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Morphogenesis of the Beirut Green-Line
Theoretical Approaches Between Architecture and Geography[1]

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Knowledge arises from this peril

Michel Serres (1983 : 92)

A GREEN-LINE

The 1975-1991 war in Lebanon turned identities into territories. The driving force of this process was an urge to ensure identity by ascribing it to geographical place (Norberg-Schulz, 1971, 1980). The consequence was a profound destabilization of the fragile multicultural coexistence and a "geography of fear" (Khalaf, 1993 : 33). The process dismanteled the underlying structures of the society. The war ran out of hand and became a fight between self made war-lords and street gangs. Instead of an agglomeration of culturally homogenuous safe-havens, the most dominant characteristic of Beirut's urban geography became the Green-Line area.

The name refers to the belt of greenery which emerged when grass and trees grew in streets and buildings that were destructed and abandoned in no man's land for years. The arabic term for the front line is : *Khutut at tammas* which means, more accurately in plural, confrontation lines[2]. The architecture of the Green-Line has become the architecture of Beirut. As it became that of Sarajevo, and of Grozny; and some areas in Los Angeles, New York (Bronx), Chicago, etc.

Which forces are at play in the morphodynamics of the Green-Line? We assume, concerning this matter, that a city is an intelligent, evolutionary system. Accordingly, architecture, being the physical form of the city, is therefore in a permanent state of transition.

War accelerates the evolutionary processes that are inherent to any given architecture, and it makes them visible (like cancer makes cellformation visible). War compresses time locally. In Beirut, the destruction took twenty two years — seventeen years of war plus five of demolition — and the reconstruction is expected to take thirty. The transition will last about two generations of inhabitants. Such a pathology offers an opportunity to study the logics of how architecture as a transitional form, in general, evolves.

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The following notes on the nature of Green-Line architecture are echos of three years of work at the American University of Beirut. They form a set of intuitions and hypotheses based upon three complementary morphodynamic approaches :

i) the theory of evolutionary systems as developed in the studies of artificial intelligence (AI) and artificial life (AL) (Freedman, 1994);

ii) some concepts from catastrophe theory and dynamic semiotics (Thom, 1983; Brandt, 1991a, 1991b);

iii) the theory of the morphogenesis of human settlement (Ritchot, 1991; Desmarais, 1995a, 1995b).

INTELLIGENCE AND MEANING

To get on with the discussion about the city as an intelligent system, we need a workable definition of meaning and intelligence. Let us start with the notion that architecture is a transitional form suspended between mind and world, and then let us adopt the following Peircean pragmatist definitions (1955 : 23-41) : intelligence is the ability to interact appropriatly with the world, and meaning is the accomplishment of such an interaction. These definitions allow us to consider architecture as the matter of thought and the city as an intelligent system.

Classical studies of artificial intelligence (AI), as done by Marvin Minsky and John McCarthy, were based on the belief that, if only a sufficient amount of data is stored on the hard drive, the machine will start behaving intelligently. This is a notion of AI which is no longer held. Most AI researchers now agree that intelligence and data are different entities, and that intelligence cannot be inserted. If a machine, or a system, is capable of intelligent behaviour, it is because this capability has somehow evolved within the system.

There are several views on how one can make this happen, and most of them are based on different neural networks, where the system is "trained" in, or "taught" an appropriate behaviour. The weakness of most of these approaches are, however, their dependence on stationary data. In real life most data are not stationary. Think about crossing a street. Traffic is regulated by rules of conducting, speed limits, traffic lights, by right or left hand driving, etc. Yet unforeseen situations occur — so unforeseen that even real intelligence falls short of accomplishing the meaning of crossing the street — and let alone an AI system depending on stationary (pre-set and constant) data. Such a system will always depend on the intervention of the computer operator when an unforeseen situation occurs.

A LOOP-HOLE

The problem led Stephen Grossberg to claim that a realistic neural network must be "autonomous, fast-learning and adaptive" (Freedman, 1994 : 79). The system must be able to identify a mismatch and, immediately, to correct its behaviour accordingly. Applied to the problem of crossing an ordinary downtown street on an ordinary day, Grossberg's claim seems unproblematic. The snag is that, in order to have system behaving like Grossberg requires, it must have a

closed feedback loop which implies that the scientist can neither intervene nor monitor the learning process. He can only observe whether the system does demonstrate or not the intelligence needed to solve the problem, but he will not be able to account for how the intelligence was achieved.

