Notes on the Nature of Informality

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TU Delft 2008
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Stating the problem

Starting a text by stating the word problem is already much more ambitious than what someone could fulfill as it implies that we need to frame a part of the reality as if we already know and can take for granted what should be considered as a problem. Apart from the fact that a problem is always about a fragment and not a totality there is also the parameter of time. If the problem we set as problem is really one, can only be known in the depth of time. The problem of today is only to be revealed tomorrow, and what we consider as a problem today, tomorrow might be considered as a bless, not a curse. Therefore, fragmentation and temporality in defining the “problem” as such is already a problem in itself and certainly I could say that one of the problems I would like to solve with this text is the wrong perception of the term problem.

On the other hand the word problem rather implies the need for a solution but I am not sure yet if the aim of this text is to solve a problem or to create more problems opening up a set of questions and relating them, I guess it is up to the reader. Additionally, a solution is something final, conclusive and in a text about informality what is critical is rather to avoid the end. So instead of the word problem I prefer the word phenomenon because all a phenomenon seeks is to be understood and by understanding it one could frame a context and describe a situation in a way that is not aimed or closed but open and flexible. Through understanding changes will come unhurriedly and naturally, they will establish a line for communication and constant negotiation, or better, a symbiosis among the text and the phenomenon of informality.

The whole project is an attempt to transform my aesthesis for the things into a gnosis, into a knowledge that can be transferred, communicated, questioned. Somehow it is an attempt to formalize the informality of my intuition in a smooth way. This is why I don’t start by aiming at the end, I just start writing, hoping that the way I write, and the content of what I write could teach me how I think.
Three little pigs

“One day the big bad wolf came and knocked on the first little pig's door and said, "Little pig, little pig, let me come in." And the little pig answered, "No, no, I won't let you come in, not by the hair on my chinny chin chin." "Well," said the wolf, "then I'll huff and I'll puff and I'll blow your house in." So he huffed and he puffed and he blew the house down.”

The famous fairy tale of the three little pigs\(^1\) and the big bad wolf is a story that intends to be didactic and teach children the value of consistency and hard working but I would like to inverse this and attempt to see it the other way round. This is probably because I never considered the first little pig as lazy or less smart and also because I consider the story as a good start for a discussion about the architectural practices and in general the technical world. In the story, the little pigs build small houses for their protection and what is noticeable is that while building takes place, every single little pig solves practically only one problem disregarding others. The first pig considers as a major problem the spending of time so sets as his main goal to build fast and finish in a short time. He really solves the problem and brings his goal to an end by building the house with the use of hay which is a light material therefore easy to carry and manipulate quite fast with the use of the minimum power. In that sense the little pig has succeeded. But then the wolf blows and the wind comes and demolishes the house. The same happens in the case of the wooden house, the aim is fulfilled with the use of a material which is more stable and can resist wind but it is easy to put on fire and this is how the wolf destroys it. The pigs finally hide themselves in the third house which is the most stable and safe because it is made of bricks and this is how they get saved. But the brick house took more time to be built and the story unfortunately doesn’t tell us what would have happened to the three little pigs if the wolf had decided to come earlier before the brick house was finished or which pig would have survived in a case where the houses would collapse during an earthquake. On the other hand I cannot avoid mentioning that there was also the possibility that the wolf would never come which would mean that the first pig would be the most successful. What I mean is that the problem of the fairy tale is that it takes the overall context for granted and sets the conditional problem as something fixed while in reality it never is.

Taking the context for granted is also what the pigs did and it is what happens in all technical practices. Every pig set his own problematic and worked according to that and eventually all of them came up with solutions that suited them and achieved the goals they had set. What they did wrong was that they failed to consider the totality therefore what they initially defined as problem was only a part of the totality and was solving only one of the possible problems. While building, they imposed a goal and brought things to an end by giving a material form that as they thought would serve the goal. But every single house had a different end and it was build to serve one singular purpose, not all possible purposes. When the wolf appeared, his presence revealed (or activated) several needs and dangers (e.g. the wind) that the pigs had failed to predict and consequently hadn’t designed possible “solutions” for them. This is why their houses didn’t manage to survive, because their processes had concluded. But this is how it is in real; there is always an “outside” that we fail to examine, the other (l’autre) which we fail to predict and to design for, there is always the unknown and the unpredictable (which certainly is not random).

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2. Published versions of the story date back to the late 18th century, but the story is thought to be much older. The phrases used in the story, and the various morals which can be drawn from it, have become enshrined in western culture.
Therefore, if we look at the reality in total, or the totality of certain processes, we understand that it is rather impossible to define a singular thing as “problem” and certainly there cannot exist something that we can clearly name “solution”. Problems and solutions exist only within fragments, as constructions or conventions that serve the better understanding of the world but they are not the world. Reality is a complex continuum where infinite sets of problems and solutions are interconnected in ways we often don’t know and cannot predict. Within this complexity any kind of interference alters the system in ways that are not necessarily singular or fragmental therefore what we consider as solution to a problem might often deteriorate other problems in ways we hadn’t predicted. Therefore what we tend to consider as solution to a problem, is rather a negotiation among several problems.
The formal - Technical

The inherent problems of technical practices

Nowadays, technology and technicality is the new metaphysics. After the collapse of political utopias and since god had already been killed by Nietzsche what remained for the people as a field to project their hopes is the technological utopia. Technology offers to human beings what in the past an ideology or a god was offering to them, the hope for safety and preservation of their being. This becomes so dominant that eventually technology becomes our being. People believe in systems and not only connect themselves to them but they grow attached to them. This is certainly because of many plausible reasons but on the other hand this belief has several side effects. Technology becomes an extension of ourselves and also a formative device, becoming itself a scope, in such a way that we often cannot see further than the “formal”.

Descartes’ rationalism introduced a model of thinking which apart from the contribution it certainly had to the history of humanity, was followed by dichotomies (the body and the mind, the natural and the technical), fragmentations, centralism (the 0,0 and orthos logos itself) etc. The critique to Descartes from the scope of the architects focuses mainly on the Cartesian space but a discussion about that is rather reductive because we always end up discussing about forms which rather underlines the way how, as architects, we tend to perceive our practice, as a “form making”. In reality the things we should be critical about Descartes, apart from the Cartesian space, are much more essential and they refer to the mechanical way of thinking rationalism introduced together with the various dualisms. One really important dualism that originates in Descartes is this of natural and technical, where the nature is hetero-defined through the technical and it is really interesting to see that the nature is being referred as a “machine” as something purely technical. Apart from that Descartes’ goal was to reach truth in order for the humans to become ‘masters and possessors of nature’ and this is a concept upon which the whole technical world (and also capitalism) is been based still until today. But the idea of reaching the truth (apart from the truth itself) and mastering nature is rather problematic. In the first place because the existence of truth is questionable, but apart from that, because of the fact that reaching the truth takes place with the use of technical media and conventions. The word truth itself is a technical word, it refers to our ability to perceive and describe phenomena that are not true or false, they just are. The concept of truth refers to a reason and an imposed goal, a why things are and not merely to a how they came to be. No matter if this “why” has an answer or not, or if there is a goal, a logos, the way technical practices function is deeply influenced by it.

What is inherent in technical productions is their mechanical perception of the “end”, in the sense Heidegger uses the word, meaning the fulfillment, the completion. Any strategy that has its origin in the realm of the technical (which rather means all of them) has to focus on a goal, an aim and a targeted fulfillment which is always singular. This technical end always refers to only one particular think or set of things selecting always a specific resolution of analysis, which is usually defined by the method, the tools and the particular definition of the context which is different every time. It is this idea of focusing to the particular (usually in only one spatiotemporal variable) and defining a specific resolution that makes technical productions to fail to be holistic and encompass the associations of particular but not individual or independent ends with the totality which is full of relations and relations among relations.

The spatiotemporal reality constitutes a continuum which is extremely complex and certainly not fixed, balanced or stable. On the other hand technical practices in order to be effective (especially in the frame of a capitalistic economy) they tend to be reductive and regard planning and
production as linear practices that need to have a starting point and an end, therefore they follow patterns or methods that are often prefabricated, they follow the “formal” way. Formality then “executes” a production considering as fixed and stable things that are not, such as the idea of the end which in the case of technical productions becomes an artificial completion, an imposed conclusion, a fixed fulfillment of a prefabricated goal. In the technical world, something needs to be finished and execute the function that it was planned for, no matter that the need for another function may appear since necessities of any kind are not fixed and they emerge in ways that in general are not predictable (there is no accuracy in any kind of deterministic approaches that attempt predictions). Technical productions then fail to be open-ended and even when they attempt to be open they fail again because they define openness in ways that leave a predetermined degree of freedom but they cannot predict everything and cannot encompass everything (Japanese ideas of metabolism is a good example). This is why the “formal” technical productions fail short in the long term and one could pose that the degree and the impact of failure increases with their scale. The reason is that they frame and they name and by this way they formalize. We could distinguish some basic characteristics and actions that take place within formal systems and structures:

1. Definitions. The aim is to have nothing left undefined, nothing ambiguous. Concerning space even the last square meter of land is recorded. You name it therefore it exists, by naming it you bring it to the realm of the known, the recognizable (the predictable) but once naming takes place it is not certain that it is what it was before being named. It is not singular any more, it is not unique, it is a unit in a category, it is not self-defined and autonomous but hetero-defined and heteronomous.

2. Categorizations. Naming imposes purposes and characteristics, it positions things and practices into general categories (sets, genres), this does this, the other does that, creates an identity which doesn’t only refer to a category and an origin but also to a purpose, an “end”. This is end is usually pre-constructed unless the name is new, not predefined but then it is not recognizable; it is not serving the aim of the action of naming.

3. Distinctions. Naming defines borders by categorizing and classifying. “This belongs here, this cannot do this and this can do that.”

4. Relations. The aim is to define how individual ends meet and connect or oppose, how they interact, how they are being articulated but because of the fact that things through naming lose uniqueness and become general conditions, any kind of connection within a system is rather mechanical. Systems function mechanically as points and connections, definitions and relations, general categories and general conditions that connect them. But a mechanical system fails to encompass particularity and uniqueness, therefore is not a continuum as it would be if we were not thinking with abstract general conditions but we took into account the exceptions. Everything are exceptions. When the connection is linear, like a bridge, what it achieves is to make more distinct the ends that it connects, to signify the differentiation, the bordering, the discontinuity, the dichotomy.

