radios, local radios), Cinema and Television (with their directors, stars, celebrities). This distinction between medium and media is the most sensitive when we talk about television, which is why we introduce it here.

For the anthropogeny, small screen Television is then this media that, in small frames of light emitted, places at the disposal of very large hominid populations the most extraordinary analyzer of gestures, and especially of faces and looks, forcing everyone to encounter the ethos of Homo with its challenges and parades <25> like no written or spoken psychology could have dreamt of doing, exposing in particular the nature of power (its necessary comedy) by framing, tightly and lightly, the indexations that make the authority or the weakness. From 1960, a hominid specimen (McLuhan) noted that the prestige of Hitler would not have resisted television and that Hitlerism supposed radio, or the cinema (motions and processional effects) of Leni Riefenstahl.

Moreover, any good or mediocre television report confronts the viewer with other civilizations, showing him at the same time that his culture is also "other". The success of wildlife shows is even more fundamental: perhaps Homo finds in them an occasion to approach the multifactorial evolutionism of the Universe, thence his own <21G3>, in a way that is both close and sufficiently indirect to avoid being traumatized by it.

Hence, the role of images was inverted. In the Paleolithic paintings and sculpture, in the potteries of the Neolithic, in the temples, the cathedrals, the pagan pantheons, their mission consisted in confirming social codes. Left to its own devices, Television as a medium tears codes apart. This is why, as a media, it is so attentively compliant with codes in the news programs, political interviews, stock exchange reviews, “witness program”, “grand échiquier” or “marches du siècle”, even in its “pieds dans le plat”, keeping so spectators safe from too much clairvoyance on themselves and on others.

It is undoubtedly this social prudence that makes that there are no **television subjects**, in the way as there are “pictorial, sculptural, video, cinematographic, photographic subjects”. With a few exceptions however: (a) Video *clips*: which imaginary character and brevity (the insert status) allow showing real breakthrough metamorphoses. (b) TV *indicatives* for similar reasons. (c) *Advertisements*, which contribute to the creation of industrial products through their imagetic resemantization. For it is not enough to say that television advertises *for* products, which would pre-exist it. In reality, what the buyer buys in his supermarket, and what the voter elects in the ballot box, is not a “X televised”, sent by a framed emitted light, it is rather a “X televisual”, fascinating like the framed emitted light is itself. (d) Some *natural spectacles*, where the medium and the media fit together so well that they let some Real <8E1> go under the convention: floods, volcano eruptions, places at the end of the world, hunting and the mating of animals.

Constantly cross-breeding geology, zoology, ethnology in their universal, radical, almost comment-less violence, the uninterrupted flow of the National Geographic Channel in the late twentieth century may have seemed like a contemporary bacchanal, some daily cult and meditation adapted to the hominid specimen of WORLD3, cleverly and popularly perceiving themselves as state-moments of Universe.

14I5. Excited field effects in granular images

In their perceptive-motor but also logico-semiotic form, excited field effects are omnipresent in the photographic process, as the author's *Histoire photographique de la photographie* (1992) demonstrates. This is no doubt due to the fact that they are the only resource for indexing the indicia emerging in a sensitive film without distorting their indicial nature; and also because they stem from the irruption of the Real in the Reality implied by the photographic process as such. Excited perceptive-motor field effects are also omnipresent in the cinematographic process, as befits images that carry not only movements but also motions; *Rashômon* and *Koyaanisqatsi* show the aptitude of our brains for excited logico-semiotic effects. Finally, in the video-recording process, both effects result from the feeric irradiation of the images in emitted light and from the psycho-sociological analytical strength of the tight framing.

Since in all three cases it is a matter of recording, not of construction trait-by-trait, there is an advantage that the show should not be framed in advance. This would explain the success of the American granular images in the twentieth century. The New World has few prior

cultural standards, in contrast with the landscapes and faces of Europe, heavily laden with two millennia of history, and therefore very often forcing the intervener to framings of framings. It is significant that the Italian cinema should have been so successful in the bi-millennial Italy at the time when it had just been destroyed materially and morally by the second world war.

As long as he produced traced images, Homo had hardly felt that he was constituted by his signs; he perceived himself as making them, creating them from thoughts he believed to be himself. Granular images, which are very independent in their production, proved him that the signs are a constitutive and preliminary part of Homo himself. This has considerable ontological and epistemological consequences. Ontologically, hominid specimens perceive themselves as more triggering than creating, being results from more or less well exploited coincidences. Epistemologically, the approaches by the top leave their place to approaches from the bottom, generative, already favored by biology and technology. In any case, they are invited to switch from the status of microcosm (the order in short) to that of state-moment of Universe.