According to our definition, a "nature based" system seems to be the one that comes closest to artificially producing intelligence. It therefore seems to be a problem inherent to a pragmatist — should we say action oriented — definition of intelligence that we cannot account for how meaning — the accomplishment of appropriate interaction — is achieved in each individual case. There is no path leading from meaning back to intelligence. Meaning seems to emerge locally, while intelligence seems to be non-local. The relation between one another therefore calls for a closer look.

ART AND NON-LOCALITY

In conventional AI as well as in classical neural networks, intelligence is tied to a certain pattern of behaviour, or to a certain set of information, which is imprinted as strings of 0's and 1's in the memory of a computer. In an evolutionary system, this is not the case. In an evolutionary system, intelligence is non-local (Freedman, 1994 : 62). There are still 0's and 1's on the hard disk, but they are not intelligence, they are the history of the system. They are imprints of the events that have occurred within the system, they are archæological layers in the system (fig. 1). The sum of such layers at any given time composes a field where events are stored not as memories but as impacts on the pattern of evolution of the system. The field evolves as time passes, so that new events and singularities enter it.

The main feature of nature based AI, as developed by Stephen Grossberg, is that it includes a closed feedback loop. This neural network is based on an "adaptive resonance theory" (Freedman, 1994 : 62). It works on resonance between a non-local field and an approaching local event. "Resonance" here should not be understood exclusively in the strict physical sense. It rather refers to a recognition in a broader sense : whereby certain characteristics or qualities of the event are recognized or matched or responded to by certain other qualities in some part of the field. It is a qualitative identification, which has to do with similarity rather than with identity or congruence. It is a case of *similitudo* in the Aristotelian sense of the concept of the relation between "general concepts" and *res* (Möystad, 1995b : 25).

Resonance, as it is outlined here, complies with other field theories addressing questions of memory and meaning such as Rupert Sheldrake's notion of "morphic resonance" (1988 : 115-132), and Stuart Hammeroff and Roger Penrose's studies of "microtubules" and the non-locality of memory (1994 : 348). According to Peirce's classification of signs, resonance would clearly be a case of iconical semiosis, and it can quite fruitfully be related to other studies of the role of iconicity in cognition, as well as in the semiotic studies by Jean-Francois Bordron (1990, 1991).

A more thorough going discussion of these interrelations would exceed the scope of the present notes. At this point, it will suffice to observe that we have outlined the following three keystones for the notion of the city as an intelligent,

evolutionary system : a closed feedback loop; iconicity; intelligence as a non-local phenomenon. Both first ones have been commented on, but the notion of non-locality might want some further clarity.

Figure 1 : Aerial photo showing the face of downtown Beirut in 1995

Historical Coastline

The Crusaders' Fort, overlooking the old harbour

Hellenistic Tower

Canaanite City Wall 3000BC

The Roman Decumanum

Al Omari Mosque, earlier Crusader Church of St. John

The Beirut Opera

Place de l'Étoile

The unearthed Roman Cardo Maximus

St.George, Maronite Cathedral

Assumed location of the Roman law School

Martyres' Square

Temporal Barracks used for exhibitions and fares

...after demolition had begun. A number of archæological digs disclosed various layers. The different digs disclose ottoman, byzantine, roman persian, hellenistic, phenician and canaanite layers : a timespan of 5700 years.

A key point in Roger Penrose's case against AI was based on the understanding of intelligence as non-local (as a quality), and therefore not accessible to computation (quantification). He claimed that the concept of a machine performing non-local properties was a contradiction in terms, and that the entire agenda of AI therefore was basically meaningless. At this stage, Penrose's dispute with AI reflected the classical dispute between those who used to claim that qualitative is just bad quantitative, and those who, like Penrose, would claim that qualitative and quantitative cannot be reduced to each other.