In practice, in higher scales systems seem to work because it is easier to reduce the resolution of the analysis and be structural (meaning reductive) in order to deal with the “general” but while zooming in and the resolution increases what we find out is that there are unique things that always escape taxation and classification and they are far from the idea of the “general” and the structures we have created in order to describe it, understand it, regulate it etc. Therefore, if we suppose that we think with structures, we need to create a lower structure that supports the particular exceptions and try to link it to the higher. The first problem is that once we zoom in again we will have the same problem and we will need another structure. The second problem is the linking of these structures of different scales, something common in all practices, because any kind of addition is not independent but creates the need to go back and reform the whole system.
A good example is to imagine the structure of a legislation system where there are always laws that oppose to each other and are constantly under reformation and negotiation. Often lower laws are the reason for the reformation (often cancellation) of higher laws and this is where the inversion takes place. From “top to bottom” productions we go to “bottom to top” reformations and negotiations where the strength of the uniqueness of the particular prevails over the reductions imposed by the general. Or to be more precise, it is the relations between multiple individual ends that seek for a valid co-existence that prevail over the general and the technically imposed end and they push things towards a constant negotiation or multiple simultaneous negotiations.

What becomes obvious from the above is that technical practices and their productions cannot be holistic; they are mechanical, therefore fragmented, and because there is always a field outside of them they leave gaps between different scales, gaps between different strategies, different practices, between the general and the particular, the society and the individual, the total and the singular etc. In all the above there is in between space. The problem is inherent in the concept of the detachment of the terms described above; technical practices are detached enclosures that are mechanically connected. For example the ways we practically link the universal and the singular, the general and the particular is by drawing lines that are either borders or linear, one to one connections between them. This is a reductive practice since apart from the two poles of the dipoles there is always an in between space and this is why there are always exceptions, or to be more precise, everything are exceptions. Taking this into account it becomes highly critical the how we deal with these exceptions when we decide to “form” a rule, a canonization, a system or a method in order to go forward towards a production. How can we canonize a complex continuum which consists of infinite unique elements, relations, relations among relations etc? Isn’t it a fundamental problem to negotiate among the individual ends of our rules and the needs that emerge constantly and without being predefined?

These negotiations, the “how” things relate to each other and grow associations with each other being in states of symbiosis, are to be found in their most compact form in the realm of the natural where these continuous negotiations become also the key for evolution. The main difference of natural practices from the technical ones is the fact that no matter that they tend towards an end they don’t conclude, they are continuous interrelated and this is perpetual while the ends are multiple and, contrary to technical practices, inherent in the processes, not imposed by an external factor. This is what Aristotle describes with the term “entelechy” (ἐντελέχεια).

The mechanical perception of the end in the technical world is what I believe that creates the major dichotomy among the natural and the technical, the ecotopia and technotopia creating a polarized dipole while in reality technotopia should be regarded as a part of ecotopia. If the technical world manages to perceive and encompass the “end” as it exists in the natural processes, as “entelechy”, then there could be a much smoother transition among ecotopia and technotopia, the human nature and the human techniques and their products. Concerning architecture in particular, the “naturalization” of the architectural processes, the smoothening of the boundaries between the natural and the technical is something I regard as a necessity since architecture is the technical expression of a fundamentally natural condition, this of habitation.

The growth of informality as a natural condition

Nature hates gaps. These gaps (described above) in the technical world that “formality” leaves open are there to be filled in by the natural consequence which is informality. As Gilles Deleuze
poses, **no matter how close one will lay the stones of the pathway there will always be gaps for the grass to grow.**

**Informality is the child of the coexistence and the relations between technical and natural ends and it shouldn’t be considered a side-effect but rather as a natural condition.** The informal is immanent in the fields or the connections between different particular formalities, expressed in any material or immaterial way, pending for activation and emergence (later in the text I describe the term). Once it grows, informality becomes the link connecting individual formal ends, altering them or creating new ones. It is almost natural the way how informality emerges and flourishes. The idea is that since informality is almost a natural phenomenon we should use it as something that is in a state of a symbiosis with formality. This symbiosis would smoothen the artificially imposed boundaries between the technical formality and the natural informality, technotopia and ecotopia. These terms are not detached no matter that often the policies and strategies of today still regard them as such.
Emergence – Becoming (informality as a natural process)

The term emergence is critical for understanding informality as a natural phenomenon. Informality emerges, in the beginning as something undefined and it wouldn’t be inaccurate to say that the term emergence resembles to the term genesis. Both these terms seem to imply that an output is not the outcome of a process where a creator or a set of creators produce something from scratch but it is an innate property of things (therefore also of space) that preexists in the realm of the possible pending for activation before being actual. Therefore, any kind of informal practice is to be considered as an activation that brings informality from the realm of the possible to the realm of the actual. To make it clearer, it is as if in the story of the three little pigs the causes that made the houses collapse and the danger were already there; the wolf merely activated them and made the potentiality of the collapse to become a reality.

What is critical to understand is that the phenomenon of emergence takes place in an evolutionary way because emergence is a cumulative process and I dare to say that this is not something detached from the formality itself. The combination of formalities and certain necessities is the activator for the growth of informality.

Emergence, no matter that is taking place in the field of the informal is touching both the formal and the informal and seems to be the active connection of the two fields as if the one is the cause and the other the effect with these two roles changing all the time, which means that the cause could be a formality which would have as an effect a particular informality and vice versa. Certainly, there could be a huge discussion about this interrelation and how it works practically, meaning, how formality perceives informality in real and in what extent formality allows informality to grow and inform the formal. But contrary to the actual situation where the formal excludes the informal, formality and informality are in true connected, at least this is how it should be.

Evolutionary dynamics are not an exclusive property of informality, but informality seems to be much more into this process of evolution because of the number of “agents” that participate and also because of the active roles they play. In general, informal emergence is a rather decentralized autopoetic process while formal development is much more centralized which means that any kind of formal production has to go through the filters and controls of an authority or processes of decision making that reduce the number of the active participants and impose technical ends (goals, aims). During the process of the emergence, everything that happens, exists, is or has been produced, no matter if it is formal or informal, function as a latent origin, as a genotype that informs the particular development of the thing, the phenotype, in a dynamic way. The output itself functions then as a possible new origin for a new production. It is as if there is a tank of characteristics that informs every new production and is in turn informed by the new product.

In order to make it more tangible, when talking about the term emergence we need to distinguish three “moments” that are being described below.

a) Origin, Phylogenesis refers to the origin and the evolution of it. Or to be more precise, the origin of the “product”, or better, the output of a creation and the origin of the creation process in the same time. The term origin here is not exclusively referring to a historical origin, but to anything that functions as a defining factor, as a data tank that informs the production, or if you prefer the “becoming”, of a thing.
b) **Activation, Pathogenesis** is the reason, the cause that activates the origin and the process of the growth.

c) **Growth, Morphogenesis** is the form generating process, the result of the activation of phylogenesis by a pathogenesis which creates a topological growth within the active materiality.

The words above are being placed in what could be conceived as chronological order (what happens first what follows etc.) but what actually happens is that the terms are embedded into each other in a way that nothing happens first or second but all together interact simultaneously with each other in a formative way meaning that the one is feeding the other constantly. Somehow emergence is a wave of constant activations of phylogenetic characteristics and a filling in of the phylogenetic tank with new ones.

What follows below is an attempt to define more analytically the terms, find their origins.

**Genesis** (Greek: Γένεσις, having the meanings of "birth", "creation", "cause", "beginning", "source" and "origin") is the first book of the Torah, the first book of the Tanakh and also the first book of the Christian Old Testament.³

The word genesis has been connected with the idea of a prefect and ultimate creation. Apart from any kind of metaphysical approach that relates the specific word to a concept of “creation” where idea is considered to be superior to its material representation or where the creation is regarded as the reflection of the omniscience and omnipresence of a creator, the word is absolutely related, if not tied together, with the materiality itself.

Genesis, before any other meaning, means birth. In this text the word is being approached as a singularity that carries other singularities. Therefore, Genesis is followed by the other terms presented in this text (Pathogenesis, Phylogenesis and Morphogenesis). All of them are related to the process of creating not in the sense of constructing by a strict absolute plan but in the sense of giving birth; in the sense of creating the seed for the conception leaving it to grow as a result of a process of becoming rather than making or constructing. Having this “process of becoming” as the main common property the terms below share, all of them consist of the term “genesis” and each of them defines a different stage of the birth giving process.

**Phylogenesis** (or phylogeny) is the origin and evolution of a set of organisms, usually a set of species. A major task of systematics is to determine the ancestral relationships among known species (both living and extinct).⁴

If we attempt to detach the term phylogenesis from the context of biology and to broaden it we will find its properties extending in any process of formation or “becoming”. Phylogenesis as “the origin and evolution” is the concept which helps us understand the relationships between different parts in the formation of a continuum that consists of singularities. It is about the relationships of the general and the particular, the whole and its parts or in the Deleuzian way the universal and the singular and their evolutionary mechanisms.

In essentialism there are general types or fixed categories (such as animal species) and the particular members in each of them share common properties. In the Deleuzian philosophy these

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fixed categories or types are being replaced by bigger spatio-temporal individuals so that a given species is as singular, as unique, as historically contingent as the organisms that belong to it. “The relation between organisms and species is not one of tokens belonging to types, but one of wholes and parts: singular individual organisms are the component working parts of a (larger) singular individual species.”

Here the idea of singularity is rather topological than geometric. One could regard the connection between the origin and the evolution in such a way. The way the origin participates in the evolutionary process is like a genetic algorithm which exists as topological algorithm and not as geometric. What happens is that the process of making or becoming (e.g. the growing of an embryo) of something is taking place in an energetic materiality that consists of spatio-temporal singularities, implicit forms that are rather topological than geometric. Once this something is produced, no matter that the process is never finalized, its extensities and qualities will hide the process under the product and the product in turn will possess and develop a set of new capacities, for example by interacting with other individuals or the environment in creating the preconditions for the evolution.

In that case, an example outside of biology that one can draw is the map of Charles Jencks for the history of Architecture where history is not presented as a linear arrangement of historical facts but is being mapped as a flowing continuum where certain historical periods are interacting with each other, flowing into each other and overlapping, depending on each other, being formed and deformed by each other in a process of perpetual evolution.

**Pathogenesis** is the mechanism by which a certain etiological factor causes disease (pathos = disease, genesis = development).

The term pathogenesis ($\pi\alpha\theta\omicron\gamma\epsilon\nu\omicron\sigma\zeta\varsigma$), in its broader sense outside of biology, refers to the mechanism that produces the connections between a cause and an effect, the matter and the form connecting the realm of the potential with that of the real or activating the virtual, in a Deleuzian way.

In the ancient Greek philosophy “potentiality” and “reality” belong to two separate realms. For Plato the ideas exist prior to their representations, prior to form and praxis and they derive from a superior, perfect world.