14J. The traced images of WORLD 3

Assuredly, photographic, cinematographic, video recorded (or televisual) images dominate the planetary reticular engineering of WORLD3. But in the latter, the traced images, paintings and sculpture did not disappear. Produced trait by trait, thus progressively, systematically and corporeally, they are capable of methodical thematizations that they have used to interrogate the perceptive and conceptual consequences of the new situation of the image. With two resources : perceptive-motor field effects and logico-semiotic field effects.

14J1. Traced paintings and sculptures of WORLD 3

14J1a. According to the excited perceptive-motor field effects. (A) The certain consequences of granular images. (B) The erasing of WORLD 2 (C) The problematic consequences of amino formations

(A) First of all, photography was barely born when painters explored its revolutions of **thematized granular image**. (a) Impressionism meditated on the revolution of the photographic grain right up to pointillism, and consequently the primacy of luminous *textures* over graphic *structures*. (b) The analytical and synthetic cubism exploited the virtualities of jumps in point of view inherent to image shooting. On this occasion, Picasso developed all the virtualities of his copulatory motricity by initiating a pictorial space-time not unrelated to the four-dimensional space-time of Relativity. (c) Chirico and Delvaux noted the strangeness of compositions with very high or staggered vanishing points. (d) Morandi and Nicolas de Staël scrutinized the evanescencies of the focusing until they reproduced a “metaphysical” painting

of presence/absence, and thus of the Real under Reality, using the exinanition of the functionings <8E1>. (e) For Vieira da Silva, even urban structures were transformed into textured networks. (f) Around 1950, Morris Louis' the *Veils*, the *Unfurled* and the *Stripes*, contemporaries of Ernst Haas' dematerializing color photographs, captured colored light as increasingly independent of any medium, which was confirmed by color television. (g) The granular indicial emergence of photography led to Dubuffet's *Texturologies*. (h) Richter made intra-photographic paintings, while Andy Warhol made intra-televisual paintings, sometimes rivalling the video grain through the weft of the print, in the same way as Roy Lichtenstein. (i) Hockney often commented on what the blasting perspectivism of his drawings and paintings owed to the sharp discontinuities in the montage of juxtaposed photographs and polaroids, which he practiced himself.

And sculpture thematized other implications of the new granular images. (a) Henry Moore no longer sees bodies in the landscape, but as opened to it as its relays. The puddles of light, by which Baselitz - a sculptural painter and even a Michelangelo style painter - opens his bodies from within, continues this vision. (b) Giacometti encountered, not without horror, the volumes of the passers-by he met in the manner of pure motions, cinematographic. (c) Close to video art, Cucchi sculpted organs that were so anamorphic (symplectic) that they give to see a constant evolutionism in the living.

We will see that trivial (conformal) paintings and sculptures are as significant in all these aspects as extreme paintings and sculptures. They have two characteristics. (a) We find "matter effects" everywhere, in accordance with the textures of granular images. (b) And everywhere, we also find "moiré effects", referring to the windowing-windowed space, as well as to the windowing-windowed time, of the same granular images.

(B) However, some traced imagetic productions are less directly influenced by granular images, and mainly point to the erasing of WORLD2 in favor of WORLD3, in particular a detotalizing of the spectacle and the spectator, and more generally of the Western "I"/"me". (a) As early as 1915, Duchamp's ready-mades were consistent with this modesty, which was confirmed by the 1960s pop art. (b) Oldenburg's sculptures and drawings, introduce the first negative (depressed) volumes, in line with the influence of a new material, plastics, or still, packaging. (c) Beuys dares trigger the perceptive-motor field effects of fat. (d) Carl Andre proposes metal slabs on the floor as sculptural work, disqualifying the traditional verticality of the monument; Dennis Oppenheim points out that any emergence in an environment comes with an equivalent depression. (e) Noland's color field and Pollock's dripping delocalize any theme, even evacuating thematization as such. (f) A strong constructivist current accompanied the twentieth century, from Albers and Mondrian, whose chipped straight lines and colorful repentances show perceptive animation (secretly gyratory) under an apparent vertical geometrization, up to Vincenzo Arena, whose traits (calculated according to serial arithmetic) and colors (deduced serially from the keyboard of the *Munsell Book of Color*) are strictly modular at the beginning, although final adjustments confirm, at the end of execution, the inevitable addition of perception, when perceptive-motor field effects are pursued.

