GENERAL ANTHROPOGENY

SECOND PART – FUNDAMENTAL ACCOMPLISHMENTS

Chapter 13 – TECTURES

TABLE OF CONTENTS

Chapter 13 - Tectures	2
13A. Tecture and tect	2
13B. Action-Passion-State of inhabiting	3
13B1. The surround. Surroundings	3
13B2. The three logics of the habitat	4
13B2a. First logic: destination, either implicit or manifested. Thecycles: Public/private, profane/sacred, countryside/city, nomadism/sedentariness	5
13B2b. Second logic: construction, either implicit or manifested	
13B2c. Third logic: Plastic englobing	
13B2d. Location-path-domain-horizon vs animal territory	
13C. Establishments on the ground during the Lower and Middle Paleolithic periods	
13D. The thematized topology of the Higher Paleolithic	9
13E. The framing village of the Neolithic. The scale model	10
13F. The sub-framing of land surveying in primary empires	
13G. Totalization of Greek WORLD 2	
13G1. The just distance of the theatre stage	15
13G2. The exterior and vertical obviousness of the convex temple	
13G3. The macro microcosmic artisan	17
13H. The Roman lateral elasticity and interiority	18
13I. The Christian apocalypse of the first millennium. Emanatism	21
13J. Cristianity, co-creator since 1033. Object and project	
13K. The purpose-drawing since the Renaissance	
13L. Borrowings from WORLD2 with remanences of WORLD1	
13L1. The reticences of Eastern Homo: India, China, Japan	
13L2. The gravitational inversion of Islamic Homo	
13M. WORLD3 and generalized engineering	
13M1. Construction as the local intertwining of faraway and heterogeneous processes. Constructive resemanti	ization
13M2. Destination as adaptability. Social resemantization and standing	
13M3. Plastic encompassement: less perceptive-motor than logico-semiotic. Ecompassing resemantization	
13M4. Elements of contemporary tectures.	
13M5. Contemporary formations (aminoids) and the rhythm by interfaces	
13N. Semiotic of tectures	35

GENERAL ANTHROPOGENY

SECOND PART – FUNDAMENTAL ACCOMPLISHMENTS

Chapter 13 - Tectures

One cannot hesitate on the domain that an anthropogeny must first broach among the developments and accomplishments of Homo. This domain is none other than *tectures*, as large as architectures, as small as furniture. This comes before detailed images, detailed languages and detailed music. Tectures appeared as a first stage. And they will always remain as the first stratum.

13A. Tecture and tect

The word *tecture* is suitable for all forms of frameworks, from the largest - such as architecture - to the smallest, such as a few pieces of wood assembled to make a chair, a few stacked stones making up an oven. The word shares its root with *technè*, technique in general. The Greek *tektôn* was a carpenter. Moreover, *tecture* is a sister of weaving - *teksere* shares the same root - insofar as the crossings and intersections used by weaver and carpenter are very similar operations in terms of transversalization, manipulation, neutralization and generalization characterizing Homo <1A1, 2B2>.

Why is the ultimate "tect" the carpenter, and not the stonemason or blacksmith? Because he placed a bit of wood *onto* another to make them overlap, build layers and insert a wood *into* another (tenon-mortise), sometimes even pegging these bits. In an exemplary manner, technique is a production of conjugated products, a multiplication (multi, plicare), says the mathematicians of categories, and the tect-carpenter, conjugator like the weaver, was the archetypal technician, in Japan and in Greece. Whilst the stonemason did not firstly produce a *conjunction* of stones, but chunked his stone using another. As for the blacksmith, since the age of metals, he was associated to sorcerers. Metal boasts mysterious virtues that escape Homo's regulating "technè", Hephaestus and Vulcan are both lame gods. Carpentry, on the other hand, is the technique closest to nature, which remains there palpable. The tree it transforms is structure, texture and growth <7>, filled with indicia <4> proposing its cleavages (foliages) to the indexes <5> of *technè*. Even when sawn and nailed, bent to hominid possibilization, <6> a tree keeps its naturality.

In this sense, large and small tectures almost merge with the habitat, and both must be treated simultaneously. As soon as they manipulate pencils, young tects, children, start drawing

houses, which they sometimes fill with furniture and utensils. Looking at them teaches us much about their development stages and stratum. The same applies to Homo in an anthropogeny. Nothing more than tectures materialize what we have just seen of the three "worlds" in chapter 12: close-continuous, distant-continuous, discontinuous.

13B. Action-Passion-State of inhabiting

To inhabit is a fleeting action-passion-state because of its multiple and heterogeneous dimensions and because of the role played by the surround, which is difficult to formulate and handle for a transversalizing being such as Homo <1>.

13B1. The surround. Surroundings

To measure the importance of the surround in a habitat, we must return to the hominid ontogeny. As a mammal, Homo probably retains a permanent memory of its ten lunar months of uterine, tactile and sound, olfactory and gustatory envelopment in a direct and indirect contact with the englobing and moving body of its mother. Moreover, as an upright mammal, it is unstable and under threat. And as a possibilizing mammal, Homo scatters according to the very various somatic, technical and semiotic series that make him up. Homo's brain is intensely intercerebral <2A8, 2B9>. It is therefore normal that Homo should try to wrap himself in stimulating and protective surrounds. Which are never definitively closed, since they take place amongst distancing thematization and transversalization.

To create these semi-opened surrounds, Homo is sensorially well equipped thanks to his hemispheric 180° vision - even 360° when he turns his head - which is at the same time englobing, punctual, angularizing and processional <1C1>. Sensorially, its proportioning and echoing audition also helps him. As well as his planing and "pneumatic" sense of smell, up to the point that he has awarded himself a "soul" (breath) <1C4>. Sensorially also, his palpating foot searching for a balance on an aligned big toe capable of indexation <5> (and no longer on the middle toe, as we find in primates with big toes apart) is now capable of distinguishing finely and almost pointing to the quality of the ground itself. Sensorially again, through his kinesthesia, his territories - now plural in possibilization – are distributed through a walk and gait easily supported by the breathing of a barrel-shaped thorax that is sufficiently far from the pelvis, and supported also by a constant evacuation of heat on his bare and upright body that offers less unprotected surface to the sun. And therefore he is, in its entirety, sensorially animated by rhythm, whose action-passion-state of inhabiting constantly exploits the eight properties: periodic and metronomic alternation, interstability, accentuation, tempo, self-engendering and suspense, convection, strophism, the distribution by nodes, envelopes, resonances and interfaces <1A5>.

The habitat is therefore made up of very diverse elements. Yesterday still, the bitter smell of smoke in large huts of American Indians, played the same role of uterine surrounds as the heavy smell of blood on Aztec pyramids. Everywhere, the reverberation of clear or diffuse sounds makes

the "walls" as open as the bay of our windows. A city consists as much about sounds and smells - and today, bits of advertising that we see - as it is about buildings. Thus, the volume of air – luminuous, odorous and sonorous - is the substance of the surround, the surrounding, the environment (viron, cercle, in).

So, for mammal Homo, who is distanciating, possibilizing, endotropic as much as exotropic, inhabiting means being here at the same time as there, grasping what happens behind by looking in front, investing (verstire, in) a volume of dwelling without stopping being in others, perceiving the domain that is the cellar and the attic whilst remaining in one of the floors. It is also being now whilst being later and before.

Inhabiting gives rise to a difficult initiation. In some countries of yesteryears' North Africa, the child first lived in his room-house where his mother was confined before his birth, this was first an insistence on *location*. Then, as an adolescent, he haunted the city and the neighborhood, opening to the comfortable circulation of *paths* in a *domain*. Finally, as an adult, he acceded the space of the Oumma, the community, which faced Mecca in the distance, towards which he turned when he prayed; thence the world had a *horizon* <1A3> peopled with Allah undecipherable intentions. Norberg-Schultz judiciously used the triad location-path-domain (to which we shall add the horizon) as the starting point of his thoughts on architecture. It is not insignificant that the mathematician should spontaneously think for the *location*, to an "open" in space; think for the *domain*, to the starting point of a function (application, morphism), the arrival of which is the co-domain; think for the *horizon* to an "open" that is both part and not part of the open of all the opens.

We should immediately point out that the tomb completes the dwelling. It continues the house under its forms of excavation, walled room, dome that is sometimes essentialized in a tumbos, a protuberance of the soil or of Mother Earth (tumba, tumere, swelling) <E.B.>. It is remarkable that Homo should have so often considered the beyond of its existence as ultimate way of inhabiting. By the preservation in the tomb of food and customary household utensils of the habitat. And even, for the powerful, with the servants of the household, who were first immolated and present in body (Ur, tumb of the Shub-Ad Queen, -300AD), then present in image form (Classic Egypt). Today's Italian cemeteries continue the cities of Etruria where the city of the living and the city of the dead coexist. In Japan, the flowers that can be found on every street corner are destined to celebrate not the lady of the house but the domestic altar of the deceased. The extend and duration of habitat extend beyond this world.

13B2. The three logics of the habitat

Because of this intention, and also because of its material conditions, the habitat develops according to independent and often diverging logics, whose conflicts are its spring, its impasses and its rare moments of full accomplishment.

13B2a. First logic: destination, either implicit or manifested. The cycles: Public/private, profane/sacred, countryside/city, nomadism/sedentariness

Inhabiting supposes that some basic functions are fulfilled: protection, storage, conviviality and privacy, circulation, limitations and internal or external barrages, silence and sound animations. Anthropogenically, tectures followed two choices: (a) to fulfil sufficiently the various functions with more or less concern; (b) to thematize the functions and manifest them in a thoughtful manner, sometimes even in a frankly reflexive manner. In the last case, we shall speak of *manifested destination*. It seems to have been one of the greatest pleasures of indicializing and indexing Homo. We find it almost everywhere, declared, discreet, secret, naive or diverted. For instance, the declaration of utilities constituted an important part of the theoretical and practical program of the "functionalism" of the first part of the 20th century.

Considering this, the destination of Homo's habitat almost always respected and sometimes manifested cycles. Temporal cycles: daily, weekly, yearly. Spatial cycles: collective/private, countryside/urban, profane/sacred, nomad/sedentary, functioning/defunct (disfunctioning), etc. We have often seen that Homo rhythmically blends homoeostasis and allostasis, exotropia and endotropy, globalization and distanciation. These cycles have experienced every dosage. The naturalist Chinese thematized them in the whole and in details. For their loves, individualist Westerners demand strong partitions walls, whilst the contextual and semiotic Japanese are satisfied with visual partitions, non-auditive, that are joined to "what is not spoken, either directly or in allusions". The line that separates profane and sacred is particularly semi-permeable and encourages every form of techno-semiotic osmosis.

In any case, contemporary megacities will have attracted our attention to the physiological and semiotic adaptability of today's Homo and perhaps even archaic Homo, to great gatherings, noise and pollution (real or imaginary). To the extent that, for many hominid specimens of today, the city seems the natural milieu while the countryside, and a fortiori the forests and deserts, seem problematic, offset, bizarre and stressful.

13B2b. Second logic: construction, either implicit or manifested

Habitat is a structure, a construction even (struere, cum), where often considerable transportations, lifting and balancing of materials come into play. With the exception of the tent and the hut, the edifice (aedes faere) supposed a singular and collective effort that feeds, along with the pain involved, a rhythmical pleasure for tect Homo. We then see that according to their various destinies-choices-of-existence <8H>, hominid specimens tended sometimes not to underline (sometimes veiling or denying it) the effort of builders and that of the built edifice, such as in India and in Islam <13L>, or sometimes on the contrary to exalt such structures as is the case in the West, in Greece particularly. In the same way as there is a manifested destination, there is a *manifested construction* for indexing and indicializing Homo. We could call it *constructiveness*, whose preoccupation made another theoretical and practical part of the functionalism in the first part of the twentieth century, whilst being present in most cultures to varying degrees.

In any case, we shall note that the action of building is not a suite of operations that would be justified only by the accomplishment of an end, i.e., the built edifice. It is a pleasure for itself, by itself, like a continuous enjoyment of collaboration, community, elaboration, stimulating and fixing minds and bodies. There has even been, in some civilizations, particularly in Primary Empires (Egypt), an implicit or explicit intention of building for the sake of building, or to destroy or demolish to have an opportunity to rebuild. For Homo, edifying a building is one of its purposes. And a key social regulator: by the discipline thus created, and sometimes by regulating births consecutive to the movement of populations of builders, in the case of cathedrals.

13B2c. Third logic: Plastic englobing

Homo has often felt a third enjoyable or hedonistic rhythmical concern when he edifies his tectures, particularly his habitat: that of their visual, tactile, kinesthetic, auditory, olfactory correspondence with the organism and semiotic system that he is, as a singular organism and as grouped organisms that make up a people or a species.