In the Aristotelian philosophy and in particular in Aristotle’s *Metaphysics* the idea about the relation of cause and effect is illustrated in the concept of substance ($\omicron\upsilon\sigma\sigma\iota\upsilon\alpha$) which is conceived as a combination of both matter and form, or in other words, of potentiality ($\delta\omicron\nu\alpha\mu\iota\varsigma$) and actuality or entelechy. The term entelechy traces to the Ancient Greek word entelechy ($\epsilon\nu\tau\omicron\lambda\epsilon\chi\epsilon\alpha\varsigma$), from the combination of the words entele (entropy = complete), telos ($\tau\iota\lambda\omicron\zeta$ = end, purpose, completion) and echein ($\epsilon\chi\alpha\nu$ = to have). Aristotle coined the word, which could possibly be translated in English as, "having the end within itself." According to Aristotle, entelechiae referred to a certain state or sort of being, in which a thing was actively working to be itself.

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5 Manuel DeLanda, ‘Deleuzian Ontology: A Sketch’. presented at New Ontologies: Transdisciplinary Objects, University of Illinois, USA, 30.03.02
The Aristotelian idea of entelechy is connected to the concept of the final cause (τελικό αίτιο). For Aristotle in the concept of the final cause the reason which gives the purpose is the end (τέλος), in the sense of a fulfillment. The end as purpose pre-exists, is being embodied in the things and is being revealed by the process of working towards that end. In order to make more clear the concept of the final cause I will give an example; in the question “why is it raining?” thinking of the natural causes would result to the answer “because water evaporates and creates clouds and they become cold and it rains”, while thinking of the final cause might lead to the answer “it rains for the flowers to grow”. Aristotle defines his philosophy in terms of essence, saying that philosophy is "the science of the universal essence of that which is actual"\(^9\).

The ideas of Gilles Deleuze about the matter and the form have as fundamental difference the fact that the purpose doesn’t preexist, is not predetermined or predominant and is not being conceptualized as an “end” or a “fulfillment”. Instead of the “purpose” there is a matter which in the process of working towards the goal is in the same time forming and being formed because of interacting with an entire energetic materiality in constant movement\(^10\). Contrary to essentialism, for Deleuze the form doesn’t preexist to its material realization and the matter is not functioning as a fixed mould that is able to produce forms from the outside. In order to make it clearer I will draw an example from his essay “the society of control” where he clarifies the differences in the formative processes of today’s “social control” and the “enclosures” that were taking place in the “disciplinary societies” as he says:

“Enclosures are **molds**, distinct castings, but controls are a **modulation**, like a self-deforming cast that will continuously change from one moment to the other, or like a sieve whose mesh will transmute from point to point”\(^11\).

What is important here is the distinction between the mold and the modulation as two different processes of connecting matter and form. The mold could be conceived as analogous to essentialism’s idea for how formation acts on things while the modulation, the continuously self deforming cast, illustrates the idea of Deleuze about the same issue. Therefore, for Deleuze, the pathos, the etiological factor, is not something fixed.

**Morphogenesis** (from the Greek morphê shape and genesis creation) is one of three fundamental aspects of developmental biology along with the control of cell growth and cellular differentiation.\(^12\)

Morphogenesis (also referred in biology as ontogenesis) refers to the process of form generation, while something takes “shape” or “becomes”. Several points that concern the issue of morphogenesis have already been referred above which is an indication that borders between the terms phylogenesis, pathogenesis and morphogenesis are not fixed points but rather degrading spaces where the terms are merging together. This gives me the step to say that morphogenesis should be regarded like that, as a process that contains and is being contained to both phylogenesis and pathogenesis. This concept is partially supported but the “recapitulation theory”:


\(^10\) Manuel DeLanda, ‘Deleuzian Ontology: A Sketch’. presented at New Ontologies: Transdisciplinary Objects, University of Illinois, USA, 30.03.02

\(^11\) Gilles Deleuze, Society of control, L’autre journal, Nr. I, Mai 1990

\(^12\) Source Wikipedia: http://en.wikipedia.org/wiki/Morphogenesis
During the late 19th century, Ernst Haeckel's recapitulation theory, or biogenetic law, was widely accepted. This theory was often expressed as "ontogeny recapitulates phylogeny", i.e. the development of an organism exactly mirrors the evolutionary development of the species. The early version of this hypothesis has since been rejected as being oversimplified. However, the phenomenon of recapitulation, in which a developing organism will for a time show a similar trait or attribute to that of an ancestral species, only to have it disappear at a later stage is well documented. For example, embryos of the baleen whale still develop teeth at certain embryonic stages, only to later disappear. A more general example is the emergence of what could develop into pharyngeal gill pouches if it were in a lower vertebrate in almost all mammalian embryos at early stages of development.

Morphogenesis is the result of an origin which is being activated and actualized through pathogenetic factors. What needs to be made clear again is that the relationship of origin and form is rather topological than geometrical and I will draw an example from DeLanda’s “Deleuzian ontology” to describe this concept and how it works in terms of form generation.

There are a large number of different physical structures which form spontaneously as their components try to meet certain energetic requirements. These components may be constrained, for example, to seek a point of minimal free energy, like a soap bubble, which acquires its spherical form by minimizing surface tension, or a common salt crystal, which adopts the form of a cube by minimizing bonding energy. One way of describing the situation would be to say that a topological form (a singular point) guides a process which results in many different physical forms, including spheres and cubes, each one with different geometric properties. This is what Deleuze means when he says that singularities are like "implicit forms that are topological rather than geometric." This may be contrasted to the essentialist approach in which the explanation for the spherical form of soap bubbles, for instance, would be framed in terms of the essence of sphericity, that is, of geometrically characterized essences acting as ideal forms. Unlike essences (or possibilities) which resemble that which realizes them, a singularity is always divergently actualized, that is, it guides intensive processes which differentiate it, resulting in a set of individual entities which is not given in advance and which need not resemble one another.

One could also draw examples from biology and the genotype – phenotype distinction. We consider the origin to be the decisive factor for the genotype of an organism, or to be more accurate, we assume that the genome of an organism is formed by its phylogeny. The genotype is in a certain degree determining the phenotype, which represents the physical characteristics of an organism such as height, weight, color etc. Similarly to the example of DeLanda with the soap bubbles, the concept of phenotypic plasticity describes the degree to which an organism's phenotype is determined by its genotype. A high level of plasticity means that environmental factors have a strong influence on the particular phenotype that develops while a low would mean that the influence was not strong. What this means, wide and large, is that a genotype has probably more than one possible phenotypes. In that sense morphogenesis should not be conceived as a closed, one way form generating process but rather as open-ended and interacting multiply with its surroundings.

References:
15 Gilles Deleuze, Felix Guattari. A Thousand Plateaus. p. 408
16 Manuel DeLanda, ‘Deleuzian Ontology: A Sketch’. presented at New Ontologies: Transdisciplinary Objects, University of Illinois, USA, 30.03.02
17 http://en.wikipedia.org/wiki/Genotype-phenotype_distinction
Evolving architectures

The process described above where the origin, the activation and the growth meet in the evolutionary becoming of a reality or multiple realities could be the strategic starting point for an extensive discussion about the evolution of building types, as if they were species. Wide and large we could attempt to consider the concept of “building type” as a genotype that informs the production of multiple phenotypes and in the same time is in turn being informed by them (epigenetic) and evolves. Somehow, the “type” (typology) is the epitome (accumulation) of the history and the evolution of a function or a form since the origin is something inscribed in the things in a rather natural way. What I need to make clear is that I refer to the type as the minimum sets of relations that constitute a think and not as if type was a form or a function.

Type is the epitome of formality and its evolution which relies largely in the accumulation of the active dialogue with the informal which deforms the multiple “biased” phenotypes. Of course this attempt to link the concept of type with this of evolution demands extensive research in the fields of the history of architecture, the history of civilization and technology in order to be valid and usable. Additionally, we need to understand that the nature of the evolution of building types is unique and no matter it may seem similar to this of animal species, the establishment of straightforward analogies might be misleading. It is useful to use it as a concept and select some terms that help the understanding of the concept but extracting tools and trying to project the whole theory of evolution on a theory of architecture is wrong and would only lead us to false transpositions.

On the other hand, the problem is that the discussion about evolution of building types architects start the parametric design (programming), producing flowing forms with the use of scripting and tools that are “generating” the final output, using “randomness” in order to simulate the enormous complexity of the topological growth. But topological growth is not something merely random, is the result of multiple causes and effects that are just too complex to observe and to simulate but still play a major role in the process of evolution because they bring the “otherness” (which is the same that informality does). Believing that this is an architecture that “evolves” is rather ambitious.

The proposed “evolution” in that case is rather an arbitrary (αυθαίρετη) parametric “development” of forms or diagrams of functions but not really an evolving architecture since these simulations lack the most important factors of real evolution which is the interaction with the active materiality and the active dialogue with the “type” as an origin. In reality, the natural evolution is the result of the interaction of an origin with an active exteriority which results not only in the morphogenesis but also in the evolution of the origin (the genotype) but in these cases the script doesn’t evolve. In all these computer simulations, in the one hand the genotype, which in that case is the script, remains the same and on the other hand the exteriority (which is only the interiority of a fragment) is determined by parameters and interaction settings that are also defined by the script and do not evolve. Therefore, the only way we can consider this processes as evolving is when we regard them as fragmented closed systems that evolve within themselves and in relation to their previous phases. This means that they might be useful as research tools or instruments for analysis but not as methods for synthesis (at least not yet) because once their outputs are decontextualized from their original, artificial environment (this of the simulation) and recontextualized in the reality, this transposition is not valid. The reason is that they were not made through the interaction with the reality, the origin and the particular context.

Additionally, this preset system, no matter its complexity, doesn’t allow the appearance of the unpredictable, the “otherness” (l’autre) therefore it is not really evolving. It is rather a simulation
of an evolution and this is how we should consider it. Maybe the only way it could be considered as actually evolving is in the manner that all things have evolved and continue to evolve. But this is something outside of the simulation itself, it is rather a part of the spatiotemporal reality. The evolution is to be found in the co-relation of multiple simulations and sets of scripts that become more and more complex through the knowledge we accumulate and through constant re-assessing, reprogramming and the use of combinations (hybrids) of smaller “scripting routines” for the making of more complex ones trying constantly to achieve better results. But isn’t this already happening in architecture and any kind of science and literally everything?

Architecture has already been evolving, in the same way that history does, and its actual evolution is taking place within history and in the same time contains the whole history of architecture, the evolution of technology, materials and tools, not merely a fragment of time where a form flows while forming and deforming into a simulated environment. Architecture already has origins that participate, and apart from that has also external conditions that direct its development in evolutionary ways. What is predominant in these evolutionary processes is the involvement of the subject (of multiple subjects). Evolution is not something outside of the subject, the society or the various metaphorical or literal “ecosystems” we live in. The contrary, it is the outcome of the various modifications and alterations of things because of the interaction with the external factors that are to be found in these “ecosystems”. This variety of interactions, alterations, transformations and modifications presupposes the existence of multiple subjects (call them agents if you want) that interact with things, alter them and drive it to new unpredictable ends as in the chaos theory. This is where informality is to be found, not only in the notion of participation, but in the active feeding of history with data and new origins through this autopoetic development. The cumulative dialogue of formal and informal is the bridge that connects the origin with the innovation and offers a constant feedbacking that leads to development.