(C) Finally, we must question the consequences in contemporary plastic creations, of **amino formations**, in what we could call **aminoid formations**, that have their parallels in

tructures <13M5>, music <15H1d>, and literature <22B9>. The discovery of amino formations throughout the twentieth century radically challenged Homo's traditional plasticism. As we recalled about tectures, and as we shall come back to it about cosmologies <21G1>, amino formations demonstrate that all living organisms result of proteins (replicated according to RNA-DNA) composed of twenty amino acids that are capable of forming stable chains, long or short. Each protein then derives its properties solely from the number and choice of amino acids that make it up and their sequencing, which then determines the ways in which (by means of the five fundamental bonds of chemistry) their chain turns onto itself to form the balls that they are, with their enzymatic actions (lock and key model, suction-pressure doors, neuronic transmissions, etc.) or builder actions (bones, cartilage, muscles, etc.). We cannot stress enough that, in such a sequential generation of analogue (of forms) by digital (of quantifiable physico-chemical actions), that is sufficient to carry the whole edifice of the living, nothing there results from a demiurgic plasticist intention, neither this number, nor this choice, nor this sequencing, nor the structural or physiological consequences which result from it, and which will be abandoned or retained by the living by means of natural selection. Is there an echo of this type of formation (Gestaltung), which is relatively simple and indefinitely powerful, in the contemporary traced images ?

A particularly clear and complete case is that of the *Chemins des écritures* where, since 1996, the painter Micheline Lo has been producing simple digitizable elements (writing characters and other received symbols) that move, meet, cling, uncling and succeed in generating, fantasizing, on the surface and in depth, the *ultra-structures* <21G1> (more than structures and textures) of nodes, diffusions, relays, leaks, corridor-walls, key-locks, suction and pressure pumps, informative transmissions, etc. In these sequences, the digital (of writing) and the analogical (of perceptive-motor and logico-semiotic, graphic or colored field effects) are as tight as possible; the digital even appears to be conductive, and this happens "blindly", i.e. without any prior global preview. Are such aminoid formations a singular production, owing to an artist who was always attracted by the resources of the writing and the text, or is this a current ?

Here are some answers: As early as 1966, Lucia di Luciano's *Strutture operative*, and even more frankly, in 1980, her *Cromostrutture*, show the fecundity of almost pure sequencing and pure digitality in the production of the analogical - at least inchoate -, not unrelated (voluntary or not) with figures that can also be found in biochemistry textbooks. Since 1970, with Dubuffet, the *Cycle de l'Ourloupe* has shown a quasi-polymeric lateral proliferation of plastic cells, as opposed to the engendering by beveling of the different types of cubism; and this, even if Dubuffet's formations and growths are still very analogical, hardly or not digitizable, and if we consider that in any case, in his work, analogue never results from digital as such. In 1982, the reproductions proposed by Achille Bonito Oliva to illustrate his texts on the *Transavantgarde* (Politi, 1982) show numerous formations by polymerization which, without decisively combining digital and analogue, nevertheless break with all previous habits, including Picasso's. It also feels instructive to reconsider, under the concept of **aminoid formation**, the colored polymerizations of Pollock, the graphic polymerizations by Penck and Keith Haring, and even the imagetic polymerizations of Jean-Michel Basquiat. In any case, today, the disaggregation-aggregation protocol that Jean-Claude Goffre applies to his environments constantly combines analogue and digital, and his recent *Be-bop* and *Tissus*

mémoire confirm the digitizing substructure of his imaginary. The reinterpretations of Japanese *ma* (interval) in Yajima Hogetsu's image-writing would make one believe in the universal character of the trend. Tony Cragg's sculptures, decidedly sequential (DNA is part of his fantasy), evoke the same approach, to the point that he adjoins paint. In architecture also, the drawings produced by Thomkins since 1960, envisaging the habitat of a multi-dimensional and multi temporal inhabitant, *Haus für Bewohner* <13M5>, dynamically combine *sequences* (continuous) and *formations* (discontinuous), according to a paradigm that can be said to be aminoid.

14J1b. According to the excited logico-semiotic field effects: the “conceptual” image

Given the epistemological revolution provoked by the new mediums and media, and more generally by the generalized engineering of the industry, we should not be surprised by an art form developed around the First World War, speculating mainly (not exclusively) on logico-semiotic field effects, and consisting mainly of quantum semantic *jumps and stumbles* <21F6>. In physics, the Quanta theory dates back to 1905, and Marcel Duchamp's decisive interventions come with the First World War. Intelligently, a retrospective exhibition on the artist isolated a book on quanta from his library in a display case.