Assuredly, satisfaction here does not result from the grasping of an object spread out frontally, such as in painting, nor from a more or less circular exploration, such as in sculpture, but from an englobed being, from a surround. Yet, the latter is not given in a fixed way, since the elements that make it up shift one in relation to the other, veiling and unveiling, moving their perceptive-motor $\langle 7AD \rangle$ and logico-semiotic $\langle 7E \rangle$ field effects depending on the circulations of the habitat. This is valid for inside and outside an edifice. What we call the exterior in this case is the inside of a wider exterior: the façade of the house, the church, the city hall belongs to a street or to a square. In Provence, the smallest sheep pen is only grasped in the neighboring fields. Everywhere, we find the same processional, perspectival and projective effect that causes the volumes to vary in relation to each other during the walk, and which an anthropogeny recognizes as one of the most essential attributes of perception for an upright primate $\langle 1C1 \rangle$.

13B2d. Location-path-domain-horizon vs animal territory

These three logics of the habitat are largely independent and the disparity of hominid environments is partly linked to their conflicts. Our ministers often take decisions concerning internet in antique armchairs that reflect their power. The gaps between destination (manifested or not), construction (manifested or not) and plasticity (englobing and processional) are all the more brutal given that a habitat is the *hardware* par excellence, i.e., any change of choice supposes heavy and slow destructions and reconstructions. A great number of buildings are used to ends to which they were not designed. How many different religions occupied the same holy buildings, how many opposite politics occupied the same seats in a government, how many external or internal conquerors occupied the houses of the conquered?

We can see this as a handicap, a discordance between ends and means. But these inconsistencies often proved a fecund provocation factor: Oxford and Cambridge's passeist architecture does not appear to have harmed the fundamental research it houses. We could even think that discrepancies of tectures form a mix that the French and the English know as *ambiance*,

which adds *ambo*, ambiguity here or there, to *ire*, the alley that paces a house. A certain usual amount of clutter, noise, dirt, agitation are the ingredients of a habitat in the same way as order, silence, cleanliness, programs. In unpredictable combinations that define topologies, cybernetics, logico-semiotics, presentivities, i.e., the destiny-choice-of-existence <8H> of each culture.

The ambiance thus understood shows best the difference between the *hominid territory* and the *animal territory* described by ethologist, which is determined in non-primates by the defense against predators and against the others of the same species when it is a question of partners, preys and storage, while in primates, it is determined by the metastable positions occupied in a hierarchy. In contrast with this animal **situs**, Homo's things-performances appear in tectures, even more than in ordinary technique, in-**situation**-in-a-circumstance-over-a-horizon. (A) The *location* is then a *place* animated with instances and social roles, indicia, indexes, massive and detailed images, musics and dialects and the upstream and downstream of hominid x-same. (B) The *path* between two locations is the link bound by the retention of the location left behind and the anticipation of the location targeted, in the technical distance and semiotic distanciation triggered by the upright and transversalizing primate. (C) The *domain* is what escapes the location and the path and yet remains present, absent, present-absent, possibilizing. (D) The open or closed *horizon* animates as much the chair or plate, near the body, as the mountain or the sea, in the faraway distance.

13C. Establishments on the ground during the Lower and Middle Paleolithic periods

The essential fact of the Lower and Middle Paleolithic was the passage from the animal to the hominid territory. From gite to habitat. This passage is linked to many anatomical and social factors that the anthropogeny broached in the first part <1-11>, dedicated to the basis of Homo: (a) variations of the walk since Homo habilis, who was still small and mostly arboreal, until Homo erectus, taller and a good walker; (b) food habits, thus hunting and seasonal foraging, depending on fruit, root, dead meat, fresh meat; (c) ages of life cleaving diversely depending on races and ethnics, (d) relations between males and females; (e) hierarchy in authorities and clientele; (f) relations between living and dead, at least if some of Homo erectus' skulls that were opened at the back indicate a ritual cannibalism rather than a simple cannibalism; (g) since Homo habilis, and reinforcing with Homo erectus, activation in the left hemisphere of the region that will become the Broca's area, which suggests a first shift of animal communication to the basics of massive vocal language (the voice replaces the scream) <10D>, and consequently a shift to a beginning of community and society territory that goes hand in hand with the advances of gestural language, which was certainly favored by the upright position and manipulation.

But the route from gite to habitat, thus to hominid territoriality, was also determined by the evolution from the simple instrument to the tool according to three punctuations: the *choppers* (hammers or cutters made in one piece), *chopping tools* (with several cuts), *bifaces* (involving a first symmetry) <9A-B>. Indeed, as we have seen in our first chapter <1B1>, the simple *instrument* (struere, in) that we find in Birds and Mammals (the otter breaking an egg with a stone) and particularly in Primates, is not yet the **tool** (uti, used in a technical way), which is characterized

at least by three levels of space-temporal articulations, and thus of actual or virtual territorialization.

(1) A first utensil articulation, internal, consists in the suite of elaborations: if *choppers* still have an ambiguous status (instruments or tools?), since they result from a chop or friction, and since it is only their first mode of selection and conservation that granted them a first technical - thus hominid - status, the *chopping tools* and even more the *bifaces* result from regulated strokes. These strokes following one another *until* they resulted in an efficient tool. This was first by trial and error, then by using an increasingly foreseeable and serial protocol <1B1>. (2) As tools multiplied and became differentiated, a second utensil articulation, external this time, referred each tool to the others within a first panoply <1B1> creating a nearby technical territory, the exploitation of which supposed a certain protocol. (3) A third utensil articulation, more external still, intervened when the locations of residence, extraction of materials, manufacture of tools and objects, and their storage started shifting away one from another, thus putting in place dispersed territorial panoplies with their own set of protocols of paths. This supposed transportation means, for instance baskets and stretchers, but also gourds to quench the thirst of the workers who were far away from their base. In all these cases, it's not only the material organization that counts, but also the imagining organization.

For the Anthropogeny, it would be useful to know according to which stages these three territorializing articulations, which proved decisive for segmenting and transversal homo, appeared. Yet we have to refer to paleoanthropologists here. The latter won't make the job easy as they rarely make a distinction between instrument and tool, and speak without further precision about the "tools" of Homo erectus, Homo habilis, Paranthropus, or even the Chimpanzees. Moreover, they face a constant difficulty: knowing who did what. In Olduvaï (Tanzania), we encountered tools prior to human remains. And one *chopping tool* placed next to the skeleton of Homo habilis does not guarantee that the latter is the author, more than a Paranthropus haunting the same locations. The site of Melka Kunture, at the south of Addis Abeda, was privileged insofar as the collapse of the basalt of the Rift unveils stratum aged 1 million years, where can be distinguished the relatively contrasting habitats of Homo habilis, who was still attached to the river and to the nearby trees (as confirmed by its central supporting foot <5B1>) and the habitats of walking Homo erectus, who stepped away from its base for day work.

Questions abound. Although we are sure that chopping tools were produced by the Asian Homo erectus for the past 1,5 million years, must we also attribute some of those to *Homo habilis* on top of its simple choppers and rooting sticks? Supposing that the answer is affirmative, can we see differences between these productions in *Homo habilis*, which is rather slender, a meat eater, with a 600ml brain that is already lateralized in a skull with a "human" shape, and in its contemporary *Homo rudolfensis*, a better walker, who eats less meat, boasts a 750 ml brain, but is more robust? As for *Homo erectus*, which invaded Asia completely up to Java, is the fact that it was very "robust" and confined itself to a so-called **oldowayen** industry (that of chopping tools), a sufficient reason to rename it in Africa *Homo ergaster* (Greek ergaster, worker, farmer, blacksmith) where, slenderer, it became capable of producing real bifaces, thus initiating the so-called **acheulean** industry? Let us note that the two types, erectus and ergaster, both knew fire - which would play a decisive role in the habitat and therefore in the hominized territoriality, as a means of heating, lighting and cooking - without forgetting that fire also intervenes in the fashioning of lithical tools, since a heated stone lends itself better to exploiting its faults. The

hominid control of fire dates back to 500 tY. (Very earlier traces of combustion were discovered in Asia. We still must determine if they are the work of nature or technique, in which case the compared performances of Homo erectus and Homo ergaster would be subject to revision).

Let us say one more thing about installations on the ground per se. In Olduvai (1,8MY) and Melka Kunture (1,7MY), it was thought that there were virgin spaces around which sophisticated or unsophisticated stones create a limit. Amongst the bordering stones, some would play a role as tent wedges, some of which are placed in small circles of four or five and other larger ones would have served as seats. Such is the sentiment of Sakka <op.cit,185>. If this reading proved right, an anthropogeny, besides the fact that it would thus recognize, for segmentarizing and transversalizing homo <1>, a first activation of the line, the point and the line-point - the foundations of mathematics <19A> - it would also presume, from the lower and middle Paleolithic, a first latent topology. The latter, activated for a million and a half years, would have led to the declared topology that we will encounter in the higher Paleolithic.

13D. The thematized topology of the Higher Paleolithic

"Modern" Homo sapiens sapiens, who has painted since 50 tY in Australia, 30 tY in Brazil and in the Chauvet cave, 16 tY in Lascaux, lived in a space the size of a province and in a yearly pace that was well marked, rhythmic, cyclic for the seasons, plants and animals. In the Ariege region, Homo carried projectile weapons and already used projectors. Homo hunted large animals having regular transhumance patterns, and moving up and down valleys where they could surely be reached. The climate was that of the end of the last ice age, which ended circa 12 tY, and is comparable to today's Siberia. Caves were sometimes locations for more or less shamanistic cults, sometimes refuge, sometimes even housing. Ordinarily, dwellings, storage locations and workshops were tents or cabins made of skins stretched on a wooden structure and anchored to the ground with stones. In Ukraine, where there was not much wood, we have found tierings of mammoth bones in regular frames, certainly covered in hides, where we can see early examples of permanent constructions.

Because shelters were perishable, tombs and places of worships are what we know best. In a Mousterian sepulcher in Qafzeh (Palestine) dated 90tY, we already find a young sapiens sapiens with both hands opened on both sides of his neck in an Orant position. Cro-magnon's tombs are clearly cut, sometimes with ochre edges. In addition to the cadaver, they comprise provisions and utensils, and body ornaments, by which the *sepulcher* fits within an establishment on the ground. *Sepelire*, from which come sepulcher and tomb, is close to the Greek "hepeïn" and the Sanskrit "sapati", which is dominated by the idea of an intense worry. Worry and superstition (sistere, super) are all the more vivid in front of the dead body, for indicializing, indexating and even paranoid Homo <4F>, that they don't have an immediate biological yield, but only a semantic one. The tomb will one day give the Greek play on words: *sôma, sèma* (cadaver, sign). The sepulcher is stuck in the ground like a stick; both make a country (pagus, pangere, ficher) and initiate a *homeland*, or a *motherland*, in any case a parental place <28E2b>. It is moving to think that the Neanderthals of La Ferrassie, who lived c. 30tY the last moments of their phylum, also had their tombs, which were only a little less complex.

Decorated caves are almost as well known to us as tombs. We will have the occasion to consider their figures as images in the next chapter <14A-B-C>. What is important to us here is their role of tecturation and settling of a location, since the animals figuring in these paintings did not appear to be situated at random. According to the strongest thesis, which was that of Leroi-Gourhan, they are grouped in species, the ones "males", such as Equus, and the other "female", such as Bos, which were distributed preferentially depending on the place where they appeared: an entrance, a room, a corridor, a diverticulum, a cul-de-sac. Dangerous animals were confined to diverted locations. Questionable in detail - are species so systematized? - this thesis is however confirmed in its principle in the Chauvet cave, the six vulvae figuring there are indisputably situated in the back rooms and occupy topologically and topographically marking and marked locations, some in symmetry. The cave images therefore follow architectonic arrangements, if not veritable compositions: (a) according to the differential topology of the location (pleats, folds, tubes, pockets, bottlenecks, spreading, etc.), (b) according to the general topology (close/distant, closed/open, contiguous/non contiguous, continuous/discontinuous, etc.), (c) according to sound echoes, localizing and delocalizing, (d) according to waving lights; apart from the chosen and focused clarity of the entrances, melted fat lamps were found.

Given that our current shamans (Siberians), when they are in a trance, walk on the ground but also fly in the airs and live underground, and seeing that their function consists in linking parallel worlds and to seek in one what momentarily lacks in another, or even to push back in another what is too much in one, we often interpret today (Jean Clottes and Al.) the cryptic investment of caves as an archaic form of shamanism. We know how the settlements on the ground of the higher Paleolithic remain close to the ambient nature. The privileged confluents of it are the cave in Chauvet, or the river with its rocky bank in Foz Cõa (confluent of the Cõa and the Douro), where Homo only has to receive the first indicia <4A> and first indexes <5A> of the mother-earthprinciple. There is no real framing yet, thus no actual geometry. Differential topology and general topology alone are exploited and accentuated as topographies.