To make it more clear, a formality like a building type, is often nothing more than the result of an informality that has persisted in time and has established itself as a state or a situation because it fits with the external conditions. Once the conditions change the type will evolve and change in order to fit to the new conditions but in order to change it needs to interact with the new conditions. The carrier of this interaction, or better, the mediator between the thing (in the particular case a formality) and the new condition is the subject or multiple subjects. Based on the above I believe that an actual evolutionary architecture is not to be found in parametric design or simulations. It presupposes participation and engagement of multiple subjects (not parameters) into all the levels of the design and production processes. Participation is the key for informal autopoesis which is the carrier of the “mutations” that are beyond programming and this is the key for evolution.

Therefore, the idea is not merely to draw inspiration from nature, but to attempt and really understand it and instead of simulating the natural processes to try and apply them in order to reestablish the lost connection between the realms of the natural and the technical, not merely technicalize the natural or naturalize the technical in a mimetic way. The overall discussion obviously draws the attention towards informality and reveals the need for a further attempt to understand its nature and its role as a bridge between the natural and the technical. Understanding informality sounds misleading and self contradicting in the sense that the informal is not something fixed or stable and the understanding of it, in the traditional sense, is like trying to stabilize something unstable or trying to solve an equation where there is nothing else but variables. Therefore we cannot seek for a final, holistic definition but we can attempt a hypothesis that could remain open for constant reconsideration and development by trying to find the relations of these variables.
Relations of formal - informal

While attempting a hypothesis on the phenomenon of informality, it almost instantly becomes obvious that because of the nature of the phenomenon the definition is not going to result in some clear general answers or some fixed categories. According to Pierce, the only definition that can be valid is by indexing. The empirical observation is enough for someone to claim that the phenomena of formality and informality are always interdependent and context specific, depending on the given time and space (situation), therefore should be treated as spatiotemporal variables. To be more precise it seems that formality is being considered as an established condition (while it’s not) while informality is a dynamic phenomenon, highly related to the established formalities but also our subjective perception.

This is why we need to realize that any definition of informality should be relative, not absolute, and should remain open-ended in order to preserve the necessary flexibility that would allow the positioning of those different, interdependent variables which are the formal and the informal. The investigation of their correlations within several different contexts could result to an index that could function as an “equation” or a set of “equations” that are able to describe the relations between several terms that are connected to the dipole informal – formal (e.g. social – natural). By various combinations of those equations it will become clearer not what informality is but what it is not. What might emerge as an outcome could be a field of possible definitions rather than a single answer. Therefore the definition is the investigation, description and establishment of those relations that in several cases might also be variables for other relations. The definition is mainly about the “how”, not about the “what”, the “how” will help us understand the “what”. The definition is latent in the relations.

Informal – formal (the terms)

The term “informality” itself is a contradictive construction because once something is being named as informal it is being formally considered as informal, it is formalized while it attempts to encompass everything that escapes formality. But this is a necessary condition of communication that cannot be avoided because language itself is a form. The term informal is obviously the carrier of a hetero-definition; informality is not self defined but always in relation to what is considered to be the particular “formality”, which is the other edge of the dipole. One could claim that the term seems like an attempt to literally formalize informality itself since it is always defined and exists through the comparison to an established idea of formality, often in ways that treat informality as the opposite.

This is something I consider as a false polarization. Informality is not merely the opposite of formality but rather the absence of formality, encompassing everything that is not formal. This doesn’t imply that the opposite of formal is not informal but that the term “informal” contains both the field of the opposites of formal but also the field of the non defined as formal and are still pending for characterization. As Derrida would pose, “meaning is not a presence but a generalized economy of absences”. Something is certainly not perceived at once and straightforward as informal but rather as an absence of formality. Before something, e.g. “a general condition”, became formal has previously existed in the field of the informal.

Informal and formal are in a state of constant dialogue, flowing into each other, triggering each other and interacting all the time. There are several examples of informal practices that are being triggered or stimulated by formal ones while in the same time there are several examples of
informal practices that in different scales they seem to be parts of formal mechanisms. On the other hand in different contexts there are several different kinds of formality because of different social structures, constructions, ideas which means that formal things are context specific therefore also informal things are. This why I consider that informality is context, time and scale specific and depends on the perception, the scope we use and the multiple definitions of formality.

**Technical – natural (on perception)**

As it is mentioned already above, the term informality is a construction; it is a spatiotemporal variable that takes different values depending on the context and also the person that perceives it. The distinction between informality and its perception is not valid since it seems to presuppose that there is an “essence” of informality to be found exclusively in the nature of the objects, as if informality is something “objective”, which is not true. The definition of a thing as “informal” lies in the relation between the object and the perceiver, it doesn’t preexist in a pure form in the objects themselves but it becomes in the moment (which is a duration) of the perception. Something is not informal per se, but it is informal because it is perceived as such by a subject. Therefore, the question “what is the informal” should rather be “how a subject perceives something as formal or informal”.

Perception is never something innocent or detached from the cognitive mechanisms which are based on a social construction / formation of the subject and the tools and forms of communication and representation. Perception is the result of a both projective and retrospective process, we project everything we know, think, have seen, heard or read to the reality and we receive back as a result of a reflection a subjectively seen image, not by perceiving straightforward what something is but rather what this something is not. This is what probably Derrida means when he says that “meaning is not a presence but a generalized economy of absences”. This process is not exclusively or necessarily visual and is not momentary. In that sense perception and therefore perceived meanings have origins therefore are never detached from the processes of social construction.

Therefore, informality is neither exclusively innate in the nature of things nor the mere result of an external projection (of a social construction), it is both. Something has the innate recognizable capacities to receive the external projection and reflect back those properties that make it to be perceived as informal or formal in a specific context.

This is why informality is to be found in the realm of the technical, not in nature since it presupposes a structure, an authority or a system that defines (constructs) what is formal through which informality is hetero-defined. Of course there are things that are not defined as formal or informal but this is because they are outside of the realm of the technical, they belong to the natural. Wide and large one could say that anything could be perceived either as formal or informal or natural. Of course there could be an extensive discussion about the relation of ecotopia and technotopia to clarify if the technical is a part of the natural (an idea which I support) or they are distinct and detached. What is critical though is to understand that no matter it takes a social context to define and perceive “informality” nature also participates playing a major role. Informality originates in the realm of the natural, it is linked to natural phenomena, needs and often instincts, but something becomes informal once it is named and this always happens in the realm of the technical.
Nature is for the technical a realm of possibilities and one could say metaphorically that technotopia occupies more and more space inside it through constant activations of possibilities. This is why informality could be considered as the state of the constant negotiation between the natural and the technical, this space of negotiation is the realm of the social.

What informal is cannot be taken for granted and is never something fixed because this would mean that we take the subjective perception as something static. There are various and different scopes that are being developed in different social contexts by different and multiple social structures. What might be taken as more stable but still not fixed are those things that derive from the natural no matter that certainly in many cases it is really difficult to distinguish between the social and the natural probably because of the fact that their interrelation does not constitute a dichotomy, a nesting or an articulation but rather a continuum. For instance, the act of building or occupying space (territoriality) for habitation is clearly the result of both natural and social necessities. Still, in all cases the characteristics of the natural needs, no matter if they are clear or not, play a major role in the emergence of informality.

The context

Discussing about the phenomena of formality and informality is a discussion about formal and informal as actions or practices informality refers to actions and practices with or without material traces. Informality is in the perception of both the action and its traces (perception is a relation).

But perception apart from being subjective is also situation or context specific. Since informality is in the perception it should also be considered as context (includes time) and scale specific because it is not only something that a thing carries within itself but also something projected to it from outside by a perceiver. In that way informality becomes a spatiotemporal variable depending on the definition of the context. It exists in the very moment of the perception of an action or object and is relative to both the object and the subject that perceives it.

All kinds of informality are context specific. It is the context that defines what is informal and formal. Of course it's never absolutely clear what the context is precisely since any context has a context for itself therefore there are infinite sets of exteriorities that affect what we consider as formal and informal. This is why the definition depends on the scope, the scale and the point of view which is defined by the intuition of a subject or a convention. This means that there is the possibility that several practices seem to be informal within a certain context but once we zoom out we often realize that they are parts of broader formal structures. On the other hand practices could be formal or informal depending on their timing (e.g. the day – night cycle often changes the formal to informal and vice versa). This would certainly mean that informality is not something inherent to things but a relative exteriority.

Informal object

As it is mentioned above informality refers to actions, objects are not formal or informal per se; they merely convey formality or informality becoming the tokens for recalling the memory of the action that produced, constituted or situated them. What this action is or how it is perceived according to subjective intuition or dominant conventions is critical for defining the object as formal or informal. Of course then we have to start from scratch since we need to answer the question, “what charges an action with formality or informality”? The most obvious answer is
that probably another formal or informal action or maybe a formal or informal context is the charger. Then of course again we need to find how another action or a context is charged etc. The idea is that there are relations and relations among relations. Let’s say that everything is constituted by sets of relations. In that case we need to think of the objects and practices as the nodes of these formal and informal relations with their exteriority. Considering a thing or a practice as formal or informal simply means that among the infinite sets of relations that constitute a thing, according to our perception, in a given situation of time and space, what prevails are the informal relations. This doesn’t mean there are not formal ones but the informal ones prevail either in number or in strength (or importance if you prefer) or both. This is how then we name it as informal but this is only a convention because certainly, there is nothing like a purely formal or informal thing or practice.

**Autonomy – Heteronomy (time)**

Concerning the parameter of time, formal processes are, or tend to be linear; we often hear, “this presupposes that or the other”. In the formal, the temporal connection of particular ends resembles walking, one step at a time, one end at a time. Even when a formal system is more complex linear processes take place in parallel towards different ends and they have clearly defined relations that do not intersect straightly but only through their ends and after their fulfillment. This is because formality has a predefined superior “universal” end to fulfill and all particular “singular” ends are working towards this fulfillment. It resembles the way how a machine works and how individual parts of it connect and function towards a goal. Therefore, the particular ends within formality are heteronomous, they are constituted by a superior end.