Here are a few themes. When do common, *ready-made* industrial objects become works of art through the quantum effect? Sometimes a rotation is enough, such as the quarter-turn that transforms a urinal into a *Fountain* (1917); or the reversal that makes a bicycle wheel at the top of its fork represent the crackling of a fire by the luminous and sonorous crackling of its rotating spokes (1917); or just the tilting of a coat rack lying on its points, and whose program is given by the title: *Trébuchet*. Such "quantum" leaps in meaning deserve as much the artist's signature and the museum base as the perceptive-motor field effects of the ancestral plastic arts.

As often happens in Hominian evolution, the torrent that emerged did not turn into a wide river until a good half-century later. In the 1960s, Kosuth "showed" - in Wittgenstein's sense that he alleges by predilection - the explosions or the semantic cancellations occurring when a dictionary entry is taken, for example Blue, Green, Grey, Red, Yellow. The metonymic Antonioni made a film entitled *Blow up* at around the same time. Dennis Oppenheim no longer used a canvas or a stone for the substrate of his work, rather choosing to use the entire landscape or Homo's living body. The Japanese artist On Kawara tried to make viewers perceive what a million years of evolution represented by patiently typing and patiently reading: 799,998 B.C., 799,997 B.C., etc. The *happening* thematized the pure, unpremeditated encounter between two unfinished processes <13M1>, ideally a spatial process and a temporal process, as being the fundamental artistic experience. In all these cases, protocol mattered more than panoply, unlike the practice of the earlier arts.

Some also spoke about *Conceptual art*. Let's agree on the term. (a) **Conceptual in the strict sense**, would aim at logico-semiotic approaches, particularly those proposing "art as idea as idea". But Kosuth, who claimed to do this, did not refrain to exploit some perceptive-motor

field effects that go beyond this definition. It is thus probably the *Proposals* of Dennis Oppenheim, these fifty or so devices (realized or only schematized) which concretize some of Nature's fundamental actants <21I>, only encountered abstractly by physicist and biologist, that have been the vastest and purest achievement of this choice, where art continues its Hegelian definition of being "das Sinnliche Scheinen der Idee". (b) **Conceptual in the broadest sense** would aim at art with a certain reflexivity, and in any case a radical and even destabilizing experimentation on art. But then almost all the images traced during the twentieth century are somewhat conceptual since, after the clash of granular images, they were simultaneously productions of art and reflections on art (like Valéry's poems). Thus, the works of Morris Louis or Stella are articulated in experimental stages, where once a first plastic question has been resolved one moves on to the next. In this sense, there is already something "conceptual" about Picasso, who painted periods as well as by periods.

Christo summarized these trends. (1) He wrapped Paris' Pont-Neuf and Berlin's Reichstag; he stretched a curtain across a wide valley and another over a plain several miles long in the USA ; he clad an entire island elsewhere. He thus "conceptually" thematized several features of the resemantizing WORLD3: (a) the transformation into baggage - among others - of what is the establishment *per se*, the tecture; (b) the resemantization of what is the basal tecture, the habitat; (c) the convertibility of the referential and the referred; (d) the inversion of the trinity location-path-domain into the trinity network-way-site; (e) the treatment of the surrounding as a surrounded, virtually movable. (2) At the same time, Christo produced painted views of these projects and realizations, partly to finance his projects, but also to make explicit their latent excited perceptive-motor field effects. (3) Finally, Christo and his lawyer wife demonstrated what was required as technical, economic, political and social work to carry out a modern piece of engineering: invention and industrial production of new fabrics, transport, tensioners and scaffolding, legal and parliamentary elaboration, etc. All this in the ephemeral of the recent conceptions of Evolution <21G3>.

We cannot leave the traced images of WORLD3 without having opposed oil and acrylic. Typical of WORLD2 since the Renaissance, oil was intrinsically linked to the fading, progressive gradation, general unity, (aerial) perspective, deep and substantial resonance, patience, globalizing contemplation, the transmission from master to disciple. Acrylic favors contrast, even the leap, abrupt cutting, impatience, comic book effect, de-substantialization. Many recent painters have remained faithful to oil (De Kooning). Others went from oil to acrylic (Alechinsky, Rothko), with varying success. Most of them have only known this new medium.

We have just broached logico-semiotic field effects after perceptive-motor field effects. We should not conclude that they are more "contemporary" and would even have replaced them. It may well be that their prevalence in the 1960-1980's was as transitory a phenomenon as the semiologist currents that drove their prevalence during the final twilight of WORLD2. And that what concerns the perceptive-motor field effects of what we have called "aminoid formations" announces WORLD3 more strongly.