13E. The framing village of the Neolithic. The scale model

The frame will precisely be the revolution of the Neolithic. Its major triggering event was probably the end of the last ice age around 12 thousands years ago, which perhaps went hand in hand with some genetic shifts. Some beasts until then wild were domesticated in a first husbandry. Some - also wild - cereals, started being cultivated, particularly on the middle plateaus of the Fertile Crescent, that curves from the Nile to the Euphrates.

Such breeding and cultivations required and allowed more stable gatherings of collaborators, companions and cognates. During the pre-ceramic Neolithic (Pre-Pottery-Neolithic, PPN) in Palestine, between 10,5 tY and 7,5 tY, we find villages of a few hundred inhabitants on four hectares in phase A and of two to three thousand inhabitants over fifteen or so hectares in phase B (Aïn Ghazal). The importance of local settling is signaled in phase C by the so-called secondary inhumations, i.e., those where the remains of those who died elsewhere are buried, and not just those who died locally, as in so-called primary inhumations <R.déc94,1254>.

That the tree trunks serving as support for the roofs of houses have varied in sections depending on the abundance or depletion of little forests, that their floors were waterproof and that the inside of their walls were lit up by plaster requiring relatively low cooking temperatures (250°C) for northern gypsum, and very high for southern limestone (800°C) partly explains the avatars of Palestine in the phase B PPN. But for the anthropogeny, the essential is that it was probably the new party walls between dwellings and the walls between their multiple rooms that encouraged building vertical walls that crossed according to angles, the most efficient of which was the right angle. Soil and walls became squarer, framed (quadrare). Stabilized homo had just created the most powerful referential: the **frame**, the **framing**.

Framing provoked an extraordinary exaltation of the transversalization and hence of the hominid possibilization <6A>. It triggered mirror effects between the vertical frame of the wall and the upright animal, and also between the standing animal and rectangle on the ground. Separated and separating, the frame gave its definitive determination to the public/private and sacred/profane couple. It triggered the *templum*, this enclosure of perplexity about the indexable indicia of victims and on the whims of the gods. The Çatal Hüyük sanctuary, 10 tY ago, on the high plains of Anatolia was the first place for the cultivation of wild cereals and provides a well-preserved and complete example where the soil was distributed in 3 x 3 squares. The repartition supposed by the breeding-culture and the repartition of the location referred to each other technosemiotically.

The right angles of the frame introduced such an abstraction, neutralization and generalization <2B2> that they engendered this fundamental technical tool: the **scale model**. The ossuaries found in Azor (Palestine) and dating 5,5 tY are in fact *scale models* of houses. On one of them, the two equal-size lateral rectangles and the frontal large rectangle opening its walls conjugate the mystery of death through their opening, and the new capacity of technical analogization-schematization through their geometry.

Framing went hand in hand with **assembling**. Whether the Neolithic roofs were supported by wooden pillars, as often in the early days in Palestine, or whether the rarity of the wood following, transitory or definitive, natural or artificial, deforestation - constrained homo to stage materials bound by plaster, and even to include shards of pottery when the aceramic Neolithic became ceramic, the assembling as such must have been a fundamental experience of possibilization, pace, pleasure and labor for neolithic Homo.

Indeed, what has been said about massive images <9> can be repeated, intensified, about the assembling of tectures. Let us at least recall: (a) the reverberations between Homo's body and its product; (b) the reverberations of the elements manipulated in the "mirrors" of symmetrical plane hands; (c) the grasping of elements in emergence from their background, with field effects <7A-E> thereby triggered; (d) the macrodigitality <2A2c> of the oppositions within/outside, pointed/not pointed; (e) the pleasure of the eight characteristics of rhythm <1A5>.

Small tectures, tools made of stone or ceramics, experienced the same anthropogenic "framing" leap, where any production was designed as a succession of stages. The anticipating thought is obvious in the complicated and highly interdependent stages of cooked potteries. But the so-called neolithic cutting of the stone also comprised, as Leroi-Gourhan insisted: (a) the prior production of a nucleus, (b) the drawing or debitage of specific tools from this nucleus, (c) the

possible use of the nucleus' production scraps. This distribution of means and ends must have comforted the distribution of a present, a past, a future. Up to articulate sharings and overlappings of life and death.

It could be that the tectures of recent societies devoid of writing in Africa and Polynesia enlighten those of the Neolithic, also devoid of writing. The Dogon house described by Griaule, with its rounded floor and square roof, comprised hearthstones that were the eyes, grinders that were the testicles, four towers that were the four limbs of a human body, a fifth that was an erected penis, the whole figuring a man lying on the side and procreating; the adjoining attics completed this system of generation and sustentiation. Such a system supposes a *woruld perceived as a generative schematism, the one shown in the images of yesteryear's Africa and Polynesia, but also the neolithic images that we shall soon broach <14D>. This invites us to wonder if the generalized **generative schematism** was not the fundamental destiny-choice-of-existence of the Neolithic (pre-scriptural) and more generally of the ascriptural WORLD1A <12B, 14Dend, 15D2>.

13F. The sub-framing of urban land surveying in primary empires

In the same way as the Neolithic introduced framing, primary empires, which are writing societies that form scriptural WORLD1B, initiated sub-framing, not only aggregative, as for everything that belongs to non-scriptural WORLD1A, but properly imbricative. The Egyptian hieroglyph for "house" is a rectangle, thus a ground plan; one of its sides is opened, articulatory, and a mobile square is inscribed in it, sub-framing. In this way, the house and the abacus are of the same mind. This time, written and other documents abound, history in the strict sense begins, and these empires have "speaking" names: Sumer, Egypt, India of the Monheno-Daro, China of the Chang and Zhou, Chavín de Huantarr in the Andes, Olmecs on the Mexican Gulf, Maya, Aztec.

This new impetus started when agriculture and husbandry developed and forced Homo to records that separated consumption and reserves, consumption and reproduction, consumption and trade exchanges. Exchangeables, merchandises (merces) in the broad sense were compared with a guaranteed exchanger and became merchandises (merces) in the narrow sense. From bottom to top, and from close to distance, the **sub-frames** of the parcel (with villages), the cantons and provinces (with the city of several thousand inhabitants), and the empires (with the palace of the despot) started superimposing and adjoining. And this sub-framing could be read from top to bottom, from palace to hovel, from close to far, from the empire to the canton, to the city, to the village, to the plot. For Homo, vertical and anti-gravitational animal, the descent of the frame to the sub-frame was even grasped as the Origin, one that is diversely absolutized and magnified. This principle was rather transcendent in the Egypt of Akhenatonand, and rather transcendental in Lao Tzu's China. But it was always *above* (super), *superior* (superior) and *sovereign* (superanus).

In this system of demultiplied frames, the delegations of legates (legati, envoys of) supposed the road and the police, which conjugated engendered the army of defense, then the army of conquests. The ranks of soldiers, their maniples, their battalions framed and sub-framed, each in their own manner. And, in the same way that soldiers aligned (lineam, ad-), the jugs and jars were also placed in lines on the shelves of the potters who were starting to produce them in series,

confirming the new grasping of things by seriation. These counted lines reflected in writings, which were themselves countable, framed by their tablets and sub-framed in their horizontal and vertical rows of characters. Moreover, written characters were themselves made up of graphic traits, again sub-framed.

The city, called by the flows of commerce and delegated power, orthogonally placed not only the walls of its interwoven houses, but up to its roads. This choice stemmed from practical reasons but also from the vision that the order of the *woruld went down from the general to the individual according to a sub-framing, of which the cities of the 10th century Tang is the paroxysm. From Egypt to China and pre-Columbian America, the framing imbrication of the *woruld from bottom to top and from top to bottom erected ziggurats and pyramids, where the vertical (anti gravitational) path of any authority and any justification was activated-passivated, because the authority, this increase in vital power (auct-, augere), will be justified and justificatory from then on. To be grasped better, the remarkable elevations of temples have also triggered around them, for the animal with a processional and angularizing vision that Homo is, regular alleys bordered with repetitions of the same motif - columns, sphinxes - that were often with right angles, thus triggering legal and distanciating **processions** (cedere, pro) that were also confirming the right angle <1C1c>. Even India's excavated temples, such as that in Ellora, exploited processionality.

A fundamental problem of hominid habitat was thus resolved. How was it possible to create a true visual surround for the upright mammal who only sees in front of him, not behind? Now, through the almost identical repetition of tectonic patterns, inhabitants started sensing and feeling what s/he could not see. This system, inaugurated by primary empires, remained unchanged until the contemporary constructions in Montpelier's atelier Bofill.

Sub-framing spread from the sacred edifices to the sites of family *instances*, with their famuli (hierarchized servants making up the family), as well as to places of hosting where the *roles* of clients were exercised. In theory if not in practice, in the traditional and ritual Indian house, the Dharma (sub-articulated order) descended on the Round earth in the shape of "squares of squares" through more than twenty thousand types of houses coded according to castes and classes. In China, where the sky is round and the earth is square, the "path" that was the omnipresent Tao was actualized-passivated into a square house in a square city, which was disposed to conform, depending on the hour of day, to the virtues of the four cardinal points, starting from a fifth, the Middle. The habitats in Japan celebrated the cosmic order with floors tactilely espousing the accidents of the terrain, whilst the roofs visually espoused the undulations of the neighboring hills.

During Primary Empires, constructivity - or manifested construction <13B2a> - only outlined in the Neolithic of Çatal-Hüyük, became paroxysmal, as is often the case in moments of novelty. In Egypt, rocks of stone weighing several tons were detached from the mountain, squared, transported, lifted, superimposed before crossing as entablatures the gaps between columns that were as colossal as themselves. We shall never experience the pain, the torments and the pleasure that circulated on this occasion in the masters and supervisors, in the free subordinates, and probably also in the slaves demanded by these huge works, where doing and endlessly continuing the work was as important as having done it. To what did respond the massiveness of the walls of Uxmal, the doors of Mycenae, the Egyptian colonnades and the pyramids of everywhere? In fact, it is the same sub-framing and writing forces that preserve aerial and telluric cosmic flows, that

regulate the human sacrifices in Teotihuacan or Monte Alban II, and that push the muscles that move and order, into temples, the stones coming from the close by or sometimes distant mountains.

One of the most significant productions of primary empires was their **calendars**, which sub-framed not only the extent but the duration. The Maya and the Aztec were exemplary in this respect. Egyptian pyramids, as well as tombs, were assuredly also privileged astronomic and astrological relays. As much as by the organization of a territory, it is through the marking out of the sky that a primary empire is included in the definitive and ultimate sub-framing of celestial bodies, i.e., primary indicia and indexes. It is astrological in the strict sense <5H2>.

The sub-frame engendered two modalities of hominid encounter $\langle 3 \rangle$. The one, static, is immobility in a defined place (sub-framed) where respect and reverence are realized monodirectionally or bidirectionally. The other, dynamic, is the procession where everyone also has its place and time (sub-framed) but to conciliate one's movement with the legal permanence of military, religious, civilian and festive relations. The *community* of empires written within these regulated daily encounters definitively became a *society* made up of semiotized socii $\langle 5G6 \rangle$. This time, the distanciation of the sign was no longer only around everyone, but within everyone.

Then, the tect became the **architect** or chief tect (arkHi-tektôn). Indeed, the large framing and sub-framing projects of the primary empires required the right arm of the despot - with his authority, his decision, introducing the great purposes and drawings - but they required also staffs with a relay chief, architect or army chief. It was a question of imposing to large populations a shared choice-of-existence, thus a common topology, cybernetic, logico-semiotic, presentivity <8H>. The passage of tect to architect signals a new leadership that will continue until Speer, a logistician of the Third Reich - thus a dolphin of the Fürher - who had been rejected from Vienna's fine-arts academy because "his projects were not painters' drawings but architects' projects".

Thus, *divinities* also became architecturizing, and organizing the initial chaos. With the Egyptians, we see divine-hominid-animal instances that combine with the cutting Sun (of the desert?) to make the initial liquid flows (the Nile's floods?) be framed, sub-framed, un-framed and reframed again (like the dispersed, gathered and redispersed limbs of Osiris). Mesopotamia undergoes similar distributions. For the Hebrews descendent of Ugarit, God first had to separate the Earth from the Water, and the Day from the Night.

However, we shall not leave the tectures of the primary empires without noticing the **nomads** who lived on their frontiers, in a relation of pillages, exchanges, contrasts and compensations, such as the Mongols on the edge of China, or the Scythes on the edge of the Mediterranean Europe. The nomad is not without location, path, domain or horizon. He takes them with him. His tent is mobile, but it preserves Homo's spatial and temporal adherence all the more through its worked and fretworked, almost viscous, furniture. His persistent territoriality is declared by stone tumuli. We already recalled that nomads have an imaginary land (pagus, stake in the ground) <12C1end>.