On the other hand informality, no matter that it has a cause, doesn’t have a superior predefined end but finds the end during the process and is constantly altering it without ever concluding. This is why it is much more complex, the connections of ends are not linear but they rather resemble to a network where there are intersections, interactions and constant redefinitions of particular ends. Additionally while formality grows from top to bottom, from the general to the particular (universal – singular), according to a generic idea or goal, informality grows in the particular, therefore it is relatively autonomous since it doesn’t depend on a generic idea of informality, the contrary. The general “idea” of what informality is, is formed by all the particular cases of informality. **Informality emerges from the autonomy and often as autonomy.**

To be more precise everything that is defined by an exteriority is heteronomous to it and in the same time is autonomous to itself. No matter if these autonomies or heteronomies are considered as formal or informal there is the tendency for informality to grow. This means that **informality could often exist even as the outcome of the collision between formalities, for example formalities of different scales, that have relations of autonomy – heteronomy.** Of course the question here is which is the formality that defines it as informal and the answer is that the definition that prevails is usually this of the heteronomy because it is the one that establishes the formality of the higher level and **since formalities and their strength are relative to their scale (top to bottom), heteronomy usually prevails over the autonomy.**

At this point is necessary to make clear that the formal and the informal are both vital because they offer different approaches that are effective in different scales. Concerning different scales, such as the general and the particular or the universal and the singular (they seem to refer better to the idea of a continuum), formality dominates in higher scales (general) while informality is dominant in the small scale (the particular). The fundamental questions that emerge at this point and need further investigation are three, **a) if there is something like an absolute general**
formality an idea that all formalities are connected to it and defined by it b) if there is something like a minimum informality (element or relation) and in which scale c) in which scale, or field of scales do the informal and the informal merge and if there could be a threshold among the two.

Recognition

Concerning the material reality the plausible question that emerges as a consequence of the above is if we can really recognize informality or traces of it and if there are some certain recognizable characteristics that could help us. The answer cannot be a straightforward yes or no but it should rather be a huge set of questions that refer to the overall context and need to be answered before. What kind of informality do we refer to, who are we, what we seek for, and what do we intend to recognize, how do we define the formal, who do we refer to etc? The “equation” for defining something as formal or informal is obviously so complex that it cannot really exist in an effective way. Especially when space is concerned things become much more complex since space is the field for the expression of several different kinds of informality (economical, social, cultural, political) that are being expressed in multiple ways (application, appropriation, performance, construction). The answer for the formal or the informal nature answer can only be particular, as particular as possible in order to be as valid as possible without ever being absolute. Informality and its recognition are relational therefore something is informal in a particular scale, in a particular context or situation, in a particular time, by particular people and its informality is a particular one. Something is informal because we recognize it as such or better, it is informal because we don’t recognize it as formal.

Since the validity of a generic definition is doubtful, instead for drawing knowledge from the general and projecting it to the particular in order to define it, it is more valid (especially when informality is concerned) to access straightforward the particular, trust our intuition – recognition in every singular case and attempt to understand the particular reason we recognize something as informal. The only definition that we could give would only be indexical, trying to encompass all the particular cases, situations and reasons that make us perceive and name an informality.
Form as the “end” of architectural process

Concerning architecture, it is impossible to approach informality without previously discussing about form. Similar to all technical practices architecture has inherent the problem of the “end” which in the particular case is to be found in the notion of “form” not only as a mere material artifact or as “shape”. This is why, no matter that I consider the form as the consequence of establishing a relationship between human beings (Behne), the way I would choose to talk about it in this first part is the one which regards it as a distinct casting, a mould. The form is not something independent from the formal; form is the precondition for the formal. It is the medium for establishing a communicating a convention, therefore establishing and signifying the formal, teaching what formal is and certainly this is not something a-spatial.

Architecture is mainly about form. It is enough to remember the famous quotes that historically attempted to influence architectural practice, “Form follows function”, “Form follows this”, “Form follows that” and no matter words change from time to time, the term form persists, always remains there and attempts to establish new associations with other terms in order to find definitions for what form is, or what could be. It’s not a problem but it is certainly a fact that architectural practice has a tendency to aim towards the form (material and immaterial), meaning towards both formality and formalism, formality concerns both the design practice and the practices that take place in the building and formalism the output of the design, the form. This is because in the practice of architecture form is the end, and in the same time is also the aim from the very beginning.

Formal tools - Formalism

This is something that becomes obvious once we look at the architectural representations and their tools that not only are always representing the space (the building) as a material form (a material artifact) but additionally they use the form itself as a tool, or better, as a language, for the constitution of the representation itself, therefore for the production of space. No matter that architects often claim that architecture is about function (functions are also forms but this is to be described later on), their processes don’t represent functions; they rather use symbols (symbols are also forms, formal conventions) in order to represent spatial forms that intend to serve functions but not the function straightforward. Form is the aim, the starting point and the conclusion.

Once something becomes formed it has concluded, it has reached its end and becomes a closed entity. Of course the how much closed it is depends largely on the particular form and the way it has been designed and materialized. In general though, no matter the degree of openness, it cannot negotiate easily with new external ends, because the largest part of its inventory of characteristics has already been set, defined, formed and even the exterior connections with other forms are preset. Often, the future or the multiple possible futures are predefined (in the case of the metabolists).

But form is only an imposed technical end; it is not the actual end. Once the form is being materialized, there comes the occupation, the living, the experience of the built space and all of them introduce new ends that often the forms have failed to predict and cannot accommodate or transform themselves in order to accept them.
In this direction, there seems to be a paradox in the architectural practice and the tools we use. When we design we think of spatial relations and we represent them as forms, but afterwards, when we build them, these forms tend to seek for new relations, spatial, social etc. that we haven’t thought of, we haven’t predicted and we haven’t designed. Therefore, the form becomes an in between stage, a field for projection, an empty token between the creator (author) and the user. Actually, form is really an empty token; it’s not the carrier of inherent characteristics that are non-spatial (meaning dimensional) and certainly does not carry an essence that refers to things that presuppose interaction, like function, that is universally recognizable or acceptable. It may convey an idea about a function but this doesn’t mean that the user will perceive it or accept it. To express it better, form is a space for active negotiation between the will of the designer and the needs of the user, among different ends. But how can it function effectively as a field for negotiation when it is already formed? Shouldn’t it take place before the form is born? What happens then is that informality emerges when and where it is possible, usually in the in between space (here the word space is both literal and metaphorical) attempting to cover the needs that the formal processes failed to predict, to negotiate.

Formative

On the other hand, considering the fact that the tools and methods we use for representing are scopes that are formative for our creations it becomes obvious that they have a major impact to our practices. The way we think, we design, we perceive and we practice, the ways how we see, understand and constitute things are formed, or at least influenced, by the tools we use. Obviously form is something excessively privileged in the architectural practices. It is both, architecture’s aim and also the tool it uses to put space and the practices that take place into it “into order” and this is not always something innocent; Not only our tools but also what we create with them, the forms themselves, are in turn also formative. As Plato says “even the walls, the fortification, of the city educate me” indicating with these words the fact that forms are formative and they have the power to formalize.

The fact that buildings are more than passive containers of people and activities but are formative as much as the practices that constitute them 18, brings back the question we live and build or we build and live? 19. The answer should be “we rather do both” in order to indicate that there is a constant cumulative feedback between the experience of living and the practice of building, the formal and the informal, the technical and the natural, the utopia and ethos. But what happens today tends to be the opposite, there seems to be a polarization of the dipoles described above that detaches the formal from the informal (etc) and this kind of feedback that one would expect to take place is stopped by thick borders that have been set between those terms and following they are being set in reality, in space. In the formal world and practices (including architecture) formal is strictly formal and informal is strictly informal, there is no in between space, there is no negotiation between these two, it’s either the one or the other (there’s no bridge that we call x-formal). This is obvious also in the how formality relates itself with the informal; it either attempts to formalize the informal, in order to control it and use it productively or isolates and excludes it in order to make it extinct no matter that the second never really works. This is the result of the fact that formal is mistakenly being considered as a closed system that has the capacity to find ends within itself and be complete as a closed entity while what is needed is rather a constant dialogue between the formal and the informal, a symbiosis.

18 Thomas Marcus, Buildings of power
19 Martin Heidegger, Building Dwelling living
Concerning the production of space in particular, the impact of this polarization is that in general architectural practice is preoccupied by prefabricated (or archetypical if you prefer), fixed and non negotaible ideas of what formal is (a prefabricated archetype) that are imposed over space. Through spatial forms architecture signifies and often even defines and establishes what formal is by drawing the borders between the formal and the informal. Once the formal is defined it also becomes formative. This is why architecture has often been used as a vehicle for the establishment of formality. Panopticism, invented by Bentham and analyzed by Foucault, is a good example and certainly not the only one that shows how architecture can function not only as a signifier of a power or an authority but also as a device for social construction. Together with the spatial forms we form the perception of people about what a form is (by defining what is formal), what is their “social role” what is “right” or “wrong” etc. The arrangement of the bodies in space, the various visible and invisible points, the asymmetries of visibility and in general the constitution of space assigns social roles and forms identities. We form people’s act of living by applying our formal technical productions on their natural needs and instincts, by imposing artificial ends while there should be emergence of individuality being expressed in ways that not only constitute space but they also transform it to place.

This formalization of space brings, either on purpose or as a side-effect, an excessive control in spatial practices of any kind. It has as a main side effect the growing feeling of insecurity where individuals don’t learn how to trust each other, to interact, communicate and negotiate. It seems that we have misunderstood and we take autonomy as isolation and detachment because we are afraid of the other. In reality it should be about interaction and negotiation and about otherness. This is the side effect of the control that isolates informality and finally excludes it instead of using it productively. It is the result of the fact that we give in more and more to a kind of communication which based in the use of closed forms and according to forms, in a binary way. Architecture itself is a form of communication and the question is, not only in what extend we are allowed to participate in the production of new forms, but in what extend we are prepared and willing to trust the participation of others.
Architecture – Notes on the contemporary history of form

“The architect must be a form-artist; only the art of form leads the way to a new architecture.”
(August Endell, 1897)

Any kind of formality has been established by means of material and immaterial forms. As Jean Paul Sartre writes in his Herostratus, “Higher values need to find material symbols or else they fade”. If we look back in history of architecture we can trace the term “form” being always in close contact with that of the term “formal” and see how the roles of the architect and the user have been related.

Modernity

The term form was one of the three terms, the other two were “design” and “space”, through which architectural modernism exists. One of the main characteristics of modernity was the excessive formality that was built under the idea of a “universal” truth, a universal architecture which was to be based on the notion of function. But no matter that architects were talking about function they were always approaching and understanding functions with the use of forms, they were starting with forms having as an aim to produce forms. This is exactly what modernity did. The modern utopia, followed by ideals about the man and the society attempted to form and therefore formalize space with the use of models and general categories.

Certainly, no one can question the intentions and historically speaking modernity offered great advances in the way we perceive, design and deal with space. In the depth of time though, and while the ideals and the perception of what democracy is started to change, the problems of modernity started becoming more and more obvious. The ideals, no matter the good intentions, were the basis for the problem. Apart from forming space, or maybe because of it, architecture by regulating spatial forms and spatial relations was forming life, was forming and regulating the relations, like those of the private and the public, the personal and the collective etc. that concerned people and their coexistence.