An opening between the two positions seems possible from Penrose's side by the concept of microtubules, and from the AI side by the concept of adaptive resonance. Both approaches rest on non-locality. When something is non-local, it means that it is somewhere, and yet nowhere in particular. It can only be observed, or perceived by its (local) effects. Before proceeding from here, I want to draw the attention of the reader to the word "perceived". The use of this word in the argument implies the present of someone, a subject, to do the "perceiving". The presence of which, it seems, remains basic to the dynamism of an intelligent system : irrespective of closed or open feedback loops, or rather as part of the loop. We shall return to this towards the end of these notes.

The fact that the non-local properties can only be observed by their local effects does not mean that they have no existence of their own, apart from of their effects. At least for the sake of argument, in order to overcome this logical loophole, we refer to the whereabouts of non-local phenomena as "fields". A field is hence the substrate of non-local, or for that matter, qualitative phenomena.

A THEORY OF URBAN MORPHOGENESIS

The theory of urban form, as developed by Gilles Ritchot (1991) and later on by Gaëtan Desmarais (1995a), provides an interphase between evolutionary systems in AI and architecture, because in a certain sense it rests on a phase space portrait of the city. The theory claims that the regularities of urban morphodynamics, as manifest on the material level — or in geographical space — spring from an underlying, abstract form. This form can be understood as something similar to Sheldrake's morphic field. It is an abstract, deep structure, a topology of locations. The concrete surface level, geographical space, is differentiated and structured in reference to this deep structure. The deep structure in its turn invests locations in geographical space with positional values.

A key concept of the theory of urban morphogenesis is the "sacred place", a particular location invested with passionate values. It can be a place of worship, a place of the dead, or of some other value that goes beyond the intelligible (Desmarais, 1995b). The sacred place is consecrated for the dwelling of an "Asymmetrical Other" (Ritchot, 1991). It is the scene of the ritual murder, which is known often to have been committed as an act of foundation of the *polis* (Girard, 1978; Serres, 1983). The sacred place evokes strong passionate excitation; simultaneously attracting and repulsing the subjects. This tension, this quality,

this "firstness" in Peircean phenomenology, is a resonance. It appears to transmit on a wavelength which resonates with subjectivity, in the sense of all subjects. In the study of the Beirut Green-Line, this energy is referred to as "iconicity".

The theory of human settlement construes such a place as a "vacuum", which charges the morphodynamics of human settlement with energy, but from some distance. Settlement does not encircle the sacred place, it unfolds at a distance. In the perspective of the city as intelligent system, this can be adopted as a key point. Read as a deposit of difference, as a wedge between meaning and intelligence, between system and fact, it makes perfectly sense as a foundatory singularity in an evolutionary, intelligent urban system.

In his book entitled *La Morphogenèse de Paris*, Gaëtan Desmarais (1995) goes on to outline an archetypical configuration of the abstract level as two axes intersecting at a right angle hence dividing four attractor basins. Isabel Marcos has discussed this configuration (1996), and studies, conducted at the Centre of semiotic research at Aarhus University[3], suggest a configuration with one bifurcating threshold distinguishing three basins : a cuspoid configuration (fig. 2).

The study in Beirut shows a configuration which is closer to the latter shape, with *Place des Martyrs* as a central vacuum. The configuration of Beirut's abstract layer, however, does not quite fit either type, and one may ask whether the shape of the configuration is really important. At least in the present study, this question is left aside, and the emphasis is put on the stratification as such, and on the link between the strata.

The problem of a typical configuration is probably important, but the investigation of the stratification and the dynamics between the levels does not depend on its answer. This position is equivalent to the one adopted by René Thom (1983 : 74) when inquired about the limitations imposed by having all events forced into only seven kinds of folds. René Thom does not reject the discussion, but writes that it should not prevent us from exploring the resources of the theory of bifurcations as such.

Downtown Beirut seems to have been victimized and subjected to a collective murder. One can easily imagine that the challenge to what René Girard calls "the mimetic desire" and "the victimary mechanism" (1978) becomes stronger in a multi-cultural society in which the members do not share places of worship, or in which they share places but not worship.

Towards the end of the war in Beirut, there were no friends nor enemies anymore, only warriors and civilians. Moreover, any public place was dangerous to be in. Under such conditions, one can imagine that public space would take on the role of an antagonistic other, and ritually to be found guilty of the destructive violence. As if to complete what the war left undone, the organization which was established to reconstruct the downtown area, *Solidere*, abolished all individual properties, turned downtown into a share holding company, and practically demolished everything that was left from the old city centre[4].