13G. Totalization of Greek WORLD 2

Up to then Homo, ascriptural or scriptural, had not left the close-continuous of WORLD1. Even the Neolithic frame and the sub-frame of primary empires had not made him see the tectures in a globalizing technical distance and semiotic distanciation. He had not detached/distinguished him-self *on* the tectures. He had not detached/distinguished the tectures *on* a background. In other terms, he had not yet inaugurated the distant-continuous of WORLD2. This will be the accomplishment of Greece. Briskly and loudly, as the movement itself was. All the tectures encountered up until then will now start to be considered in a certain median distance, a "just" distance, where they will appear as "wholes" integrated from "integrating" parts. That is, parts integrating them (making them integral) as "wholes", and making them stand frankly out of a neutral background according to the decision of a contour decided as a contour, border of an accomplishment.

13G1. The just distance of the theatre stage

This major anthropogenic rupture, consumed between 800 and 700 B.C., supposed a very singular turn of events, of which an anthropogeny must bring together a few determining traits.

The very slicing white light of the Eastern Mediterranean. A large sea, but bordered by islands, whose emergence outside the water under the light resulted in the bedazzlement of the Greek Archilochus and suggested a definition of truth as *a-lètheia*, unveiling ("a-" privative, lantHaneïn, veiling); Hesiod has fifty different names for the Nereid. A both difficult and vincible sea - thus provoking - for the Phoenician navigation of the era. Where commerce escapes the despot and depends above all on the sailor who is sole master on board and ingenious, on Ulysses' *polu-matHês*, with more than a trick up his sleeve. On the Aegean Sea, freight is perishable and calls for insurances that invite to design a form of private law, which is both flexible and responsible. By the shape of the creeks, by the abrupt mountains of the Hellas, the cities of the back-country, sheltered from pirates, do not communicate between them, and the caprices of a bush climate regularly push them to the edge of famines. They are forced to internal cohesion and to brisk initiatives of adaptation. Therefore, on sea and on land, Ulysses is invited to democracy, i.e., the common management of the city by non-dependants (eleftHeroï). And by one of these encounters of heterogeneous series that are the driving force of evolution, these ekastoï (each-onefor-themselves) speak Greek, a dialect that, in Homo's history, was the most analytic and synthetic, in any case the most interrogative and awakening ever spoken. Which in this context will result in circa -800 to the first hominid writing to be transparent to the being, and totalizing to the concept <18D>.

Thus, antique Greece created a new way of looking at things, which is said *tHéastHai*, which is best practiced in the theatre *tHeatron*, whose focus is the *skènè*, the stage, i.e., a location that is exactly in this "just" distance from where the elements of the *woruld <1B> are given over to the vision-touch, and also to the hearing, like integrated "wholes", thence mathematizable. Each part of such a "whole" (holon), of such a "completed" (telos, teleion) becomes precisely

"integrating" insofar as it does not first refer to the next part, but directly to the whole that it integrates, and from where the eye goes back to the other parts, which each time also refer to the whole directly.

Then, the continuous is no longer a sum of aggregative neighborhoods or imbrications like we have seen in WORLD1A or B. It is the result of a grasping in the totalizing distance (distanciation), in a "just" distance, which is characteristic of WORLD2. Now, tectures decisively stand out from their background, almost denying it, instead of inchoatively emerging, whilst preserving their fecundity. Their matter (Hulé) withdraws to the advantage of their form, *morpHè* becoming *eïdos*, the truly visible (*Feïd, voir), that it contents with carrying. The rhythm realizes its eight dimensions (periodical and metronomical alternation, the interstability, accentuation, tempo, the self-engendering and suspense, convection, strophism, the distribution by nodes, envelopes, resonances, and interfaces) in the instantaneous passage of the part to the whole and the whole to the form. Rhythm thus holds in a proportion that is called *analogia* when it is external, *harmonia* when it is internal.

This establishment of the right scenic distance, totalizing any tecture, and also any nature, was a lightning strike for Homo. In a few decades of enthusiasm and violence, it imposed itself to the whole of the Hellas, activating hundreds of thousands of hominid specimens in the astonishment, admiration, amazement summarized by the substantive *tHawmasia* and the verb *tHawmadzeïn*, which Aristotle defined as the springboard of metaphysics. The supreme enthusiasm was theory, *tHeôria*, which has the same root *tHeF as *tHeasthai* and *tHeatron*. The surveying of the Egyptians became geometry in its present sense (theoretical science explaining its axioms and postulates) and Aristotle's *bios tHeôrètikos*, the theoretical life, was then considered as the supreme hominid achievement.

Simultaneously, the convex/concave couple emerged, where the light and proposed convexity of tectures (ponere, pro) prevailed on their concavity, which was shady and non formalizable. When, in -480, the Athenians won the Battle of Salamis over Persia - their east - Homo definitely installs WORLD2. From then on, the new tecture with its vision, hearing, and touch, will be adopted by the entire Mediterranean via the Roman empire and will reign for more than two thousand years. Today, it is still alive despite the arrival of WORLD3.

13G2. The exterior and vertical obviousness of the convex temple

The new Greek tecture was realized the best in the *neôs*, later written *naos*, which we translate into "temple" from *naïen*, dwelling for a man but more particularly for a god, according to the anthropogenic sacralization of all habitat, which is testified in the last verses of the *Odyssey* on the marital bed. The Greek *neôs* was first built according to the demands of the carpenter's wood, the *tektôn*, which played with its tenons (embolon, embole) and mortices. Then according to the demands of the stonecutter, keeping in mind the memory of the carpenter in his triglyphs and metopes, and continuing the exercise of the carpentry in the wooden scaffold used to hoist the materials, to ensure the role of template, and to evaluate in advance in soft the future visual effects in hard.

Despite this constructive archaism, the novelty proved startling, and to be honest terrible. All previous buildings had been interiors as well as exteriors, even the Egyptian pyramids inscribed *in* their horizon like so many cosmic markers. But in Paestrum, there are now only exteriors for spectator hominid specimen. It is true that the god or goddess, and their priests, are *in* the "neôs", but the latter is a full parallelepiped of which the people only grasp the exterior plans, stereometrically: the *opus quadratum* of very smooth walls confirms their sturdiness; the frieze makes them protrude further towards the arriver; columns only hide them by protruding in turn.

The Greek column deserves a particular attention in contrast with its Egyptian counterpart. In its three versions, Doric, Ionian, Corinthian, the column is the most extraordinary tecture produced by Homo insofar as each element of an organism directly refers to the whole organism. Geometrically, mechanically, anatomically, "constructively". Foot leaning on the floor of the stylobate, it rises in a swollen effort right up to the pad and the abacus that bear the fulcrum. Its groove does not ornate it, but circles it, reduces it to bare ribs in its initial Doric form.

The integer totality of this column (holplie or peltast or caryatid) reverberated and resounded in the whole colonnade (Macedonian phalanx). Assuredly, for the operation to succeed, a specific proportion was needed "that where the greater is to the lesser as the sum of the two is to the greater": 1 is to 0.618 as 1.618 is to 1; 1.618 is to 1 as 2.618 is to 1.618... No arithmetic or geometric relation is more integrator of integrated parts and of wholes. This is why it was called the *golden ratio* or the *golden proportion*. Approximately, in the Parthenon it rules the gaps between the columns if their width is taken for 1; or it rules the width of the entire building if its height is taken for 1. Such integration could only stem from the isosceles triangle, the most conclusive shape for vertical Homo. By strongly widening its base, thus its aplomb, the isosceles triangle introduced in Egypt, although more pointed, will summarize WORLD2 so well that it will cross the Western world right down to the White House.

Let's see, however, that it was always a question of perception, and not only of abstract calculation, thus of *tHesis* and not *tHema*. Therefore, in order for the Athenians - climbing up the Acropolis and crossing the Propylaea - to suddenly see at 45° to their right the Parthenon as an absolute "whole", it was necessary for its horizontal and vertical lines to be *perceived* as parallels although the distance and vision angle curved these lines. The builders counter-curved the stylobate and architraves horizontally, and the columns vertically. The result recalls the paradoxes of Xenon, which characterize so well the logical heroism of Greece, and then the entire WORLD2. Because, this perceptive totalization demonstrates that any totalization of this type is an illusion. Static, kinetic and dynamic perceptive-motor field effects become here excited field effects, and even excite themselves into logico-semiotic field effects <7A-E>. This logico-perceptive paradox of geometrizing Greek art will cross WORLD2 until its surrealist interpretation with de Chirico and Delvaux.

13G3. The macro microcosmic artisan

We shall not say that the pleasure of constructivity (manifested construction) culminated in Greece, because it had to be huge in Egypt. But nowhere was it as legible, analytical and synthetic simultaneously. The rational Greek tect, the *demiurge*, artisan of the suburbs (démons,

ergôn), constructs tectures that are wholes, that can be decomposed (lueïn, dissolve) by going back up (ana) to their elements, in a moment of analysis, before putting them together (titHènaï, sun), recomposing them, in a moment of synthesis. He grasped them through the four causes that Aristotle will make explicit: a *final* cause, the most noble, that which commands the others, as an achieved goal, a wholeness, a totality without shortage (Holotès); a *formal* cause that which stems from the overall intelligibility; a *material* cause, that which is restive to the formal cause (perch'a risponder la materia è sorda, as Dante said to summaries Plato); finally, an *efficient* cause that which himself is.

The uppercased Demiurge, the universal constructive tect, will not operate differently. Between his hands and under his integrating spirit ($no\hat{u}s$), the *woruld became the *cosmos*, a rational order, i.e., an ultimate tecture entirely dismountable and remountable according to the laws of geometry and arithmetic, transmissible by an explained discourse, the *logos*. A text in ancient Ionian explains this "macromicroscomic" faith (Kranz) decidedly: "There is a similitude as to the number and the form between the living and the cosmos; they have the same mode of engendering (*pHusis*)."

Thus, the procession of the people, instead of ending up in the temple as in Egypt, moves around the temple, and the procession of the Panathenaia is symptomatically called a "tHeôria", loyal to the "tHeôreïn" and the "tHeastHaï", a thin netting of proportioned walking bodies signaling a new social relation: "demo-cracy", the government by the integrated wholes, who are each of the non-dependent citizens (eleftHeroï). Their move has become flexible according to the *harmonia* and *analogia* and is no longer steep like in Sumer or stationary like in Egypt, and fills the frieze of the Parthenon. We hesitate as to the etymology of *eleFtHeros*, akin by some to the future of (the verb) to go (**eleF*), and by many to the Latin *liber*; but in both cases, we suppose an enterprising vital impetus.

13H. The Roman lateral elasticity and interiority

Italy is not Greece. First of all, it comes after. Then, it is not always on the brink of famine. Thanks to the surrounding humidity, cereals and fruits are rather constant and beautiful. The model is agricultural now, no longer marine. The country is split but not to the extent that there are no large plains, such as Latium, Etruria, Campania, which are capable of forming coalitions of people (populi). Seen from Fara Sabina at night, the Roman landscape, today illuminated, can even give the idea of a large and breathing *imperium* that is very different to that sub-framing of the Primary Empires. In the meantime, through the technical advances of navigation, the Mediterranean has become a *mare nostrum*, neither too big nor too small to trigger a unanimous commerce around the port of Ostie.

Is this in congruence with this flexible balance of the landscape? The fact is that the language spoken by the Romans became the widest and vaguest ever practiced. No articles that would give too much precision as to the status of things. Not many prepositions that would be too determining. No liaison particles from one sentence to the next. Words boasting huge semantics: even "ratio", which speaks of reason, has twenty different senses. No imposed syntactic suite of

the subject, verb, complement or attribute. Only *notions*, budding knowledge (noscere, inchoative of knowing) the grammatical functions of which are indicated in often-ambiguous cases and that can be placed anywhere, calling each other laterally from afar, more than in Greek. The whole is taken up in a pompous, numerous diction as will say Cicero, and from which today's Italian's flatulence result. Dilating air everywhere. Around syllables. Between syllables.

Thus, the Romans will not really conquer. Alexander, the frontal Greek, raced straight ahead from Macedonia to the Indus River. Romans never charge ahead like that. Romans love homoeostasis, not immobility, but a mostly lateral movement that comes back onto itself. This demands that regularly, a new province is added to the already assimilated provinces to ensure the internal and external exchanges, and thus borders, but nothing more. For example, to cleanse the Mediterranean from its pirates, Africa had to be conquered via its coastline, in Carthage, but never by entering into the deep Africa, although the *limes* did at one point cross our Sahara. The same goes from Asia and Gaul. Caesar quickly goes to great-Britain to explore the country but soon returns. Roman law, with its four or five weddings on the menu, shows this opportunism that culminates in the Senate (senex, ancient) of the Roman people, where points of view, by dint of crossing one another (laterally here again, as in the cold, tepid and hot waters of the Thermae), ordinarily found a point of equilibrium proving approximately satisfactory for all affairs (a faire, genrenda, agenda) of the world. This thermodynamic achieved around the Mediterranean a "pax", the Pax Romana, unique in the history of Homo. The Latin morality is a question of moderation, "modus", measure and dosage. Moderate, dose, govern are all three said "moderare". The lateral balance between the assemblies of the comitia centuriata (census, aristocratic) and those of the comitia tributa (egalitarian and popular), two rather equal and independent powers that seem to make any government impossible (Hume), were capable of regrouping the Mediterranean in a first *imperium*.