Modernity failed to generate or stimulate fields for negotiation of those relations because it came with the intention to establish fixed relations that derived straightforward from a superior “idea” (truth) under which models and categorizations could take place. To give a paradigm, the modern era had been largely based on the vision for a society of equality, where all people had the same rights, the same obligations and the same opportunities. That was the foundation of the “modern” democracy, equality. The establishment and preservation of this equality presupposed the existence of a center, an idea or an authority that would set the norms and also the “forms” for regulating and canonizing and finally securing that everybody were equal. All practices, including architecture, were aiming to the “equality” but in that manner architecture became the expression of an authority that was establishing a heteronomy. Additionally, equality was often

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20 Adrian forty, , page 149
21 Cornelius Castoriades would name it so. Etymologically the term heteronomy derives from the words hetero (έτερο) which means other and nomos (νόμος) which means law, rule. Heteronomous is a thing that obeys laws that have been constituted outside of it.
misinterpreted as commonality and this is how autonomy and self expression were reduced even more to the mere execution of a model for living.

The perception of democracy changed radically and in the position of “equality” as a foundation was put “the right of being different”. The date that is considered to be significant for this transition point is the May of ’68. The idea of autonomy came in the foreground offering space to the individual to form and express his own subjectivity according to standards and ideas he would decide for himself.

But no matter this change, still, the formal and formative nature of architecture never seized to exist. Architecture remained a heteronomous practice. The reason has to do with a series of facts that didn’t change since modernity and rather prove that the practice is being sealed off:

a) An architect (a subject) designs everything, both the practice and the form.

b) The design practice takes place within the frame of an established technical practice that uses specific tools, methods and often ideas.

c) No matter the practical overlaps the roles are clearly defined, the user, the architect, the builder are distinct characters.

d) The communication tool among different participants in the architectural practice is form

e) Origin, continuity are sealed off mediated to the practice through the architect, not through the craftsmen.

Nevertheless, all these described above are contained in the word “Architecture” itself. A rough etymological analysis shows that the word "architecture" comes from the Latin, "architectura" and ultimately from Greek, "arkhitekton" (αρχιτέκτων = architect) which in turn consists of the words “αρχή” και “τέκτων”, the latter could be translated as “the one that possesses the technique of building” while the former is a little bit more vague because it could be translated in various ways as “rule, authority, beginning” and in the case of architecture all these words seem to fit. However, an architect then, etymologically speaking, is the “master builder”, as the word “αρχή” indicates is the one that has the authority to build, the one who possesses the “rules” of the building practice, the well established techniques. It is more than clear that the term “architecture” itself places the architect in the centre of the architectural practice, making him the “author” of the built environment.

Post modernity

Modern societies were based largely on the industry of mass production (Fordism) and David Harvey, claims for the transition to post modernity that is a result of what he calls “space – time compression” drawing in this way a strong connection between the post modernity and the “late capitalism”. He says that the developments in transportations and communications caused the
radical shift of capitalism from “fordism”\textsuperscript{23} to the stage of “flexible accumulation” which is what has led to the changes that constitute the entire post modern culture.

As Harvey says, since 1973\textsuperscript{24} “the experience of time and space has changed, the confidence in the association between scientific and moral judgements has collapsed, aesthetics has triumphed over ethics as a prime focus of social and intellectual concern, images dominate narratives, ephemerality and fragmentation take precedence over eternal truths and unified politics, and explanations have shifted from the realm of material and political-economic groundings towards a consideration of autonomous cultural and political practices.”\textsuperscript{25}

No matter that the idea of autonomy prevails after modernity, this idea of the authorship of the architect is something that accompanies architecture in all stages of post modernity. No matter that the role of the architect is questioned and altered, this takes place in a certain way and only up to a certain extend, not radically. Even in the radical philosophical and later architectural movement of deconstruction the architect comes even closer to the role of the “author”.

Certainly, one could say that deconstruction was much more interested in the quest of “meaning”, therefore treated architecture as a language and gave the architect the role of the author. But the building is not a text, it is much more interactive and the user is not a reader, he plays a much more active and formative role for the text (building), therefore, in architecture, the roles of the architect / author and the user / reader are less distinct than in literature. In that sense, the role of the architect as an author, as the mediator of an idea through a praxis (where in both idea and praxis his own subject is the centre) was never questioned by the deconstructivists. The contrary, it was taken for granted. Of course, this doesn’t mean that architecture excluded other subjects (the user) from its processes, certainly not. But during the deconstruction which attempted to “decentralize” and “inverse the dipoles” the architect remains in the centre of the process and this is rather contradicting.

No matter the new complex syntactics that are being introduced into the design process, the role of the architect remains the same it was in modernity, positioned in the center and over the process. The difference is the how, while in modernity he is the centre as a form-giver, in deconstruction he is the centre as the founder of the method or the process (the syntactics). In both cases his authority remains the same over the final product no matter the alterations of the processing methods and the different “how”. It seems that architectural deconstruction did something that is in extreme contradiction with the philosophy of deconstruction itself. Deconstruction looked deep inside the architectural processing and gave gravity to the subject of the architect but this was done as if processing was a singular, autonomous, closed, self constituted and self contained entity, detached from the overall architectural practice and as if the architect was a detached creator. Additionally, the roles of the builder (the laborer) and the user (inhabitant) remain the same and in general all the particular roles in the process remain distinct and relatively autonomous, and also detached.

On the other hand, the main medium for representation and communication remains the form which again is the end but also the medium through which a concept is mediated. Deconstruction didn’t question radically enough the architectural logos, which is form, as a medium of

\textsuperscript{23} Harvey uses the term “fordism” for describing the emphasis of the modernism to the standardization and mass production.

\textsuperscript{24} 1973 was the year the Bretton Woods accord on the control of international capital ended. Both Fredric Jameson and James Mittelman date the start of the postmodern period from 1973.

\textsuperscript{25} David Harvey, *The condition of post modernity: an inquiry into the origins of cultural change*, Cambridge, MA: Blackwell, 1990 (p. 328)
representation and communication. Therefore the “against logocentricism” of the philosophical deconstruction failed to be adequately transposed as “against morphocentricism” in the architectural deconstruction. Deconstruction was a radical formalism, not a de-formalism and didn’t attempt to inverse the fundamental relation of the designer – user which in architecture could represent the dipole object – subject or technical – natural.

Therefore, the boundaries between the technical and the natural weren’t smoothened and the “naturalization of the unnatural”, which Derrida was claiming to be one of the goals of deconstruction, was something that maybe one could claim that has affected the built forms and partly the design process as a closed system, but apart from that it didn’t really affect the foundations of the architectural practice that remained purely technical since the boundaries among different roles and practices weren’t smoothened.

The design process remained under the power and the mediation of the architect and it was not treated as a totality that is the result of a constant interaction – negotiation among the architect and external powers or dynamics that depend on multiple subjects (a society). Therefore architecture of deconstruction remained heteronomous.

Of course, in the process of designing and building which is defined by sets of interrelated autonomies – heteronomies, the question is not so much “who builds” or “who is the author”, since there seems to be participation from everybody and these questions are rather to general. The question is in what extend several autonomies exercise power over the process and how. Historically speaking the centre of the architectural practice is certainly not the user. If architecture was itself a language we could say that until now the architects were creating both the langue and the parole; the basic elements and the rules of the system, which means the language as a structure, and also as a spoken word. The idea is not merely about the parole, so it is not about giving people the ability to have their own parole with the use of a prefabricated language that someone else created, because this kind of parole already exists and it’s a part of informality. Architects create the langue and the parole and people based on these create their informal slang. The idea is not to impose a language or sets of them, but to give people the opportunity to create their own informal langue, both individually and collectively, in order to inform more adequately our formal ones.
Habitation – the public and the private

Talking about autonomy and heteronomy definitely takes us to the realm of the social and when it goes to architecture and built environment in particular it is rather impossible to avoid talking about “habitation”.

The scope that regards architecture as a social necessity or as a social product is intersecting the topic of habitation and in that sense the link between architecture and the “social” is certainly valid, at least, up to a certain extend. But before characterizing architecture and habitation in particular as the outcome of “a social necessity”, maybe we should attempt to regard it as something more fundamental that surpasses and in the same time encompasses the “social” and the “technical”. What architecture is in the first place and prior to its form as a notion, is the result of the formalization of something natural, the outcome of the technical approach towards natural conditions. In that sense, we could consider habitation as the epitome of the negotiation between the technical and the natural, as I have already said before, architecture is the technical expression of a fundamentally natural condition, this of habitation.

This is exactly the realm where informality appears, in between the natural and the technical, in between autonomy and heteronomy and in between the subject and the object. All the above “in between” situations are to be found all together in an active dialogue within the praxis of habitation. This is why informality is inherent to it. People tend to occupy space and when there is no planning or legislation that implies or implements an “end” covering particular needs, or when the boundaries of formality are not clear informality emerges.

Certainly, occupation of space, in the sense of “habitation” could be considered as something innate in the human nature, something similar to an animal’s territoriality which for the human is transposed to the notion of “ownership”, “property” or “possession” and is linked to the idea of autonomy but in order for this autonomy to be controlled and because of the fact that within a social environment several autonomies meet and overlap there is the need to negotiate and set connections and boundaries with each other. There is when heteronomies appear, established by an authority or the society itself (consciously or not) they regulate among other things also the negotiation for matters of space or matters that form space. Therefore, because of this interaction of autonomy and heteronomy one could say that habitation itself is both a natural practice and a social phenomenon and each of these two prevails in a different scale. Autonomy prevails in the small scale is connected to the notion of property and identity and is being expressed naturally while heteronomy, or if you prefer a social contract, is to be found in the large scale as a regulating and also formative factor for space but also for non material things that constitute space. To make it more clear, one could say wide and large that the autonomy (and the natural) is contained in the notion of oikos - house while heteronomy (and the technical) is to be found in the notion of polis - city. Certainly these two concepts are not exclusively spatial but they are the spatial expressions of broader concepts.

The ancient Greek term polis (πόλις), translated as “city” has embedded in its meaning, apart from the spatial organization and the materiality of the city, also the social and political structure, the governing and the civil law and more or less anything that constitutes the city as a community of actively coexisting and interacting people, and also as a notion. Polis is the outcome of the, active dialogue of several autonomies, which could result to overlapping, regulation, canonization, in all the levels of the constitution of the city, (political, economical, social etc.) and is not something instantaneous, it has an origin which is inscribed in the notion of the city itself, as a “collective memory”.

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“One can say that the city itself is the collective memory of its people and like memory it is associated with objects and places. The city is the locus of the collective memory.”

Polis as a permanence is built upon the formalities this memory has constituted through persistence in time establishing them as conditions. These formalities are of any kind (economical, social, cultural) and are to be found in all levels and scales of the city, both in the material reality and the immaterial structures and notions of it.