Figure 2 : Aerial photo of metropolitan Beirut showing the Green-Line
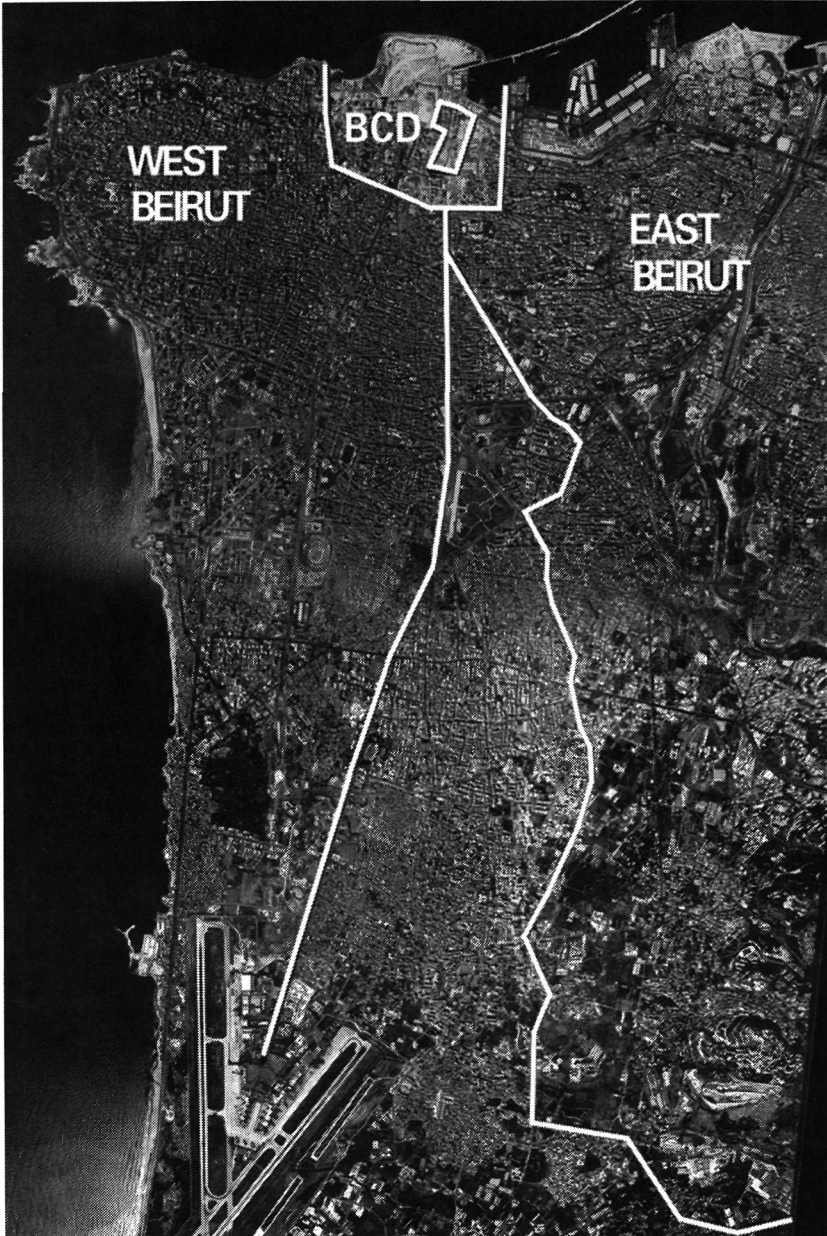
...and how it demarcates two attractor basins : West Beirut, East Beirut; and how Beirut Central District was turned into a vacuum. The north-south axes between the port and the airport roughly coincide with the demarcation line. This would correspond with an axe of transportation. The east-west axes are however not evident, even though *Rue de l'Indépendance* might be read as being one.

According to Gaëtan Desmarais : "the subjects are æsthetically overwhelmed by this pregnant form (the corpse) which emanates dysphoric and euphoric affects" (1995b). Green-Line architecture has got this property. In Beirut, airconditioned busses, with French, British, German and Japanese tourists inside them, were circulating between ruins and rubble shortly after downtown had been opened. Sarajevo received its first tourists even before hostilities ended. This perspective will allow us to see civil, ethnic, cultural war as a discharge or eruption of evolutionary energy from the urban system. Without considering causes or ends of such discharge, we can observe that it has the effect of attracting the parties to the corpse.