14J2. Comics, the exemplary image-text of WORLD3

Comic strips got off to a decisive start in 1905 with McCay's *Little Nemo in Slumberland*, the Divine Comedy of the ninth art. This is a very singular phenomenon. Since he has been framing images, that is, since the Neolithic period of Çatal Hüyük, Homo has been capable of producing a succession of frames separated by an interval, each of which contained a moment of a global event, of a history (historia, exploration); this is what the tapestry makers called a series of episodes, or a suite at all. Some Egyptian frescoes, or the paintings of the shrine of Saint Ursula of Memling, can be read as suites. But a *comic strip* is not composed of episodes, and is thus not a suite.

Indeed, the frame of an episode belongs to this episode (hodos, path, epi, sur, eïs, towards). Thus, in an image story split up into episodes, the white between the frames *connects* the episodes; it works between them as a link, resonance, breathing pause, interval (vallum, inter). On the contrary, in comics, the frames are not intervals, but the elements of a multi-frame. So that here the white, instead of being the *link* between pre-existing frames, it pre-exists to them, it is a kind of preliminary white, an empty white, a white of temporary cancellation, a white of initial radical discontinuity (as the camera's walking frame is prior to what will be taken by it).

There are many examples of comic strip authors who, on the pure white of the page, first produce this multi-frame, with its frames-elements, which determine the moments of the history that, on a general theme, they will generate afterwards. Conceiving his *Histoire d'O*, Crepax undoubtedly started by drawing his combination of frames. The last page that Hergé drew bears the draft of this sort of multi-frame, of which only the first frames-elements have been sketched. Thus, the starting definition of the comic strip could be something like: a **multi-frame germinating from a null blank** or a **multi-frame surfing on a null blank**, and then calling for a drawing, for a general theme and for events that correspond to this status.

This phenomenon forces comic book readers to a double grasping, already hundred times described. *Sequential grasping*, according to the left-right, top-down sequence, of the thumbnails, which is confirmed by the ultimate page of Hergé mentioned earlier. *Surface grasping*, as we see the last and the intermediate thumbnails at the same time as the first, the eye capturing the entire multi-frame in a back-and-forth way, from the previous one to the next one, and back again. In the separation by the null blank or the cancellation blank, the precedent is not a past, nor the subsequent is a future, nor is the event a present, whereas a true episodic story is a succession of presents swollen with pasts and futures.

What is the shape of the multi-frame and its component frames? Sometimes circles, almost always rectangles, as we find in photographs, and for the same reasons; if white surrounded a circle, this circle would saturate the white and become nimbus (as it was used by Symbolist photographer Cameron), while the rectangle succeeds in frankly trimming the nullity of the blank. The fact that the frames-elements are very prosaically called "boxes" or "thumbnails" or "squares" is correlative to this decompressing, demagnifying situation. This is

confirmed by the very rare cases where there is only one frame on a page. It is immediately multiplied in an internal multi-framing of the spectacle in Gianni de Luca's *Hamlet*. Or it works as a sub-frame, double sub-frame, left page, right page, of an entire book taken as a multi-frame, in Vaughn-James' *The Cage*.

Next are the structures, textures and <7F> growths of the drawings. For it is not enough to say that their traits and stains refer back from one square (thumbnail) to another, since the interrelationships between figures are also omnipresent in the St Ursula's Shrine. The revolution in comic drawing is that it consists of primary elements, of elementary elements, and that it often grows according to a development that is, itself, the most elementary, i.e. a pure multiplication (multiplicatio mere numerica), or better still, a proliferation (proles, pro), since this multiplication is often organic. Usually, the cartoonist is neither carried by the strong order of the structure, nor by the strong disorder of the texture, but by the proliferating variation-selection of the growth. Comic drawing is evolutionary in the sense of contemporary evolution, more variant than selective, multifactorial <21E2e>.

Let us open *Little Nemo*. A small mushroom in the first case-thumbnail, multiple and larger mushrooms in the second, an overwhelming forest of giant mushrooms in the third. Elsewhere, a street, streets, a maze of streets. Such is the drawing matrix of the comic strip. Where the hero, the cartoonist, his reader, the multi-frame, each of the frames-elements are all lost "between sleep and wake" (in slumberland). Where, if they are "me", they quickly become "little people" (little nemos). As early as 1905, McCay's full title says it all: *Little Nemo / in slumberland*.