The word oikos (οἶκος), normally translated as “house”, signifies much more than the materiality of a built house. Similarly to the term polis it refers to a lot more than the construction’s elements such as the bricks, the walls, the windows or the roof. The term refers to the idea of a family, everything that surrounds it, all material and immaterial things that family possesses. Oikos is usually also historically charged by the origin of this family which of course signifies and is being signified by the materiality of the house itself. In that sense the word oikos touches the grounds of both the material space and the social space in the way the idea of “habitation” in general does.

Oikos is an autonomy inside the heteronomy of the city but one could also regard it as a heteronomy that regulates and defines the autonomies of its members (family). Concerning this in particular, Xenophon in Oeconomicus discusses on the relationship of the husband and the wife within the oikos and how a man could succeed in household management. Oeconomicus is one of the first works in economics and a significant source about the everyday life in classical Athens. Michel Foucault quoting Xenophon writes,

“...the main value of the art of “economics” is that it teaches the practice of “archein” (άρχειν = ruling, governing) from which is un-detachable. Governing the oikos means to rule (άρχω); and governing the house is not different from the exercising of power in the city.”

As it becomes obvious from Xenophon’s words, the ancient Athenian oikos was a field for the exercising of power in a similar way that the city. What we can understand from that is that there are relations of autonomy and heteronomy in between the members of the oikos similar to those in between the oikos and the polis and certainly the polis is in turn heteronomous because of a higher structure etc. Additionally also in between the individual members of the family and the polis there are relations of autonomy and heteronomy. Taking into account the above, and understanding that spatial singularities (oikos, polis) are connected to the social, it is normal for one to assume that the social is something that is being inscribed in space in many different ways, material and immaterial.

Space is constituted by the relation of the individual to the society and the how this relation is formed according to general and situation specific heteronomies defines also the spatial arrangement of both the house and the city. The way how the oikos and the polis are related is to be found in the notion of public and private and the how they are being interrelated within the social context and finally how they are being inscribed in space. The spatial relation of the public and the private often signifies the relation of the subject to other subjects and the perception, not only for the notion of the city as a material artifact, but also as the body of the social. It is on this borderline of the public and the private where are also to be found the traces of the notions of the objective and the subjective, of the personal and

26 Aldo Rossi, The Architecture of the City (page 130)
the social, of the autonomous and the heteronomous, of the freedom and power. The strongest and more crisp these borderlines are the more detached are the poles of these dipoles. When polarization comes informality is to be found in all these “in betweens” offering continuity in fields where formality creates merely borderlines and linear connections. Thus, the fields where informality is emerging in various ways is in between the oikos and the polis (spatial - economical), in between the public and the private (spatial - performing), in between the society and the individual (political) etc.

These are the fields that the architect has been given the power to practice and influence, consciously or unconsciously and concerning the complexity of all these relations architecture is rather reductive. In the architectural practice, similar to all technical practices, what prevails is this general condition over the particular, the heteronomy over the autonomy the attempt to objectify the subjective. This formalization that has as vehicle the architecture and the architect creates discontinuities and borderlines in all relations and scales; it is not by accident that informality grows faster when formality is greater and suppresses autonomy, no need to wonder why modern buildings have been the best canvases for informality to grow. Taking into account what Heidegger means when he says that “the house has dwelling as its goal” we can claim that dwelling is the end of the house. But when we design we don’t design the dwelling, we design the house.

But the house is much more than its form, it is a lot more than the formative materiality. It is an entire field of relations of any kind and with almost anything one could imagine. Apart from the obvious and dominant relation of the oikos and the polis (the house and the city) there is another relation that is equally, if not more important, this of the house and the subject. The house is more than a cell in the body of a city, the house is the memory of it, the expectation for it before it is built, it is the coziness in English, or what is called oikiotita (οικειότητα) in greek which means familiarity and derives from the word oikos (οίκος) which is described above (means house). Therefore the house and what dwelling is, are up to the user and there is nothing like a method or a knowledge that could be deployed and applied as a general rule for how the house is to be designed. Therefore, every time we design a house it is necessary to start from scratch and design according to the context, the inhabitant, the city, and no matter this still we will possibly fail because the house is more about the experience of the dwelling, the memory of dwelling, the dream for dwelling and this is something total and subjective, therefore impossible to grasp and design it. It is easy for an architect to learn how to design the ideal angle for the seats in an amphitheatre an amphitheatre so as to have the best sound quality and good visibility to the scene, it is easy to learn what material to use for better insulation and corrosion resistance, but it is really difficult for somebody to approach the extreme complexity that synthesize the house and the city and will certainly never find rules for it.

Architects can build houses as forms, but the idea of dwelling, as a practice, as a function, as even more than that, is something indefinable because the form becomes a function, a feeling, a perception once an agent is implemented and this happens only after the completion of the building. More precisely, the house is being dwelled by an individual that has a subjective idea of how he dwells but when we design we do it for a specific need or sets of needs, having archetypes of habitation in our minds and it is doubtful if the individual user has the same needs or complies with our archetypes. Certainly the user may modify the building but on the other hand may also modify his own life and develop the feeling he has these needs and he has the particular, imposed, idea for what habitation is. There is the danger that users of space will learn to live and experience space as if they were mere executors of a prefabricated (formal) idea for what space is and how they should behave and occupy it. The main problem in this case remains that we reduce the inhabitant to the level of the mere executor of a prefabricated idea of what habitation is
instead of stimulating him to find what habitation means for himself and build or design accordingly, or better negotiate over a design and a final form.

Together with this through built space and by imposing our ideas for what oikos and polis are we create an image for what the society is. We impose spatial relations that form social relations and create social conditions and in that sense architecture is not an easy task but rather a sensitive one. Experience has shown that especially when habitation is concerned plans tend to fail because the subjectivity of the individuals prevails over the general conditions and objectifications set by the designer which means that no matter how formative a formality is, informality still finds the way to emerge and no matter that the established “archetypes” of habitation are not entirely questioned by the inhabitants there is still an extend of self consciousness and a notion of autonomy that leads to some kind of autopoesis (modification).

Of course, the question that still needs to be answered is what extend of the space we produce is the result of heteronomy (heteropoesis), what is the outcome of sets of autonomies (autopoesis) and how these two different productions relate.
Topos – Topography

In a discussion about the public and the private it is impossible to neglect the topography as a factor that generates the conditions upon which people build up societies and individual identities. The ground and the topography has always been a fundamental element in the constitution of polis and oikos not only as material artifacts but also as social entities and certainly is a vital factor in the emergence of informality. The reason is that ground escapes canonization therefore formalization is something that cannot be easily applied without the necessary modifications that are often informal. Additionally ground is the anchoring point of the materiality of oikos and the polis on the materiality of nature. In this connection the dynamics of informality are inherent, as in any kind of connection between the technical and the natural. Apart from that the ground is not merely a geometrical space but is charged with meaning, is the “commonness” but also the “property”, the record of history and the signifier of it as an origin but also the territory of dominance. It is a natural basis that generates the dynamics for a smooth or sharp connection with the technical and the social and a soft or hard transition from the public to the private. The ground not only is the field of the “in betweens” where informality emerges, but additionally its topography is formative for the emergence as a process and also its output by generating certain dynamics.

An anomalous ground and a more complex topography creates different possibilities for the kind and extend of informality than a flat one but in both cases ground has certain ways of interacting with the society and activate social mechanisms because of different viewpoints, altering visibilities and orientation points that create centralities and peripheries affecting the notion of the public and private.

For example, a panoptic supervision as it is imposed by a viewpoint high over a city is often connected with the idea of centrality and the spatial accumulation of power. In his “Hérostratus”, Jean Paul Sartre describes the feeling of superiority someone has while looking other people from above, from a higher viewpoint. It is this ability of height to signify power that explains why palaces and castles were so often built on spots like that. But apart from concentrating and signifying the power such places have always been privileged for the development of cities. Ideal for defense against intrusions and in the same time able to function as places of gathering, as places for anticipating the surrounding landscape and for cultivating the idea of the city as polis, as a social formation, while the urban fabric was developing around them. They were called Acropolis.

On the other hand, apart from height, there in a landscape there is also depth. The cavity of the ground was always to function as place for someone to be hidden, imposing a feeling of protection, becoming a shelter or a haven which when it was extending underground was resembling Kafka’s “Der Bau” adding a new layer to the city, contributing to its complexity and multiplicity.

Certainly the how informality is being connected to the topography and where is to be found is a topic in itself and needs to be investigates separately and thoroughly, but one cannot neglect that there is a connection between the ground, both as a topography and as a topos (place), and the conditions that lead to informality.

The high and the low as they are being described above is only an example to show that certain characteristics of the ground are strongly connected with the central and the peripheral, the exposed and the hidden, the public and the private. Certainly instead of the high and low one
could find other features of the landscape that have similar effects, let’s say in the case of the Netherlands this could be water – no water or artificial land – natural land etc. In all cases those terms are carriers of binary oppositions that are often inscribed in space, making the city a result of their continuous interrelation forming multiple horizons, orientation points and eventually several layers that contribute to the multiplicity of the cityscape and also the individual’s experience of it, creating the charging that constitutes a topos, meaning “a place”, a personally and subjectively experienced space. This personalization of the experience of space and eventually space itself through the notion of place where also history and memory participate is the basis of an individual identity therefore a field for the emergence of informality.

Apart from the spatial experience and the notion of place which refers to the subject and produces informality indirectly, ground is also the contributor to a spatial complexity which affects straightforward the establishment of the material borderlines or the fields in between the natural and the technical, the public and the private, the social and the personal etc, fields where formality and informality are to be found either hidden or exposed but always in constant dialogue.

To make it more tangible, often the complexity of the ground in combination with other kind of dynamics is the platform for the emergence of spatial outputs that are not even touched by any kind of technical, technological, artificial or in general formal approach or design process. In cases like these the spatial product could be the outcome of the combination of the dynamics of the topography (natural) and the mere intuition of people that built on it (technical). It is then informal per se, at least up to a certain extend, as it is the result of dynamic processes that take place in situ, on the specific landscape and in real time, by trial and error, not on blank papers and outside of the place. In these cases the “author” is not one or two, and maybe it is pointless talking about authorship because authorship is about authority and in such dynamic processes that are context specific tend to encompass so complex relations that they resemble to ecosystems where things become almost naturally through autopoiesis. So, it’s not about authority or control but rather about losing control, sharing authority and giving in to the dynamics of space and time. It’s not about a designer looking the 2D plan from above as a superior creator who is detached from it and attempts to translate an initial idea into the representation of a praxis. It is rather about experiencing the 3D landscape and cityscape as material and social fields from their inside, sensing the dynamics and participating actively to the production of space in a way where praxis and idea come together and are in constant dialogue.
Matters of Identity

Possession – Craftsmanship - Consumption

One of the reasons why autopoesis is important, apart from the fact that it is an integral part of the evolution of history, is because it is linked to the idea of identity. Autopoesis is a practice that originates in autonomy and in the same time establishes it. This is why it is connected to the notions of the subject and the identity. It is crucial to attempt to talk about craftsmanship as a process while the building of a materiality builds in parallel an identity.