Once hostilities ended, and *Solidere* erased even the ruins of downtown Beirut, one could observe a certain reconciliation in the mourning of a shared loss. The æsthetic pregnancy of the Green-Line is breathtaking. Its architecture still keeps producing new forms that read as transitional. Proposals have been made to incorporate certain urban types, and spatial practices that emerged as *ad hoc* tactics of survival during the war, in the architecture of the reconstructed Beirut (Sarkis, 1993).

FIELDS, FOLDS AND OBJECTS

Intelligence is suspended between mind and world, powered by the interplay between intentions and facts. The problem is how to combine intentions with a closed feedback loop. One must not mistake facts for system. Facts, as well as intentions, are local. Facts are embedded in objects, and intentions in subjects. They form together small and local subsystems, or discontinuities. The overall form of the interplay between them, however, is a quality. It is non-local, and it rests in the field of architecture.

How facts and intentions combine, embed intelligence and produce meaning, is a semiotic problem. In architecture, it is also a pragmatic problem. Let us therefore adopt the sign structure according to Peirce, and adapt it to architecture (fig. 3). The three elements of the Peircean signstructure are the *representamen* (which represents), the *object* (which is represented in some capacity of respect), and the *interpretant* (a sort of software or operative system, which regulates the relationship between the two first elements).

In architecture, the three corresponding elements are the "Opus of Architecture" (OpA), the "Object of Architecture" (ObA) and the "Field of Architecture" (FoA) (Möystad, 1994, 1996). When architecture contains a collective memory, and constitutes the matter of thought as suspended between mind and world, it does so only in its capacity as field, FoA. It is, however, not in its capacity as field that we inhabit architecture, or build it. We do not build a field, we build objects, ObA, one by one.

ObA is a stationary fact, in spatial as well as in temporal terms. Therefore, the object is only intelligible to us in its capacity as space-time phenomenon, OpA. It is only when we interact with a house that it takes on meaning. Then it unfolds in time from concept to project, through use and decay until demolition transfers it to memory. The sensual experience of OpA is local and individual subsystem.

Figure 3 :   The three elements of the Peircean signstructure

INDEXICAL
INFERENCE
PAST
ACTUALLY POSSIBLE: INTENSITY
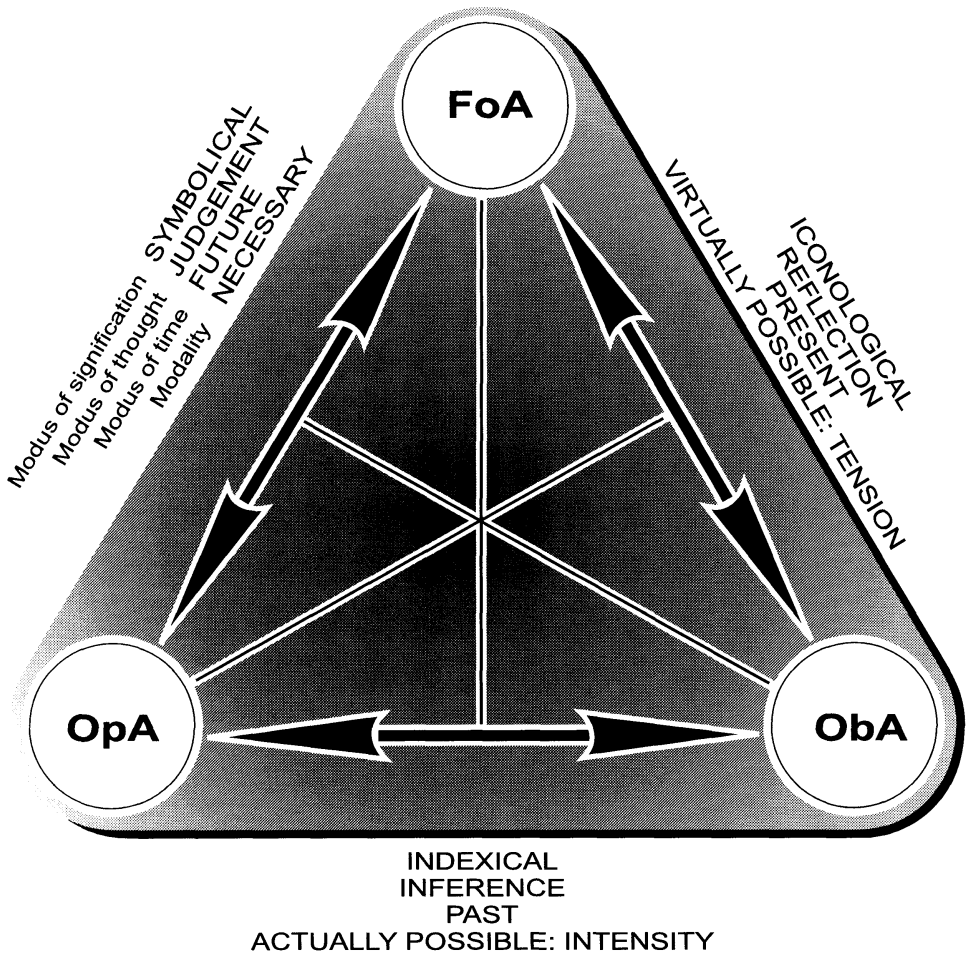
OpA is the actualization of a certain amount of space-time in FoA, and FoA, in its turn, is the morphogenetic field with which ObA resonates. The semiotic relationship between FoA and ObA is therefore iconical. There is a causal relation between OpA and ObA. When we experience a piece of architecture, the experience is a direct imprint of the physical object. The semiotic relationship is indexical.