Such elementary developments of elementary elements could only belong to three areas. (a) *Topology*: general topology of near/far, englobing/englobed, continuous/discontinuous, etc. ; differential topology of the seven elementary catastrophes: fold, cusp, swallowtail, butterfly wing, and hyperbolic, elliptic, parabolic umbilicus. The opening images of *The Cage* show a simple lattice, to which the first of the catastrophes, the fold, suffices, as soon as it alternately meets another fold at right angles, the base of any framework, and the rest ensues. Symbolically, a French cartoonist took up Moebius as a nickname, from the most well-known paradoxical figure of the general topology. (b) *Rhetorical geometry*, with the divings and conter-divings of its points of view, of which Schuiten's *The Archivist* made a western scenography. (c) The *caricature*, reducing the gesture-face-eye to a few indicia or indexes, also elementary and in proliferation of growth. However, without the charge of the true caricature (caricare) <14A10>, which seeks the motion, the motion under the movement <7B-C>; the comics trait is conversely a movement without motion, kinematics without dynamics, Marsupilami. Because the motion and the dynamics would fill the null blank with their strengths.

Comics themes also are obliged. Never descriptions, which are always insistent and plenifying, neither narrations, nor stories. But surface and sequential coincidences of coincidences (cadere, in, cum) by dint of multiplications and leveraging, accelerations and decelerations, growths and decreases of elementary traits up to their points of catastrophe: falls, collisions, rebounds, fractures, absorptions, ejections, flights, vertigo, monstrosities (teratology here is natural). And under which semantic superstructures ? The stones in deserts (Vaughn-

James, Druillet, Moebius) or in cities (McCay). Plants (McCay), and some animals, resembling to plants in many ways (tigers, marsupilami). Office stacks of paper (Franquin). Proliferating architectures (*Spiderman*, *Urbicande*). Erotic positions (*Histoire d'O*, where, on the null blank, the comic box is a possible archetype of the female gender). And, most commonly, all combat panoplies (spears, revolvers).

And, if there is neither real past, nor real future, and therefore no real present, the archaic remains. Temporal archaism: *Harzach*, *Wuzz*, the three *Incal*. Space archaism: deep space (*The Secret of the Unicorn*, *Red Rackham's Treasure*), high and hovering space (*Tintin in Tibet*), interplanetary space (*Explorers on the Moon*). And that particular variety of the archaic that is the arche of cultures (Hugo Pratt) and the urban semantic thicknesses (Tardi and most of Peeters' scenarios).

Language is not excluded from these evolutions and involutions of growths, but, surrounded by a closed trait that also surrounds it with a blank of cancellation, it does not lend itself either to history (research, exploration), or to narration (transmission of knowledge, gnoscere), or to a story (citation, recitation), all of which assume the continuities and depths of full speech. Pushed to the apologue by the inter-frame, comic book language too consists of elements. Sometimes still in massive language ("vroouuûm" and "schtroumpf"), made of *sounds* that came before the *tones* of detailed language, in a new archaism <10D2>. Sometimes polishing itself up to stereotypes, like the language used by Tintin the reporter or the metatext of Francis Masse. Moreover, comic-strip texts soon ceased to subtitle the thumbnail boxes and were incorporated into them as *bubbles*, at first wisely quadrangular, too, and then increasingly vague, espousing the elementary and catastrophic multiplication and leveraging of the traits-points-stains of the drawing. Usually, the font used in the writing proves relatively unreadable, so as not to compromise the general predominance of analogy over macrodigitality <2A2e>, and to discourage the linearity of the narrative.

With such displayed *semiotic*, the comic strip is inevitably a *semiologic* genre. That is to say, it was invited from the outset to display the processes underlying every image and every language. It was comics strips that made known that the root or theme **schtroumpf* could *specify* just about any thing-performance-in-situation-inside-the-circumstance-over-a-horizon <1B3>, as is asked of any developed language <17>. English has called it "comic strips", or "comics" for short, because the comic genre has always been the semiologic genre showing bare the mechanisms and implications of signs <22E>. It is also remarkable that, where ancient comedy dismantled the semiotics of a particular society to confirm or nuance it, to temper it, comics dismantle the semiotics in general (Harzach). Confirming the passage from the ancient Cosmos-World-Dharma-Tao-Quiq-Kamo to the Universe of recent cosmologies and evolutionism.