What was now to become of the tectures designed as wholes, made up of integral parts, and standing out from their background, as introduced by Greece? This is the occasion for the anthropogeny to see the extent to which tectures and architectures depend from the social relations and the perception of bodies. Although WORLD2 continues in Roma, it horizontalizes there. As devilishly intelligent and innovating as the Greek may have been, they did not think of the arch or the vault. Their need for obviousness was undoubtedly so strong that they kept to the pure act of vertical and convex pressure of the pediment on the entablature weighing onto the capital supported by the body of the straight column on its feet. The oblique lateral pressure, that of the clavage (placing the key) of the arch, was not obvious, it could not be analyzed or synthesized mechanically or plastically.

It is in fact the lateral pressure of the clavage that will carry and extend the entire Roman architecture: cupola, semicircular arch, vault, crossing of edges. If each stone of a vault holds, it is not vertically by its weight onto a lower stone, but by its oblique pressure on an adjacent stone that supports it in an elastic compensation. Similarly, the lateral pressures of each arch are abutted by that of the neighboring arch, until the whole leans on nearby hills, at the Gard Bridge, or ends up by coming back onto itself in an endless circular support, at the Coliseum. A Roman arch is balanced like a *senatus-consult* or a period of Cicero. This in the destiny-choice-of-existence of WORLD 2 but with an anthropogenic evolution that breaks with Greece.

Wholes, integral parts and things standing out from the background now result from a vague and measured, subtly swollen expansion. The oblique balance of the tecture, of politics, of language and of the Roman legion in its campaigns is more important than the Greek eruption. Concave is as pregnant as the convex, shadow as much as light. Rome did not invent the clavage, nor the arch, nor the vault, but it borrowed their elements at the corner of its Empires and melted them, rebalanced them, spread them, inflated and amplified them extraordinarily. Borrowing and repackaging suits the Empire well.

So this topology, cybernetic, logico-semiotic, presentivity, in a word, this destiny-choiceof-existence <8H> became mature enough for tectures to shelter *anima* and *animus*, two modalities of a wide, spread out, totalizing breath, flowing back at the same time onto itself by dint of being vast and insinuating. The masculine animus was still polarized, tense, willful, the principle of courage and the renowned "virtus", he was controlled energy as much as impetus. But now, the feminine *anima* was ready to become all things (anima est quodammodo omnia) up to the Great Soul of stoicism. She no longer embarrasses herself with the Greek distinction between "psyché" and "pneuma"; she is high up to the *arx mentis* (the citadel of the mind) and deep right to the *intentio profundior;* she introduces the adjective *immensus* (mesura, negative "in"). As a result, *animus* made less fortune than *anima*, which became the spiritual principle of the nascent Christianity-Neoplatonism.

Thus, Greek totalization is not abandoned. But now interiorized, it becomes the *infinitum*, often invoked by Cicero, and compared to which the *a-peiron* (non-delimited) of Anaximander seems narrow. It is in the immense lateral breadth of the infinite (indefinite) that Cicero before Virgil invents the moral and intellectual honesty, the range of good sentiments, paternal and conjugal tenderness (*teneritas, teneritudo*) and the concept of Universe, an eminently Roman idea, since the *universum* is not the one, but only what is turned to the one: *versus unum*. The food of the infinite soul will be the *gloria*, a kind of indefinite beaming light, final and ultimate cause of all actions.

Rome's spirit-soul maintained its daily animation in the tecture of the Roman basilica, which is so indispensable to the civis romanus that it establishes the latter in every location where it installs the empire, with the circus. Summarizing the soul, this basilica is simultaneously a tribunal, a commercial stock exchange and a walk, a vast place where all the rebalances mix and merge. And to reach this result, it inverts the plan of the Greek temple. While the latter was a solid grasped frontally and stereometrically from the outside, the basilica is frequented from the inside to the extent that it becomes insignificant from outside (Zevi). From then on, it is from within its surrounding walls that columns receive and support the roof, and the internal space thus becomes a generalized place for negotiation (otium, negare). The crowd enters and exits from several places at the same time, like waves; the entrance is also (more) lateral than frontal. The entire building creates a social homeostat where unbalances are resolved, excluding the confrontation of the Greek frontality.

The Latin *mundus* literally translated the Greek *cosmos*, and from both sides it is a question of arrangement, cosmetic, clothing, adornments. But mundus is more modest, more operative, more pragmatic than the cosmos, cosmological. In French, "cosmos" gave the rational vertigo of "cosmique" while "mundus" gave the skill of the "mondain", who knows his "world". We do not know what Vitruvius owes his Greek predecessors, particularly the lost Hermogenes, but it is

eloquent for us that all ten books of *De Architectura*, which were long meditated by Bramante and Michelangelo, and where tectures are envisaged in their generality, were the work of a Roman, probably a contemporary of Augustus.

13I. The Christian apocalypse of the first millennium. Emanatism

The Paleo-Christian basilica, mentioned since Septimius Severus, continues the Roman basilica, but transforms here again its destiny-choice of existence <8H>. It closes the porticoes, except for one, the sacred and initiatory main entrance, that will one day play the role of Nartex (narHex, case) of the catechumens. On the opposite side, the former Roman tribunal has become the hearth of worship, in what will later be known as the apse. Between these two poles, the inside columns supporting the roof are taken in a movement from the entrance to the back, and the circular medallions that top them accentuate this feeling (Zevi). Once s/he has entered the space, the faithful is induced towards something else. The Roman space-time, dilated in all directions, becomes the vectorial Christian space-time. Going from the secular to the sacred. From nature to supernatural. From immanence to transcendence. From the particular to the universal. From the anecdotal and contingent to the eternal and the necessary.

Serving this aspiration, the floor is covered with labyrinth marquetry, and the mosaics on the walls, after those of the floor, give way to what Procopius calls an "exudation of light" in the 6th century. Everything is swarming with furtive neo-platonic apparitions in suffusion, in outcrop, in more or less liquid layers according to which the Principle simultaneously emerges from itself and returns into itself. Clarity is blurry, hesitant because of the innumerable celestial hierarchies according to which it emerges from the One or God. The Paleo-Christian basilica is the intense location for the prowling of the sacred. Tecture there is more a texture and even more a growth than a structure <7F>. At the same time that he is aspirated up to the piercing eyes of the Pantocrator in the abside-tribunal, the faithful gets lost in the hexagon of Ravenna, or in the gyratory light machine of Saint-Sophie.

This change supposed a convergence of multiple and confuse influences made possible thanks to the unity of Rome's "Mare Nostrum". (A) The Roman flexible and sentimental in(de)finity folded into itself, without losing its scope, in an interiority sufficient for its intimate, autarchic contemplation, capable of preserving itself from any exterior attack, according to the Stoic program of Epictetus and Marc-Aurelius emperor. (B) If Homo's soul is capable of a will so powerful that he reigns equally on himself, the world must also have a soul, the Great Soul, capable of a sufficient in(de)finite self-engendering. (C) Bordering the luminous Mediterranean, this Soul replacing Jupiter ended up being, like him, a clear particularly warm light. The world according to Plotinus is nothing other than this clarity, emanating and spreading from the absolute unity-intensity-interiority of the One, through Ideas, Pure Spirits of the angels, the Rational Bodies of men, the Living Bodies of animals and plants, and lastly the not very Living Bodies of minerals. Augustine's Plotinusian vision of Ostia is not intelligible if we forget that in Hippone he used to dictate his writings amongst the mosaics we can still admire in Tunis' Bardo Museum.

However, to grasp the anthropogenic moment that the tectures of the Paleo-Christian basilica are, we must add the new Christian vision to the ending Roman vision. Paul of Tarsus was

a Jew of Roman citizenship, and of such Hellenic culture that he is one of the major Greek writers. On his own, he summarizes the Mediterranean basin of his era. We can thus think that he lived explosively, apart from his Pharisaic fervor, the in(de)finite interiority of the Mare nostrum that was replacing the convexities and stereometry of Classical Greece. In any case, as he rode to Damascus to persecute the disciples of a certain Jesus of Nazareth, whom he hated, he fell to the ground, struck down by the idea that infinite interiority is brotherly, that there are no Jews or Gentiles, no men or women, no masters or slaves, but one Body whose Head is Jesus since he is the son of God-Yaweh-Adonaï. He shall be the new verb that replaces the Torah, taken from contractual writings (Hebrew archaic, then Aramaic <18C>), and of whom Paul the scrupulous Pharisaic verified that it "makes evil swarm"; it must be replaced by Augustine's "ama, et fac quod vis" (love and do what you want). The divine is a palpable flesh ("quod manus nostrae contrectaverunt de verbo vitae", as John will soon write). It is remarkable that Christianity was born from the deflagrating encounter of two singular persons, Jesus of Nazareth and Paul of Tarsus, at a time when the Latin notion of *persona* was precisely affirming itself. Assuredly, this view is so scandalous ("ineptum", "impossible" said Tertullien) that several centuries and ecumenist Councils will be necessary to dare support that the Son is consubstantial of the Father, against any Arianism, and that his human body is not an appearance, against all Docetism. But after year 200, the new vision is sufficiently formulated by Orignenus, with a systematic exegesis and theology, to dialogue pertinently with the Roman-Greek emanatism of Plotinus and give the synthesis that, since Augustine, will define the West, for six or seven centuries, by the relay of John Scotus Eriugena (850).

To evaluate the revolution thus introduced in tectures, one must above all not understand Christianity of the first millennium through the one of the second, closer to us. The first Christianity was literally apocalyptic (kaluptein, unveiling, apo, by subtracting the veil), and was in the continuation of Greek truth, the *alètHeïa*, another unveiling (a- negative, lantHaneïn, hiding), but now by the expectation of the end of the world, which is the judgement of the world, the Parousia (presence, arrival), was supposed to be very near. With the Paleo-Christian basilica, the quality of the light of the terrestrial Jerusalem will manifest the celestial Jerusalem, that of the conclusion of the *Apocalypse*. Everything there swarms with occult or intermediary forces, indecipherably beneficial and maleficent, in intermittent Manichean temptations. There is nothing left of the solar mythologies that allowed to spot oneself happily amongst the recognizable gods of classical Greek and Roman polytheism.

In Europe, six centuries of all sorts of Invasions, from 350 to 1000, will make this moment one of the most worried of Homo's evolution. Textures and growths <7F> invade structures to the extent that they are devoured; accumulating and criss-crossing its stones with gloomy enamel, the tecture of Carolingian goldsmithing tends to supplant architecture. Like the hypnotic interlacing of the Irish miniature, it alone is capable of showing the redoubtable thickness of suffusive light.

Does the tecture of the first apocalyptic millennium belong to the distant-continuous of WORLD2, or does it mark a return to the close-continuous of WORLD1? Assuredly, it experienced WORLD2 and is secretly haunted by it. But it refuses its too integrated wholes, its too integrating parts, its too clear contours making emerge forms over backgrounds. The movement of the Paleo-Christian basilica, which was going from the "portal" to the "tribunal", and thus obtained thereby a certain totality of the eye and the walk, will slow down in the course of the following centuries. In Santa Maria in Cosmedin, then in San Miniato al Monte, the

colonnade will alternate double columns with single columns before fanning out in two levels. These are so many means to create a stumbling block, a stupor, and to find back something of the passages, from close to close, activated by scriptural WORLD1B, and even ascriptural WORLD1A.

13J. The co-creator Christianity since 1033. Object and project

Around the year 1000, the six centuries of barbarian invasions during which no stable construction could be foreseen - except during Charlemagne's reign - ended. On the impetus of the latter, Capetians and Othonians founded a Kingdom and an Empire. William the Conqueror's Hastings victory in 1066 is near. On the thousandth anniversary of his birth, Christ did not return to judge the living and the dead. Nor did he return in 1033, on the occasion of the thousandth anniversary of his crucifixion, of his death and his resurrection. Western Homo starts feeling free and is usefully provoked by Islam and Byzantium. There will be then one century of hesitation, until approximately 1150 and until the Roman basilicas in Saint-Denis, Vézelay and Autun. But something irreversible had started as early as 1050.