Between the individual experience of architecture (OpA) and architecture in general (FoA), there is language. The semiotic relationship is symbolic, and symbols are conventional signs, like laws. When the evolutionary system of the city is brought in crisis, it is this aspect of its semiosis that collapses. The logics of war is indexical. The value of a place becomes its strategic position, and the value of a building becomes its capability to withstand shelling. Indexicalization detaches the architectural forms from the programs that once led to their design. Indexicalization de-programs and de-forms architecture. It produces architectural

monsters[5]. Indexicalization folds architecture back into itself. It resorts to the object, to matter. Subjects become objects to each other. Locations become transitions, and points in phase space become voids.

War overrules civic laws, and its result is an iconisation of the urban tissue. War makes forms eroded. Buildings loose their edges through erosion. Lasting gunfire gives rounded edges, soft, flesh-like shapes, but it very rarely produces structural collapses. Just like erosion due to acid rain, but faster. Forms withdraw and become pregnancies. Shells do not penetrate a wall, they barely touch it. The touch detonates the explosive inside the shell. The explosion creates an opening in the wall, and imprints a regular pattern radiating from the centre of the detonation, like an ornament, around the opening. After years of urban warfare, the omnipresence of shell impacts take on mythical dimensions and, during the Balkan war, they were named "Roses of Sarajevo". The seeds of the roses came with the wind, and the weapons, from Beirut.

Often erosion through gunfire is observed on the lower levels while the upper parts, exposed to more distant fire, are shaped by shelling. The urban tissue is exposed. Buildings are peeled. Their skin is ripped off. Structures are uncovered. Interiors open to the outside, and outsides penetrate the buildings with holes looking like corridors left by the militia's tactical movements. Air raids work on a more abstract scale, directly on the city.

Objects become monsters. They become matter, flesh, substance, skin. They hiss, they smell. When sewers become shelters, sewage becomes surface, architecture disembowelled, and when everything becomes silent, I am stunned by nakedness. I am pulled in, it absorbs me, and folds me back into myself. The iconicity of the Green-Line object nails you to the moment. At some point one cannot resist the sensual attraction to the corpse : the de-programmed body. The movement of time is stalled by iconic expansion of the present.

REASONANCE[6]

The Green-Line architecture of Beirut emerged in stairwells, bomb shelters and ventilation shafts where opposing militias could exchange corpses and greetings. The same phenomena however do, slowlier and in a less spectacular way, unfold in any city. Children do live in sewers in Bucuresti and in Mexico City. Houses are burnt down, abandoned and then reprogrammed in Bronx. Cities do decay and buildings do erode. The only thing special about Beirut is that these processes have been unfolding at a pace where they lent themselves more readily to be observed.