In fact, the comic strip was precisely made possible since the origins of the comic image, let's say from Egypt. Better still since the printing of engravings, in the 16th century, if it is true that the printed word favors empty (null) blank. Better still since the mass printing means of the 19th century, where the empty (null) blank is even more active. Finally, quite decisively since the photography of the 1850s, favoring proliferations, dives and counter-dives. However, apart from the prolegomena of Töpffer and Doré le Jeune, its specificity only starts

during the first years of the 20th century. Without doubt, its radical discontinuity was excluded by the close-continuous of WORLD1 and by the distant-continuous of WORLD2. It supposed the really confirmed discontinuity of WORLD3, i.e. the first years - cubists, dodecaphonists, relativists, quantum - of the 20th century <12C2>.

It is an anthropogenically enlightening coincidence that *Little Nemo in Slumberland* (1905), which exhausts almost all the virtualities of comics at the same time as it inaugurates it, was started in the same year as the Special Relativity theory, the Old Quantum theory, Picasso's Cubist presentiments, the first preoccupations of mathematicians for general topology (Poincaré), and in the aftermath of Freud's *Traumdeutung* (1900). Or, that comics had its first classicism, with *Flash Gordon* and *Tintin*, at the time when D'Arcy Thompson, a topologist zoologist, was publishing successive editions of *On Growth and Form*, where some of its illustration boards would fit in. Or even, that comics dared to go to the end of its questioning in Moebius' *Harzach*, and attained its greatest theoretical ascendancy from 1960 to 1980, when René Thom's theory of the seven elementary catastrophes of differential topology was formulated.

The comic strip is so exemplary of the ontology and epistemology of the discontinuous of WORLD3 that it indirectly penetrated all its images and also all its ethics. An anthropogeny will be attentive to the fact that its structures, its textures, its growths belong enough to the reticular engineering of WORLD3 to attract as many scientific minds as literary ones; it is to its drawing, not to that of the painters, that research publications resort to when they want to image their approach. If the comics strip multi-frame with its empty blank (null) favors kinetic perceptive-motor field effects to the detriment of excited, and even dynamic field effects <7A-D>, it stirs up the logico-semiotic field effects <7E>. Undoubtedly, in the attitude of every contemporary philosopher, there is something of Francis Masses's *Les deux du balcon* (1985). This hold extends to the phantasmagorical architecture of the Bofill studios <13M3>, and it is no coincidence that the creator of *The Obscure Cities* series, François Schuiten, designed the scenography of the most visited place, *Planet of Visions*, including a Paradise, at Expo 2000 in Hanover.

Should we add that no other genre among traced images makes us perceive more crudely that Hominian knowledge is modular and consists, since its departure in the infant as in *Homo erectus*, in finding indicia <4> before indexing them <5>, all the while detecting new ones? Because, what else could a null blank multi-frame trigger first, other than indexed indicia and a few indicializing indexes? Not to tell stories, but to “create events” almost in the purest form, to multiply events by coincidence. More potential than actual. More multifactorial than orthogenetic. More modular or sequential than causal. Endlessly “to be continued...” There is no possible "system" of the novel, whereas one can try a “*Système de la bande dessinée*” (*System of the comic strip*), like the title of Thierry Groensteen says (P.U.F., 1999).

Let's end with the borderline case of *The Cage*. Martin Vaughn-James - who is a fixative fixator as Robbe-Grillet <26R2a> and a tracked tracker, in *L'Enquêteur* (2002) - undertakes, between 1972-74, to make a comic strip of the **location as pure generator**, without character nor story. "In Toronto, where I was living at the time, there was a rather banal, but also rather curious building: it was a power pumping station imitating the style of a Greek temple, and

where the chimney was an almost incongruous element. An electricity generator that could well become an image generator". The cartoonist's pen started running over the multi-frame and the null blank reduced to their essence (two frames on two facing pages, with a central fold), and (fatally?) generated the angles of traditional geometry and the catastrophes of differential topology, the two conjugated generating walls, windows, sheets, ropes (especially the bed where order and disorder intersect). Transcendental in elaboration. This soon developed and arranged itself into sequences, and then into symmetries that were as temporal as they were spatial. The final title came from a phrase found in Faulkner's *Light in August*: "though he did not then know that, like the eagle, his own flesh as well as all space was still a cage". The cartoonist-writer heard Beckettian phrases supporting and flying over his cage: "threads already faltering... the cage stood as before...immune to chaos and decay...concealing nothing...beneath their single and continuous surface...". The only thing left to do was to place, at the opening of the whole, the first element of all tecture and architecture, the first of the seven elementary catastrophes, the fold, which, in its back-to-back encounter with another fold (sometimes at right angles), provides the latticework, the first technical and erotic link (lovely shadow on the heart) of the cage that is all *Umwelt* of an animal, even an eagle.