This was almost a second Christianity. The first, apocalyptic, affirmed that God was the creator, that he was personal, that he was even tri-personal, that he had created the world from nothing, by will, by glory, the glory whose notion was created by Rome. But all this in the western world, and also in the east - despite its memorable doctors, such as Athanase, John Chrisostomos, Gregory of Nazianzus - had been covered over, made blurry by the neo-Platonician emanatism and the supposed imminence of the Judgement. The fact that Parousia did not occur contributed to clean the atmosphere laden by too many indicia and indexes, thus by too much magic <4D>, even if the cadastre of English land commanded by William the Conqueror is still known as the Domesday Book, the book of the Last Judgement. In the end, one will think, infinity is not the same as indefinite. Created ex nihilo by an intelligence, the World is not made to be torn in a coming Apocalypse, but to be constructed, elaborated (laborare, ex) in a task where creature Homo is the co-creator of the Creator. Homo and God mirror one another, the second is architect whilst the former is tect. God is the engineer of engineer, he is not a capricious despot, Israelite or Byzantine, he is providence (videre, pro) in a sense that is more mechanic and less vitalist than in Plotinus. The veil is torn. The finished and the infinite are degrees of participation to the being (Anselm of Canterbury, Thomas Aquinas), a being in which God enters, as well as its creature. We have come back so from Plato to Aristotle.

As we can see, decrypting the indicia and indexes <4A, 5A> of Nature was no longer enough. Nature had to be used, exploited even, with the lightening of the workload of slaves and serfs, as for several centuries already, but also with an extraordinary pleasure of "constructivity", of manifested construction, seeking difficulty and even the impossible for themselves. Especially from 1150, but already in a few places from 1050, Homo will start doing what he had never done before: buildings that are exploits, technical and intellectual adventures. In the ecclesiastic edifice at least as much as in the theological sums, Homo's faith seeks its own intelligence, it will be "fides quaerens intellectum" according to the motto of Anselm of Canterbury at the time. The zero and its positions will make their entry into arithmetic.

The program of the engineer tect was fecundly ambiguous. Practically speaking, the cathedral must be large enough to house the Christian crowds who dwell there during pilgrimages and feasts. Theologically, it is desirable for its walls to be hollowed out to ensure the brightness of the clergy and the King, and for the light of divine glory - piercing through the stained-glass window - to replace the emanist suffusions of Neoplatonism mosaics. But for mystique and pleasure, it is also essential to make increasingly unholdable walls, higher and higher, in a will of unique elevation, until the choir of the Beauvais cathedral fell down. In a paroxysm of difficulty, let us replace the wooden ceilings with stone vaults, the oblique lateral pressures of which will soon have to be countered by flying buttresses, and let us thus create external frames, that will feed the constructive pleasure of passers-by. The ribs are there to hold the vaults up, but also to declare that they hold up, and according to which layouts of derivation of forces they do it.

Thus, medieval Homo conceived a new notion of tecture, that of object, ob-jectum, thrownacross, thrown-in-front. The word was a decisive innovation. The analytical, demiurge and synthetic Greek tect distributed its panoplies and protocols into things to use (kHrèmata), things to acquire (ktèmata), things to practice (pragmata); it spoke of problèmata thrown in front of (balleïn, pro), but only in mathematics and astronomy insofar as it was mathematizable. The Latin artisan knew the res, the thing owned (kr. Raï), the opus, the work, the factum, the fact, but will never think of creating a substantive word *objectum*, although he used the neutral past participle "objectum" from the verb "objicere" (jacere, ob). It was only after year 1000 that objectum (oculo objectum) became a substantive. But success was staggering, probably responding exactly to the new, cocreating destiny-choice-of-existence. In a few centuries, French would form the word objet, German Gegen-stand (standing in front), Dutch voor-werp (thrown in front), Russian priedmiet (thrown in front). Correlatively, projectum, which was still only a balcony in classic Latin, took its sense of projection towards the future, which still stands today. Thus, the WORLD2 had returned in force, since nothing is more a whole made up of integral parts standing out over a background than an object, inside a project. Nothing privileges the final cause as much, thus situated at the source of the three others, formal, material, efficient, following the will of Aristotle.

However, the Gothic is a good occasion to note the ambiguities of the notion of progress in tectures. Indeed, the performance of its stone vaults are remarkable, and as far as construction is concerned, there will be little really new change after Gothic until reinforced concrete. Despite its bolting, riveting, soldering, the Eiffel Tower is very Gothic. But at the same time the veins and bays of Gothic cathedrals excluded frescos, the revolutionary art that, from Giotto to Raphael, supposed large full walls and plans of the antique and then Christian basilica. Thus, the development of perspective (of frescoes), lever of modern science, supposed that in Italy Gothic remained adjacent.

13K. The purpose-drawing since the Renaissance

The architectures of WORLD 2 we have considered so far used wooden scaffolding, which served as a vehicle for materials, or as a template and as a support before the conclusion of the stone clavage or the hardening of mortar. But, having become a virtuoso co-creator, an engineer, the tect of the late Middle Ages had to previsualize his work increasingly. This developed the

schema, completing the scale model already in place in the Neolithic <13E>. Particularly, to avoid excessive scaffolding, it became vital to foresee the cutting on the ground of elements that would be assembled in the air; this led to a mathematics and drawing of the conical sections that led Piero della Francesca and then Desargues to initiate projective geometry. Finally, to win the order for the construction, builders had to convince the commissioning princes, who were less stable in their finances and in their ideological programs than their ecclesiastic counterparts for cathedral. This stemmed in a new call for drawings and schemas. Treaties of convergent, aerial, axonometric perspective began proliferating. It is very regrettable that we know so little about Piero della Francesca's relationship with the other builders of the Ducal palace of Urbino.

Yet, the tectural drawing-purpose thus conceived transformed the medieval project master, who lived and worked on his site, into an all-powerful designer who, in his workshop, using light instruments on light papers, pre-manufactured virtually not only private and public edifices, but entire neighborhoods, then cities, in an urban planning that combined in spirit the sub-framing of primary empires with the totalizations of WORLD2. From co-creator the architect became creator, by giving his "creation" an ever-increasingly ambitious sense, confirming so the modern sense of freedom of choice <13K, 30F-J>. Indeed, the *eleFtHeria* of the Greek was only a political independence, denoting the decision, which contrasted with the servility of dependents. And, Rome's libertas only added the Latin generosity (of lateral topology) to the Greek frankness (of frontal topology). It was not until the first Christianity and the apocalyptic Neoplatonism that political freedom became an interior freedom, between salute and eternal damnation. And we had to wait until the second Christianity, co-creating after year 1000, before it shifted into a profane freedom of choice, at least on terrestrial means, since the last ends remained divine. It was only at the beginning of the renaissance that the development of the banking system shifted money from its status of precious metal to that of a counting unit, thus giving rise to the notion of universal exchanger. Under the impetus of the latter, making everything exchangeable, freedom soon became for Homo a freedom of ends as well as of means. To the extent to suppose itself founding, even creative. The drawing table of the urbanist architect contributed greatly to this new freedom of founding. If he did not create the matter like the Creator, which creates from nothing, ex nihilo, until the material, the architect adviser of princes who governed the territories that they controlled with their eye (Piero della francesca's portraits of the Montefeltro are domain portraits) had at least the sentiment of creating forms from nothing. This is the strongest moment to signal resonances in the accomplishments of Homo between tecture, money, writing and freedom <29A5c>.

Considering this, which formations (*Gestaltungen*) were privileged? We are first struck by geometries, like cupolas over squares, especially since the Treaties of Alberti, a great producer of plans and scale models, encourage this reading. And it is probably things like ichnography (ikHnos) attributed to Peruzzi for Rome's Saint Peter, when he was appointed architect upon the death of Raphael (1520) that invite *Encyclopaedia Britannica* to characterize him as an architect of an "extreme simplicity and delicacy". Yet, the thick column, multiplied from the convex to the concave, are no longer the mechanical supports and relays practiced by Rome and Greece, but are conchs triggering amongst themselves perceptive-motor resonances that are less related to totality than to growth <7D>, being shells more than blueprints. Finally, in architecture as elsewhere, there is nothing antique in the zoomorphic "renaissance" of the Antiquity. The blinding projective drawings that accompany Piero Della Francesca's *De Prospectiva pingendi* retrospectively light up the straight albeit vibrating geometry of Brunelleschi, and announce the curved and tense geometries that will engender: the "mannerism" of Perruzi himself, the bandaged spring of

Michaelangelo's Vatican cupola, Palladio's mobile shadows, Borromini's Baroque, Vierzehnheiligen's rococo and finally Louis II of Bavaria's Wagnerian romanticism. Ronsard's *Amours* spelled out the profane or religious eroticism of these torsions in 1552: "Soit que son or se crespe lentement, / Ou soit qu'il vague en deux glissantes ondes, <...> Ou soit qu'un noud <noeud> diapré tortement".

Thus, in the dynamic curvature, the anthropogenic moment of the tectures of the distantcontinuous of the WORLD2 completed itself. Overall, except during their relative interruption by the apocalyptic Christianity of the first millennia, these tectures did not undergo any radical fracture since the dispositions of the Acropolis until Haussman's Parisian urbanism, or Mussolini in Rome.

13L. Borrowings from WORLD2 with remanences of WORLD1

Before moving to the tectures of the *discontinuous* of WORLD3, an anthropogeny must ponder on these cases where hominid tects were subject to the influence of the *distant-continuous* of WORLD2, and even adopted something of its detaching contours, hence of its globalization, without breaking with the *close-continuous* of WORLD1. We encountered a first example in the West, in the tectures of the apocalyptic Christianity of the first millennia <13Iend>. There are others, clearer, outside the Western world.

13L1. The reticences of Eastern Homo: India, China, Japan

The Greek contour had already been exported by the conquests of Alexander as early as 300 B.C., through Iran up to the Indus. Then, in one thousand years, it reached India, China, the former Indochina, Korea, and finally Japan, where it imposed itself from 600. However, the oriental Homo never completely accepted the totalizing tectures of Greek and Roman Homo. He always arranged for the contours and the internal arrangements of the built to retain something aggregative, pulsatory, interwoven, in a way that each part refers to its neighboring parts rather than refers directly to the whole. At times, this choice blurred the manifested construction, the constructivity, in the Indian temples of the Orissa and Borobudur and more still in the excavations of Elephanta and Ellora. At other times, it visually and tactilely underlined its unbroken continuity with nature in the anti-seismic overlapping of the Japanese house.

These reticences vis-à-vis the distant-continuous of the Greek WORLD2 reflected the fact that in all cases Homo still inscribed himself in the social structures of Primary empires, and that inhabiting dwellings or manipulating utensils as if they were wholes made up of integral parts supposed those "free politics" that were the Roman or Greek citizens, then those "free of choices and instaurations" that were the paleochristians, and later the medieval, Renaissance, classic and romantic bourgeois. There were reasons of ontology too. The right scenic distance of the western *tHeatron* was incompatible with the convertible flows of the Chinese Tao, with the Indian Maya and dharma (sub-articulatory), with the instantaneous intensities of the Japanese Kami. This right

scenic distance required the will for epistemological obviousness that spread accross Greece 2,7tY ago, and that was the West's sole and for a long-time unique destiny-choice of existence.

13L2. The gravitational inversion of Islamic Homo

The Islam of the tectures also experienced WORLD2 and drew its inspiration from Greek, Byzantine, Iranian buildings - amongst which it developed - by borrowing the resources of the clavage and the ribbing. But its ontology of absolute transcendence, non mediatizable, always arranged so that the construction, instead of exhibiting its weighing and its efforts, should give the impression of descending weightlessly, in a mirage; "the earth like a bed, and the sky like an edifice", from which the water from the skies descends (Koran 2,22). Thus, arches were elevated to deny their oblique pressures; their supports don't fall onto columns like we find in the Roman and the Gothic, but come back amongst themselves in cantilevers; under the capital, the shafts are so slim that they seem to hang more than support; the ribs give the impression that they dig and air the vaults instead of reinforcing them; the polychromy denies the weight in the inside doubleau, and in the slopes of the cupola outside.

13M. WORLD3 and generalized engineering

For tectures large and small, the passage from WORLD2 to WORLD3 was not an anthropogenic event less considerable than the passage from WORLD1 to WORLD2. In habitat and even in furniture, shifting from continuous to discontinuous is more violent that shifting from the close-continuous to the distant-continuous. Thence, the change that took place in Paris between the Eiffel Tower, still in the spirit of the Gothic WORLD2, and the Centre d'Art Georges Pompidou, a knot of heterogeneous shuntings and flows typical of WORLD3, testifies of a fundamental revolution. We shall follow that one according to the three logics of all tectures: destination, construction, encompassing (englobing). And we shall start with the construction because in WORLD3 its techniques have become so omnipresent and prior that they impose their referential to the surround and the destination.