Green-Line architecture is non-local, yet embedded in the object, as a quality. Therefore not even war can dismantle it. Its iconicity feeds on morphodynamic energy. Increased energy generates increased iconicity, and increased iconicity produces increased dissipation. Iconicity breeds between place and meaning, and is a source of difference between intelligence and meaning : without which both are lost. One is tempted to parafrase Gregory Bateson (1973) and suggest a step towards "an ecology of reason".

Buildings do tend to become more sculptural as ruins. This sign structure is dynamic. It is a loop. If we include both design/planning and use/experience in the temporal dimension of OpA, it is even a closed feedback loop. It allows intentional action on the city as architectural field. It includes identification of mismatches and corrective action. By virtue of the object's, ObA, resonance with the field, FoA, and the field's linguistic interaction with the using/designing subject, the loop encompasses both learning and intentional action. Construing the feedback loop by this way implies the inclusion of the (designing/using) subject in the structure. Our built environment now implies a loop composed with three elements :

i) Symbolical form, laws, conventions, habits and traditions. These are culturally coded, or programmed forms and meanings. Directly related to architecture, we would see conventional and historical aspects of architectural form (greek columns, symbolizing power, etc.) in this class. If the scope of this list was not restricted to our built environment, it might have corresponded roughly to the abstract level in the theory of urban form.

ii) Indexical form, the physical form, the built environment, technologically generated form. Related to architecture, one would find forms referring to engineering and hi-tech in this class; structural honesty and similar notions (the concrete level/geographical space).

iii) Iconical form, matter, resonance, sensual aspects, æsthetics, touch, and passion. This is where architecture would emphasise materials, tactile qualities, acoustics, beauty, surprise, ambiguity (subject/object as a system of interaction).

Architecture seems to offer itself as the substance in which the intelligence of the city — as an evolutionary system — is embedded. In this perspective, it must be reasonable to understand architecture as the matter of thought (Möystad, 1994), and it seems to be working (but the loop is closed).

CONVERGENCES AND DIVERGENCES

Desmarais and Ritchot's theory of urban morphogenesis stratifies the city in one underlying abstract level, and another concrete surface level. The dynamic sign structure suggests that the abstract level would correspond to the Field of Architecture, and the concrete level to the sum of the physical objects. Where Desmarais and Ritchot suggest the rule of property as a third and mediating term between the two strata, the theory of architectural form suggests the OpA - ObA - FoA sign structure as mediating element, as interface, or to stay within the vocabulary of these notes; as feedback loop.

First divergence : the theory of urban morphogenesis bases its operation on a sign structure which, in my opinion, remains binary. In Saussurean terms, one might read the concrete level as a Signifier and the abstract level as a Signified. The notion of an archetypal configuration of the abstract layer seems to support this reading, as it implies the presence of a more or less permanent and transcendental

form of content. The semiotic problem of arbitrariness between the (abstract) content and its (material) representation is dealt with by the means of a "noological addresser". If this addresser works as a channel of communication, carrying messages from abstract to concrete level, the semiotic structure is going to merge the two levels, by which there would be no semiotic structure. If the noological addresser, however, is a coding mechanism, as in fact suggested by the reference to the rule of property, the arbitrariness would still be there, since rules only work by consensus as the case of Beirut downtown clearly shows.

The theory of architectural form poses the same semiotic problem. It points out an abstract and a concrete level of the city, but it sees none of them as neither permanent nor transcendant. It sees them as two out of three equivalent elements of a dynamic semiotic structure : the city as intelligent, evolutionary system. The third element, which would take the place of the noological addresser, is the OpA - ObA - FoA sign. This way semiotic arbitrariness is overcome. Moreover, meaning is seen as local and conditional rather than as transcendent.

Second divergence : the structural theory of urban form is concerned with a relatively stable structure. The dynamics related to the implementation of the rule of property, including the play of control of territories and movement, do not seem to go beyond such an understanding of the theory. The agent of spatial actualization is a "rule", a scientifically and logically manageable entity : an object. This leaves the problem of understanding the role of man — the subject — in the generation and dynamics of urban form, unsolved.