The English edition (1975) came out on brown paper, packaging paper, genetic paper, not yet on the white paper, conclusive, dogmatic, of the French edition (1986). Consequently, the only commentary that is not talkative is the table where René Thom, in the first edition of Benjamin's *Stabilité structurelle* (1972!), compared the seven "elementary catastrophes" with their seven "organizing centers", their seven "universal deployments", their seven parturitions of key nouns (pocket, fault, hair, mouth, etc.) and key verbs (to generate, to empty, to plug, to bind, to sew, to hole, etc.).

As radical as it is, does *The Cage* conclude the story of the comic book? No, because comics still only knows the plasticist, Platonic (of polyhedra) and Aristotelian (of embryological leaves, or bed sheets) geometries, and ignores the non-plasticist, amino- and aminoid formations <14J1a(C)>, which the twos of the *Deux du balcon* cultivate and meditate in their cannibal plants. The *Francis Masse's encyclopedia* could commence.

14J3. Positioning and advertising image. Photogenics. Images and commerce

One cannot leave the realm of images without considering the decisive role they play in *positioning*, this fundamental characteristic of Hominian societies and systems. For it is inevitably that techno-semiotic Homo distributes its *woruld in a few positions, or positions separated by conditions of quanta <21H>, or even oppositively, and in limited number. This is due to the technique, which cannot create all the intermediates of intermediates. It is also due to the hominian brain, segmentarizing and cleaving, which works using relatively distinct and quickly commutating neuronc synodies <2B10>. Thus there is today only room for a few "major brands" of mineral waters: Evian (equilibrium) vs Perrier (madness) vs Volvic (archaism), etc.; a few brands of cigarettes: Marlboro (flavor, country) vs. Peter Stuyvesant (travel, take-off); a few political parties: left vs. right, socialism vs. social democracy, etc.; a few religions: Protestantism vs. Catholicism vs. Islam vs. Buddhism, etc.; a few bathing suits:

bikini vs. mono-kini, etc.; a few armchairs, beds and types of houses. In the same way that all languages get by with a panoply of two or three dozen phonemes.

Thus understood, the positioning is ensured by very diverse factors, words, music, gestures, intergestures. But images play there a dominant role, partly because they can be present in a diffuse way, from far or near, while sometimes moulding the objects they position to the point of almost coinciding with them (the toothpaste tube). And, among images, it is true that the massive images of tectures are very important <13N>: thus, the design of houses, furniture and utensils defines mental representations and gestures, and therefore options of society and existence, which form a system. However, detailed images have extraordinary powers in this respect. More economical than music, faster and more constant than speech, we already see them semantize and position some Neolithic and Paleolithic tools.

However, the positioning role of images only became crucial with the industrial revolution. Indeed, products that are highly standardized in their function, production, and distribution are usually deprived of meaning and call for a kind of additional semantization, which has led to talk of *resemantization* <13M>. Thus an anthropogenic advent took place when the new industrial objects met the new granular industrial images, able to semanticize them in bulk and cheaply. In this way, photography excelled above all by its lightness, its availability of layout, its allusive character. Television did so through the light it emitted, where the product to advertise is changed into an elf. Cinema by its reflected and distant light that makes the product a star, that is to say a distant clarity, an object of desire.

Hence the anthropogenic explosion of **photogenics**. First of all we think of people and bodies : in 1997, the sudden death of the most photogenic woman on earth, Princess Diana, was felt as an intimate loss by people all over the Planet. But there is also a photogenic of objects, and when they are not photogenic by nature, something else must be associated with them, for example: the horse and Formula 1 for Marlboro; a camel for Camel, etc. This is how the concept of **brand image** emerged. Brand image tries to surprise in small occasional advertisements, and aims at stabilizing in its great adverts: although the Coca-Cola bottle and graphics are more than a century old, they have not been subject to changes but only modulations. The role of publishing or the advertising of things is so well suited to the detailed images that it has provoked their invasion in the Hominian environment.

SITUATION 14

Anthropogenically, it should be noted that Homo made his productions that escape him the most in detailed, traced and granular images. A music, a tecture, a poem, and a fortiori a theory, no matter how complicated and complex they may be, all offer us a glimpse at where their efficiency comes from. On the contrary, imaged productions often simultaneously put into play thousands of variables (linear, colored, designating) that are both heterogeneous and interdependent, and which escape both the producer and the spectator. Nothing is more simultaneously under the hand and elusive than an image.

Translated by Paula COOK, 2019

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