13M1. Construction as the local intertwining of faraway and heterogeneous processes. Constructive resemantization

We can almost summarize the change in construction by the displacement of the notion of *process*. Since its Latin origins, the word designated a suite of actions and operations aimed at a goal; *procedere* was walking forth; the stages of the process were serialized by pursued ends and we can still read in the Merriam-Webster dictionary: "process, a series of actions or operations conducing to an end". Yet, the processes that intervene in the construction of contemporary tectures don't have defined finalities, such as edifying a house, and less even such a house, but to the contrary they are available to multiple ends. The same process *piping* provides water and gas pipes as well as the frames for tables and seats, even the simulating profiles of pediments. The

wire is also polymorphous. In one century, a same company, that used to master wire, produced field fencing, spring mattresses, meshes for space capsules, a micro-wired concrete destined for nuclear plants.

The new major processes *piping*, *wire*, *concrete*, *laminated timber*, *glass*, *steel*, *plastic*, *building block* (parpaing) tend to be continuous and perpetual; in French *parpaing* (building blocks) comes from *perpetaneus*, *perpetuus*. These processes are usually heterogeneous between them in their production and distribution. Coming from afar and going far, transportation and the coordination of arrivals (PERT for the manufacture of the Nautilus) are the dominative aspect: the mixing and the transportation of concrete happen simultaneously in automobile concrete mixers. When it comes to objects, the latter are governed by implications that go from the largest to the smallest: boat or plane hold >> removable containers >> wagons or lorries adapted to the containers >> appropriate packaging for the transportation >> placement of the products' organs to foresee this packaging. At the same time, most of the partial processes regroup in major processes; the tentacular aspect of which is rendered by their determiner: the Electricity, the Nuclear, the Rail, the Marine, the Aviation, the Automobile. The latter alone comprises plethora sub-processes: the road, the emergency services, the insurances, the refineries, the trade fairs, the service stations, the advertising, etc. Automobile advertising comprises an imaginary that is as broad as a religious cult.

Heterogenous and autonomous, transnational processes with multiple ends radically modified the situation of tect Homo. To build is no longer to confront in a laborious and enjoyable hand-to-hand combat, human sized materials, with natural textures and close by extraction (Saint Philibert de Tournus and its visible quarries), but it is now to trigger, to punctuate, to **steer** locally exotic flows, that in any case are surpassing on all sides a tect that has become a local steerer-trigger. In other words, the construction of tectures shifted to **information**: no longer the edification of a form using materials that had a shape that had to be vanquished, but the deployment or exposition (ponere ex-) of forms in formatable flows, with quick-setting such as casting, lamination, tensioners, riveting. Yet, while the formation (Gestaltung) was made to be shown in its efforts, the constructivity" <13B2b>. Who would think about exalting the load-bearing function of a pre-constrained concrete lintel, however remarkable is the qualified work it provides? So, since 1930, Homo invented *styling*, the first intent of which consisted in making disappear frames under a careenage. Automobiles were only proud of their mechanics for two or three decades before they definitively hid them under a hood.

However, for constructor Homo, constructivity persisted as a souvenir, or nostalgia, in what the Italians called *resemantization*. In Montpellier's Antigone neighborhood, the Atelier Bofill founded in 1964 multiplied pilasters and capitals that declared the efforts of antique buildings, but this time do not carry anything. The garden of a motorway petrol station erects four concrete cylinders, figuration of columns, surmounted by a reinforcement of simple pipes, figuration of a roof and a pediment, that suffice to suggest an imaginary Trianon for the chain-restaurant "l'Arche".

As often in the anthropogeny, a change this deep came after a short and extreme exaltation of the anterior moment. On the eve of the disappearance of constructivity of WORLD2, the cantilevers of the house on the waterfall sang the organicism of Frank Lloyd Wright. Mies van der

Rohe imposed a sort of stoicism of the built through a rhetorical exactitude, not too much or too little ostensible, of metal and glass. Le Corbusier sculpturally accentuated the load-bearing elements of his Ronchan Church using rough formwork concrete, "masculine", standing out on the lumpy shotcrete, "feminine", of non-bearing elements. Constructivity was the most striking component of Bauhaus functionalism. Its frames are increasingly open from Nervi to Calatrava.

13M2. Destination as adaptability. Social resemantization and standing

In ancient tectures, destination preceded all else. It was obviously social and even cosmic. Thus, we broached the generative schematicism of the Dogon house in the ascriptural WORLD1A <13E> and the thousands of models of the house distributing the casts of India in scriptural WORLD1B. There is nothing more cosmological than a pyramid. Until bourgeois WORLD2, the kitchen with its fireplace, the dining room with its table and parallel chairs, the bedroom with a corner or central bed (Spanish) situated the vital functions in an almost sacramental manner. Since it took shape, the home was a private temple that was a little less regulating and regulated than the public temple.

However, in the tectures of WORLD3, the destinations widely follow the imperatives of construction, which transform the habitat into a container and the furniture into relays. In the new cities, the future owners project their domiciles by ticking items in catalogues: so many water blocks, bedroom blocks, kitchen blocks, office blocks, energy blocks, telecommunication blocks spread out over two or three predetermined arrival points. Their services will go across frequently changing trades according to themselves changing groups, including the "patchwork family". These groups know that their actions of inhabitation will be reduced to the stereotyped manipulations of some household appliances, taps, a minibar, an internet console. Excepting an accident, none of these protocols, usually less analogical than macrodigital <2A2e, 2B6> will give way to an event. The ancestral adaptation made place to **adaptability**. Moreover, the contemporary functions are sometimes so elementary and sometimes so complicated that it is better to dissimulate them. In particular, electric wires - which are rich in intelligent destinations - would only embarrass the mind if their user saw them too much.

So, the manifested destination withdrew like the manifested construction. And also left place to a resemantization, that of the *standing*, simple "standard of achievement" or "achievement of competitors". Here again, after one last twilight sparkle. In the Villa Savoie, Le Corbusier built a bathroom where washing continued the ideal of antique gymnastics. Elsewhere, he ritualized the vital functions to the extent of designing tables making one with the building. In his eyes, the entire urbanism had to separate, and thus spatially and temporarily declare: (a) production, (b) exchange-leisure, (c) sleep-rest. The thematized destination continued in the functionalism of Bauhaus at the same level as constructivity, but once again in a last symbolic gesture.

The parameters of destination were one more time redefined these past few years by those of **mobility**. We first think of the increases and speed of transportation by rail, car, plane, which gave rise to new architectural destinations, serviced and sometimes manifested in suburbs that are now new cities, in motorway petrol stations, in airports and in all sorts of hubs, in traditional urban centers adapting themselves to motorway city-dwellers. When browsing through a collective work such as *Les territoires de la mobilité* (P.U.F., 2000), we discover a new vocabulary expressing the

new situation as well as possible: *peri-urbanisation*, *ex-urbanisation*, *pan-urbanisation*, *territories* of flows vs territories of places, places of transit (weak) vs places of insistence (strong), microsociabilities. And this revolution is well overflowed by that implied by the Internet, mobile phones, home working, home leisure, since 1996. The notion of **network**, creeping for the past halfcentury, becomes a dominating paradigm. Networks are systems whose elements communicate between them more according to their inter-connections than according to their proximity. Their number and flexibility are apparently dispersing. But at the same time, the random or premeditated coincidences of their superimposed weft trigger innumerable new energetic and exergic "locations" in a multidimensional reterritorialization that made them call "areolar" (Jean Rémy).

13M3. Plastic englobement: less perceptive-motor than logico-semiotic. Ecompassing resemantization

All the tects and architects of the past cultivated perceptive-motor field effects, either because their tectures were elaborated in the immediate contact of their body during ascriptural WORLD1A and scriptural WORLD1B or because they were preconceived by totalizing views during WORLD2, on templates in Greece, on the drawing boards of the Renaissance. In Florence, these field effect still petrify us on the steps of the Capella dei Pazzi and make us move slowly and ecstatically on the tender and pink slabs of Santa Croce. They comfort us by their untrappable happiness as we achieve daily tasks in a peasant or bourgeois house of yesteryear. And since perceptive-motor field effects transform things into fantasies, the old dwelling was the archetypal fantasy of the sexual and universalized partition-conjunction <7H,7I3> both in adult poetry and in children's drawings.

Destined to blur in the architecture of WORLD3, the perceptive-motor field effects experienced, on its eve, the same terminal exaltation as constructivity and manifested destination. In 1960 still, Le Corbusier wrote to the author when he received Les Arts de l'Espace : "When everything is at its intensity - color, drawing, idea (theme), proportion, balance, the achieved harmony in all these built elements - then at that moment a sensation of the order of the ineffable is triggered. I called it: the unspeakable space. The word suffices. If I was able to touch the sensibility of people to Ronchamp and La Tourette it is because of this nature of harmony triggering space". Le Corbusier's plastic demands regarding the surround encouraged him to move away from the standard of the meter - the abstract conventionality of which he deemed responsible for the decadence of architecture after the eighteenth century - to the profit of a "modulor", a module founded on the golden ratio (1,618/1) from a human size defined at 1 m 83 (for the inch/foot conversion) and destined to re-establish between the body of the tect and the body of the work this analogy and physical harmony that he believed favored the thumb, the palm, the span, the cubit and the breaststroke. The Kinesthetic and cenesthetic concordance of the tect thus boosted even proved the occasion for Le Corbusier, then in Gesine, to sense the space-time of WORLD3: from 1930, his Villa Savoye did not have a ground floor except for the energy supply and consists of a floor built on columns to better deny the support of the ground. It is an "external-internal form" that is already windowing-windowed. Its superstructures don't crown it and are relays to the surround in the spirit of Pevsner's sculptures at the time. To enter it, the off-center inhabitant is forced to go around a central column instead of walking between two columns. The culminations of this plastic englobing were Le Corbusier's Chandigarh and more still Brasilia by the architect

Niemeyer and the urbanist Costa's. These two cities were built from a tabula rasa, particularly the second, which exploited to its limits the plastic malleability of new materials into biased cupolas, continuous curved columns and fleeing curvature arcades (for publisher Mandadori in Italy).

Once again, this was only a dusk. Perceptive-motor field effects have little place on computer screens that, in our architecture and design offices, compatibilize the flows of materials <13M1> and the functions of availability <13M2> in the form of rows and columns of digits and schemas. In such a way that the plasticity of the surround has itself become resemantization, exploiting as best it can the field effects, particularly logico-semiotic. It is in this sense that in reaction to **modern architecture**, which was an ultimate effort (1920-1965) of excited perceptive motor field effects, as well as of unanimous social ideal and manifested constructions, we started speaking of **post-modern architecture**. There are two versions of it that we shall call (1) declarative post-modernism and (2) modest post-modernism. We will then have to envisage an even more radical solution still: (3) the (con)fusion between large and small tectures; even (4) truly new formations, such as Bilbao's Guggenheim Museum.

(1) The declarative post-modernism understood resemantization as the marked injection of ancient motifs, deemed rich in plastic strength. In the beginning, such as in Milan, these themes were dictated by cultural circumstances, such as the evocation of the heritage of a city with a rich past. But soon they will work as simple erratic and exotic memories. In such a way that the Greek-Roman elements that originally supported static, kinetic, dynamic, excited perceptive-motor field effects started triggering logico-semiotic, sometimes violent field effects. So, between the old Montpellier and the sea, the pilasters and capitals of the Atelier Bofill, through their refusal (and powerlessness) for current plasticity, through their will for a pure plastic citation, made the Antigone area into a sort of no man's land, no-path, non-domain, non-horizon, which sustains a non-extent and non-duration that some find unbearable whereas others, set aside from sense, experience a change of scenary or an exil from the cosmos to the universe or to the multiverse. It is remarkable that the Antigone area and the comic strips of the series Villes Obscures by Schuiten, creator of Planet of Vision on the occasion of Hannover's Expo 2000, including the Pavillon des Utopies, should light each another, by providing similar experiences of here-and-elsewhere and now-yesteryear, where the fantastic, the reality and the real <8E1> interweave until they are merged together.

(2) Since then, a **modest post-modernism** has taken hold, following the implicit conviction that the evolution of the living in general, and of technico-semiotic homo in particular, is hyper varied, bushy, multi factorial, non-reproductible <21G3>, and that there is thus an advantage not to destroy the singularities of the past where they dwell. Whence the preservation and even rehabilitation of former original tectures. More still, new constructions that exploit new process-based construction techniques and are destined to globalizing computer functions now continue the plastic formulas of their ancient surrounds. Also, the recent Tate Modern in London, a very contemporary art museum located in the huge remains of the age of energy (pre-computer) industry at a distance with the dome of St Paul's cathedral. More soberly, Brussels experienced, before the first world war, an original canon for the width of the streets, height of houses, color and animation of the façades, called facadism, of which the Modern Style of Horta's house is a high place. Having become the capital of Europe, many new neighborhoods try not to break with the face of the Belle époque.