From the point of view of the theory of architectural form, a basic part of this problem is that man, as an architect in the Aristotelian sense, is left out of the model. With the proposed feedback loop, the entire structure is dynamized, emphasis is shifted from genesis to dynamics. The subject is changed from external entity, only implicitly and passively present as anthropological structure on the abstract level, to explicitly and actively present in the feedback loop, acting on the system through OpA. This shift implies a change of view of the subject/object relationship as a dichotomy to a dynamic system, where both ones are associated rather than dissociated, where they can be part of the same spatio-temporal phenomenon. Through time object can become subject and *vice versa*.

First convergence : both approaches emphasize on difference. They set out to understand the development of urban architectural form and of meaning; even though the semiotic interest is more explicit in the architectural theory than in the urban one. The prerequisite of any semiosis is that something (A) can stand for something else (B), and consequently that A is different from B. For "something" to be something and not just anything, it must be different from "anything". This difference gives "something" form, and by the same token it makes semiosis possible.

The abstract notion of difference is made concrete and tangible in both theories to a degree where it becomes a rather precise and operative concept. The urban theory delivers applications of difference by its adoption of the "Asymmetrical Other", the corpse (subject becoming object) and in the concept of "vacuum". The

architectural theory builds difference on "iconicity", a concept which is related to discontinuity of form, to the unexpected, to rapid change and to the sensual experience of matter.

Sensual experience, the arousal of passion, whether through violence, vacuum, erotics or matter, strictly relates to here and now. In this respect, difference is also a temporal difference, a punctuation, a difference between past and future. A difference without which an event, a narrative, a resonance, or the experience of any spatio-temporal phenomenon, would not have had form and would consequently not have been intelligible. Both meaning and intelligence depend on there being a difference between them.

Second convergence : the interest in modellizing change. The urban form theory delivers elements for a phase space portrait of the morphogenesis/dynamic embedded in its notion of the abstract level. The architectural theory applies the same kind of tools in its notion of the feedback loop. The theories differ in their approaches to the semiotic structure of the models, but they converge in providing a basis for the analysis of form as a process. This common interest could probably be developed, to the point of instrumentalisation through a closer study of how to apply the theory of bifurcations (Thom, 1983 : 74) to the dynamics of urban/architectural form.

CONCLUSION

As formal system, the theory of urban form is in no way contradicted by the theory of architectural form. In fact, they rather complement than contrast each other.

The architectural theory could profitably adopt large parts of the formal system of the urban form theory, both internally in the FoA function and externally as an elaboration of the notions embedded in the chorematic diagram. While Desmarais and Ritchot, however, are left with the problem of how to bridge from settlement to subject, the present study includes the subject in the settlement. This is probably as trivial as it sounds, even though what it suggests may be rather provocative : the subject is a feature of thought, rather than the other way round.

Philosophically, one might be tempted to make the following reflections : at this point in time, Beirut, the seat of the Roman School of Law, seems to have been sacrificed by Europe whose legal framework is delivered through the *Lex Romana*. For fifty years, it has been paying ethnic debts for Europe. One might hope its suffering will lead to a reconciliation in the mourning of what is lost. UNESCO's declaration of Beirut as cultural capital of the Arab world could, at best, indicate something in that direction.

If there are thoughts, their meaning is to think them. If there is architecture, its meaning is to build it.

NOTES

1   This article is part of a research project financed by the University Research Board at the American University of Beirut. *Cf.* http ://www.aub.edu.lb/fea/agd/projects/arch_link.html

2   For a survey material such as photos, panoramas and further descriptions of the Green-Line, *cf.* the following URL : http ://almashriq.hiof.no/lebanon/900/910/919/beirut/greenline/index.html.

3   The issue was discussed at length by Brandt, Marcos and Möystad during the seminar "Semiotics of urban structure" at the Centre of semiotic researh, Aarhus University, November 12, 1996.

4   This operation was done through an amendment of the Constitution. This amendment may be read on the following URL : http ://almashriq.hiof.no/lebanon/300/340/342/law_no91-117.html.

5   Frascari (1985 : 157-166) points out the double reference of "monstrare" as both "to make the invisible visible", and "to make (someone) think". The architectural monster can be *in* the building or it can *be* the building itself.

6   I have constructed this neologism from " reason " and "resonance". It alludes to the close relationship between iconicity and resonance, and their basic significance to reason(ing).

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