(3) Moreover, a more radical phenomenon took place in the conception of the plastic englobing by tectures: the **fusion between great and small tectures**, between buildings and furniture, the near and the far, the container and the contained. For the past century and a half, the telephone, then the radio, then television, then the fax machine and the internet have created an internaut inhabitant, a planetary Ulysses who is circulating amongst relays of relays, windowing-windowed amongst windows. The radio sound and the video recorder spectacle, internet information, confirmed by the multi-directional lighting of the cheap electric spot, have become *the architecture of those who no longer have one*. By them, the building and the furniture invert their dimensions. Running through the world, the spectacle of the television screen and the architects and tects from the worry of the proportions of a wall or bay windows, and rendering obsolete any stable composition. The phenomenon of **installations** is eloquent in this sense. Paintings and sculptures become environments, hence tectures or architectures. Conversely, an entire city can be organized one moment into a unique work. The city of Ghent managed this in 2000 with the explicit title: *Over the edges*.

(4) This will have been the essential audacity of Bauhaus preluding, as early as 1920, this englobing fusion of large and small tectures, that later, in the sixties, Ulm's Industrial Design, taking advantage of light materials and of a multi-form and flexible combinatory, non-vectorial, will introduce in everyday life. In Frankfurt-am-Main, the client of the Hugendubel library is immersed into the *mental* openings offered to him by the prints, CD-ROMS, messages of computers, but also immersed into the *physical* openings according to which all that is proposed to him horizontally, vertically and particularly obliquely. In an imbrication of large and small tectures, in a network. Being subtracted from the stabilizing units of the Cosmos-World-Dharma-Tao-Quiq-Kamo that were the ancient libraries and bookstores. And, rather crossed by the Universe, "Versus unum", even the "infinite Multiverse" of which he is a state-moment <30L>.

13M4. Elements of contemporary tectures

Since Vitruvius, theoreticians of tectures like the idea of **elements**, i.e., cells in which the three tectonic logics - social function, construction, plastic englobing - characteristic of a moment of civilization, are supposed to regroup. Here the column, there the wall, or the threshold, or the door, or the arch, or the cupola, or the niche, or the tatami (layer and module). The Egyptian hieroglyph used the wall + its opening, the door. The *Deuteronomy* seems to have been particularly sensitive to thresholds.

We could then try to articulate the tectural elements of the habitat of WORLD3: (1) the *portable radio*, whose "techno" sound provides the uterine surrounding. (2) multiple source lighting, which completes visually this sound and almost tactile surround. (3) The *television screen* that ensures a sufficient presence of bright objects, triggered discontinuously, albeit with a continuity of sequence, such as the stability of "time grids" and presenters. (4) The *fixed and portable telephone*, which ensures a reasonable rate of social proximity. (5) The *internet station*, which opens the registration of everyone in their wide social functions, over a horizon. (6) The *Fax*, which assuredly transports graphic documents, but also the warm gesture of the autograph, participant of the daily theatre. (7) The *access meatus* to the neighborhood street, the regional road,

the continental motorway, which are today as much or more a part of the habitat as the house. (8) Rather optional *furniture*, of which the diaper and the automotive are the extreme. (9) Rather light parts (waterproofing, beams of metal or layered wood, joints) that protect from the wind, the rain, the sun, the look of the other.

Habitats of very varied semantic thickness and extent-durations adapt to this panoply: former renovated cities, which are semantically very thick; new cities produced combinatorially, of an almost null thickness; new archaizing or resemantized cities, of varying thickness; telework sites in distant or nearby countryside, of variegated semantic. As for public architecture, it is most at ease when it takes charge of the strong relays of network crossovers (areolar) where the interfaces can be monumentally intensified: motorway stations, underground entrances, stations, airports, shopping malls, leisure centers, banks branches, museums, pavilions of utopia. In this enumeration, we shall note the absence of the religious power, evanescent, but also of political power, which has become too omnipresent and too ungraspable to find real radiance locations, with perhaps the exception of the White House. Whether it is question of habitats or public homes, the referential and the horizon have considerably widened, having moved from the village and the urbs-polis to the "urban planning", where locations and frontiers are nothing more than punctuations. Alongside architects for houses, stations or cities, have appeared those who overlook them and take charge of Quebec, the Mediterranean, the trans-Himalayan.

13M5. Contemporary formations (aminoids) and the rhythm by interfaces

Homo's tectonic formations have always echoed - consciously or not - the ideas of the generation-evolution (physis) that were circulating in their era; tectures inspired cosmologies from which they were in turn inspired. This is the case of the *generative schematism* for the ascriptural Neolithic (WORLD1A) and its magician artisans or shamans. The case of *numbers* for the scriptural primary empires (WORLD1B) and their surveyor and astrologist artisans. The case of Euclidean and projective *geometries* for WORLD2 and its analytical-synthetic artisans (the Greek rational artisan). Is there a typical tectonic formation (Gestaltung) for the maturing WORLD3?

In its conception of life and evolution, the twentieth century will have been rattled by the discovery of the formative power of **amino acids**. We now know that living organisms are essentially made up of proteins, action proteins (enzymes) and structure proteins, the polycopy or replication of which is ensured by the RNA-DNA. Yet, it was shown that any protein is made up of only 20 amino acids, which each comprises two portions. One comprises one of their twenty different configurations, and is the source of a first differentiation, **compositional**. The other is identical in everyone: it conjugates an NH₂ *amino* and a COOH *acid*, which allows them – by means of covalent liaisons through the expulsion of a molecule of water - to form indefinitely long chains, whose billions of possible sequences are the source of a second differentiation, **sequential**. Finally, in the polymeric chains thus constituted, amino acids attract or repel each other according to the five fundamental chemical liaisons (covalent, ionic, H-, hydrophobic, weak) in such a way that their chains curl up in balls, and that these balls each have general properties of structure, but also points of chemical activity/inactivity that are incredibly accelerated (their enzymatic aspect) according to a third differentiation, **stereometric**. Thus, proteins deserve the name that Berzelius gave them; they are indeed *proteioï*, of primary importance. In 1970,

Anfinsen's team showed that if we uncoil and extend the chain of amino acids that make up a protein, it loses all its properties and recovers them all once it coils up again. There are there at least two incredible originalities for Homo in the late 19th century: (1) the structural and physiological fecundity of **sequentiality**, (2) the engendering of analogy by **digitality**.

We can see that cosmologic **formation** (**Gestaltung**) that takes place here breaks with all former theologies and philosophies, which had only known gods who were sculptors, painters, geometricians, arithmeticians, carpenters and masons, weavers - in a word plasticians in the Greek sense - for whom the sequentiality does not intervene, and where the digital is only there to articulate the analogy, not to engender it. Kant's "Critique of teleological Judgement" which is the cornerstone of his system summarizing the West is thus ruined thoroughly. Moreover, the concept of **amino formations** boasts very vast echoes. For it is true that mental states (i.e., semiotic, technical, presentive <26B>) are of another order than living bodies, but this does not prevent that Kandel's - future director of the *Principles of Neural Science* - discovery in around 1970, whereby memory and experience are the fact of a brain acting like a bio-chemical computer where the software morphs into hardware and hardware into software (which is not the case of current technical computers) <2A1>, does well belong to the same non-plastician conception of formations.

Let us return to our original question: in recent tectures, do we find **aminoid formations**, i.e., formations that echo the thus discovered **amino formations**? We shall see that this is probably the case in painting <14J1a> and literature <22B9>, and almost declaratively in music and dance <15H1d>. But in tectures, shouldn't we expect considerable delays due to the heaviness of the material and perhaps also of the thinking habits of the tects and architect who were for millennia the brothers of the plastician Demiurge, inhabited with triangles, squares and circles? Perhaps, could we see first lineaments. First negatively when, around 1970, plethora speculations on the emptiness, alterity, the lack, the hole, the cut, and the will of switching from a geometrical model to a topological model, or still the fascinations by the theories of chaos start to mark a profound defiance towards the ancestral architectural plasticism. Then positively, in the same years, with these sketches where Swiss Thomkins proposes utopias conciliating the sequencing (continuous), the variation (discontinuous), the return of one on another, into (partial) engendering of the analogic by the digital. Finally in the "Project on the City" of Harvard Design School, the fundamental place given to the shopping center, "latest form of social activity" indicates a new attention to sequential digitality, either that the built exploits the resources of the escalators and the walls allowing for air conditioning, as in the giant architectures of the Pearl River Delta in China, or that it is elaborated at ground level along a ground railway line where all the heterogeneous series of contemporary globalization accumulate and cross one another, as in the spontaneous Metropolis of Lagos in Nigeria. We could speak of a chemical or biochemical paradigm of architecture.

These questions on eventual aminoid architectural formations invite us to question the relations between rhythm and architecture. Amongst the eight properties of rhythm dictated by the hominid stature, the anthropogeny revealed the organization in nodes, envelopes, resonances, interfaces <1A5h>. By applying this reading grid to the architecture of the second western millennium, we roughly encounter the following choices: *nodes* of the Roman architecture; *envelopes* of the Gothic and first Renaissance; *resonances* of the second Renaissance, Baroque-Rococo, Romanticism; *interfaces* of Modernism and Post-Modern. The rhythmization by

interfaces is probably the only one that can be practiced for a windowing-windowed inhabitant in areolar networks <30K>.

13N. Semiotic of tectures

The fundamental of the semiotic of tectures, large and small, buildings and furniture, resides in their quality of **massive images** <9>. Like the hand axes of the Middle Paleolithic that introduced the massive image for Homo, tectures still hesitate between their technical function of practical proposition and their semiotic function of cultural thematization <4A>. Whether they are pyramids, tumulus, castles, huts or stools, the technical and semiotic aspect here also results from a global body to body between a used organization and a using organism. As humanized as they can be, they inevitably remain immersed in nature, because of their materials, construction processes, destinations, plastic references to the surround. Finally, the growths, the tectures and the structures are here difficult to demarcate <7F>. Whence, among tectures, the intensity of the **ruin**, which cannot be found elsewhere: "Make me an architecture whose ruins are beautiful" said Hitler to Speer. A damaged painting and patchy poem truly lack something, whilst the ravaged and pillaged Parthenon impresses us as much or more than if it had remained intact, albeit differently. The same goes for a chair, particularly if it belonged to Beethoven or to a dead grandfather.

So, temporal dimensions are there as important as spatial dimensions, the duration as much as the extent. When he inhabits, everything happens as though Homo found convenience, pleasure, enjoyment in accommodating with a certain *already-there* rather than instituting something built from scratch, from a *tabula rasa*. This cumbersome already-there seems to concord with the nature of the surround, with its almost uterine remanences and rememorations, what we would dare call its archaism (archè, principle). There is always something archaic with Homo who long lived in utero. With a lesser degree in furniture than in buildings.

The social **connotations** of tectures take place in this massive imagery. Despotic status of the large sofa. Royal status of the stairs. Bourgeois status of façadism and display cabinets. Worker status of the workshop and simple machines. In Aachen, the raised throne where Charlemagne followed the mass indicates, alone, the religious and political continuity of the Carolingian emperor, and his link to an antiquity. Along with the fact that here the social condition always takes root in the human condition, insofar as each tecture manifests the servitudes of life. The palace remains complicit with the lair, the burrow, the den. The festival hall adjoins the bedroom where one lives and dies. As products, poems and paintings never comprise these admonitions that, in all furniture and building, put birth, life and death in reciprocity.

As for the tectural **denotations**, i.e., these indexating inflexions <5> whereby a door handle invites to grasp it, a stair to climb it, the door frames to distinguish or conversely to confound the actions of inhabiting, they come as supplementary finishings. Hesitating between the status of indexes <5> and the status of indicia <4>. Magic, haunted, by that again <4D>.

Thus the tectural field effects are born from all part, distributing significations, senses, the sense, the Sense, the significance <8F>. They are covered, with diverse accents, by the verbs

habiter, Wohnen, to dwell, which are all semantically thick. These field effects realize destinieschoices-of-existence by their topology, cybernetic, logico-semiotic, presentivity <7A-D>. Crossing fantasies <7I> and things-performances-in-situation-in-the-circumstance-over-a-horizon <1B3>. In reveries of the cellar "beneath", the attic "above", the dependences "next door", the hearth "in the middle", the room "away", the kitchen "in insistence". And in the most unconscious, insinuating, and permanent activation-passivation of the eight aspects of the rhythm <1A5> that can be.

SITUATION 13

This chapter is in close resonance with Chapter 11 on the articulation of the hominid specimen, and Chapter 30 on the avatars of the x-self. It is also closely related with what will be said on ethnics in Chapter 28 and what we broached on the walk, and gait in Chapter 1: the hominid walk and gait inhabit almost as much as they move. But we shall also have noted how, to embrace textures, we have had to take an overview of the great destinies-choices-of-existence that tectures realize and suppose so well. Therefore, examining these tectures is an appropriate opening to the second section of Anthropogeny on Homo's fundamental accomplishments.

Translated by Paula COOK, 2018

(Last update, February 16, 2024)