Actions and practices charge the reality and especially when we talk about personal actions, practices, productions of any kinds and even our concepts do something more than charging, they create the conditions for the projection of an identity and the reflection of ourselves for understanding and defining ourselves. “I made it with my own hands” or “I’ve written it myself” is something that charges with meaning the things and by reflection our existence because there is a history where we participated and we can recognize it in the things and recall it. In such memories - histories of creation we are able to recognize ourselves and the relations we have established with exteriorities that could refer to the materiality or ideas. This is how we create an image for ourselves, through relations that are recognizable and memorable, identity is relational (not essential). The more complex and multiple these relations are the more likely it is that we will create an individual identity, therefore the participation in a production of any kind as creators of the product, and not as mere executors of a systematized pattern of movements or actions that lead to it almost automatically, is vital for building an identity.

Things have certainly changed a lot in time and with the loss of craftsmanship, the way how things come into possession has changed and with this also the way how we perceive possession has changed. In the past the owner and his property had a relation of creator – creation, something was ones possession the very moment it was coming into being, while today this relation has transformed to that of buyer – commodity. While in the past something was one’s property because he had made it or built it with his very own labor, today it is his property because he has accumulated money by working and has bought it, or to be more precise he bought the labor that has produced it. Obviously, it is really difficult to understand the difference today but the concept of buying brought something that previously didn’t exist, the quantification of qualitative characteristics, the quantification of value, the price and the salary. In that way, together with the loss of craftsmanship and because people buying the labor of others or even the labor of machines, came the detachment from the process of production and things became simulacra, images detached from their own origin and history, valued only by their transactional price. Therefore, identity became a matter of consumption instead of production, and it is impossible to avoid recalling the graphic artwork (illustrations) of Barbara Kruger that says “I shop therefore I am” illustrating in the best way the how identity is being established today.

This is how formalities are being established and considering that architecture is also becoming a commodity, or a simulacrum, this is how it produces or attempts to produce, consciously or not, identities and social roles. Fashion, lifestyle and the established images and symbols of the consumerism are not leaving architecture untouched, the contrary. Architecture is in the very center of all these and itself becomes a symbol of an identity and also a formative device. It almost doesn’t matter any more the experience of architecture as built space, as a carrier of its own process of design and production, but it becomes itself a simulacrum where the contribution of labor to the production and also production itself is totally absent from the final product and not only it is not signified but often all its traces are being erased. Finally architecture becomes a
promising illustration without background, scenery for everything and everyone, people and practices, that it could ever contain but never really contains them. To contain means to be in dialogue, to share and negotiate borders but here what prevails is either a passive one-way forming of the containment or a detachment between the container and the containment that never really reaches the point of interaction or actual forming.

In all cases what becomes dominant is absence of the subject and absence of autonomy in all levels. In the level of the production the builder (not need to mention about the user) is a mere executor whose work is never being signified in the final output. In the level of the experience of the built space, the user and his practices are perceived as either a passive formable containment, a soft “mass”, or a detached moving object that doesn’t interact with the building as a subject. In the level of the architectural design there is the compliance with an abstract idea of a fashion or style, ideology or position for what design is. Eventually all these three levels are detached and they are all heteronomous, actually they are all connected through a heteronomy, this of the commodity. The architect creates a space that complies with the general needs of the market because it has to be consumed, the builder executes a production and the user buys it in a process that is usually linear, one way, fragmented and highly heteronomous since the autonomies that participate in it do not have any creative access to the process itself but they rather execute.

The problem in the first place is that we have already been socially formed according to the above, in any kind of production, not only in architecture, there is a dominant idea for what is formal, and no matter that we also are often the carriers of our own informality and its dynamics, within the systems of production and consumption formality has a privileged status. On the other hand it is rather obvious that mass production is necessary for covering the needs of people and going against it is in a total and absolute way without having anything else to substitute it, is similar to denying civilization. Therefore, concerning in particular matters of identity, I would say that the problem of the mass production is a problem of excessive formalization that suppresses informality and excludes any kind of “personalization” prior to the consumption, during the production. More or less is again a problem of a privileged heteronomy over multiple autonomies. Since personalization is absent and because of the fact that people nowadays seek an identity through consumption, life becomes a race of “who has more”, instead of “who has what”. Identity itself becomes equivalent to the accumulation of prefabricated goods that function as symbols to be shown instead of being a matter of personal creations, or even possessions, that are to be used according to our individual needs.

The question is how we can change it in order to encompass and satisfy the need for the cultivation of a mosaic of multiple identities and multiple forms and establish individuality. I would dare to say that in the world of consumerism informality seems to be the answer to the matter of identity, is about making a commodity to be more than a property by becoming a possession (κτήση) and through this possession to gain a self consciousness that cultivates a uniqueness and autonomy. This could take place by denying the traditional way that imposes ends to things and let the users impose their own ends during the production and not after it.

Mass customization - prosumers

The problem of autonomy and heteronomy within the formal practices obviously creates the need for personalization, and contemporary processes of production are attempting to solve this by means of mass customization. No matter that this is a step forward that shows that there is a certain consciousness of the problem, mass customization still remains largely heteronomous.
since it is based merely on the offering of more options to the people but not so much in the actual implementation of them in the decision making beyond that. It is not by accident that the new term for consumers in the era of the mass customization is “prosumers”, as combination of the words producer and consumer, or according to others of the words professional and consumer. In both cases the word consumer still remains dominant because the person never becomes a real “conducer” in the process of production no matter that the word conducer is also the result of the combination of the words consumer and producer. The participation of the subject still comes exclusively in the moment of the consumption, not before this. No matter how many options, parameters or variety of choices we offer to the user the degree of freedom is still rather mechanical since most of the times the final output depends on combinations of basic elements (like the lego), we allow choices with an “either – or” logic but we don’t really offer the chance to the users to chose for themselves and question the fundamental logic of these systems, for example the notion of habitation itself.

On the other hand even if an absolute freedom of customization prevails there is the danger that this freedom that mass customization offers could turn against creativity, as Tim Clarke poses, since the role of the designer (creator) as a specialist is being at shake. Taking as an example the freedom that software has offered, people can compose their own music, create their own pictures etc but in what extend does this create original and unique results? Does it really promote innovation? Isn’t it possible that together with a wave of mass customization will follow a massive wave of reproduction of already known aesthetical and functional archetypes that people will repeat because this is what they have already learned? Certainly no one can predict, everything is possible and if something like this happens it might lead to a static situation. But reaching at this static point would presuppose that there will be no diversity, no formal and informal any more as distinct categories but they would both collapse in one thing where everything are the same, have the same value, the same importance, the same origin etc. In order to avoid this flatness where nothing emerges as distinct and unique, formality and informality should exist and be in dialogue in a way that none of them is being excluded but both of them are connected in a smooth continuum where informal productions could inform the formal and vice versa.

This connection of the formal and the informal where both of them remain distinct in a continuous relation seems to be critical today for another reason. Technology has managed to perfect our media, and brings closer than ever the design process to this of the actual production with the use of CNC machines etc. the greatest danger is the absence of bias, the absence of traces that could signify an origin or the trials and errors of a process that could create an identity. We have to go back to the consciousness and the signification of the trial and the error, the inscription of the process on the product. We need to find ways to keep active the trails of erasure, change, alteration, and leave our productions open to these or else they will fail in the long term becoming simulacra without origin. There is also the danger of the loss of the “accidental”, there is the danger of the over-formalization, where the objectivity prevails over the subjectivity, the form over the matter, the heteronomy over autonomy. Together with all these we will lose the chance for the “otherness”, the unexpected and the unpredictable that stimulates evolution. This is where informality comes to offer what formality tends to deprive, multiplicity therefore identity. There is no reason for fear or hope, just the consciousness that we need to look for new approaches.
Theory for a Praxis

Certainly at this point any kind of proposal remains in the level of theory therefore needs a further investigation in the field of the praxis. What can be produced at this point are sets of particular plausible conclusions and an outline of the aims of a further research that could make the whole idea actively productive. The intention is not to give a final but rather to show a direction.

Taking into account that the practice of building and its output, especially habitation, are, not only social, but also natural necessities what I counter pose is a more in-formal and also a-formal approach towards the process architectural design that attempts to re-establish the relation of the subject and the built space. Somehow give to the people more freedom to occupy and modify their space because this is what makes space to become place and creates the feeling of belonging with all that means.

There are already a lot of issues that have been illustrated in the text and need to be taken into account for the production of a theoretical platform that could sustain the productive use of informality and the smoothening of the multiple polarities that have been described above. The mechanical end of technical productions, the power of the architect over the user, the formative and reductive tools we use etc, raise issues of origin, identity, autonomy, authority etc.

Eventually, the overall discussion is a discussion about relations and how we can stimulate the growth of continuities instead of the established borders or linear connections. In these fields where continuities need to grow, we often find informality emerging. Informality emerges dynamically in between the general / universal and the particular / singular (scales), the idea / immaterial and the praxis / material (actions - creations), the personal and the collective (social), the public and the private (inscription of the social in space), the subject and the object (perception), the technical and the natural (topography), the legal / proper and the illegal / improper (convention).

Therefore, informality is the establisher of this continuity we seek for, always appearing on borderlines and overlaps or gaps in the fields of the in between spaces restoring continuity. Taking into account that informality derives from the subject the idea is to give space for subjective (informal) implementation in our practices.

Concerning architecture in particular, the position I take is that as long as the architect is the sole and exclusive executor of a form or a process, without being informed by various exteriorities, he becomes the establisher of enclosed systems and eventually formalities that tend to become formative conditions. No matter the origin, the benefits or the purpose of the particular formality, the result is that the subject of the user is put aside and autopoiesis is kept outside of the processes giving space to heteropoiesis (somebody else creating for myself). The reason is that the status of the architect as a specialist in matters of space is fading as we attempt to have a closer look at the ways how space is constituted dynamically by needs and innate powers architects cannot predict or control. Therefore I believe that the basic discourse in architecture today should obviously be about the role of the architect as space “creator”.

The architect is the carrier of the technical and the main question is not how he can apply that over the natural but how he can connect it with it. The “naturalization” of the architectural process, the smoothening the boundaries between the natural and the technical is something I regard as a necessity since architecture is the technical expression of a fundamentally natural condition (necessity), this of habitation, (shelter protection). This naturalization could again
be approached by the use and stimulation of informality. There are dynamics that cannot be planned and don’t need to, there needs only to be space for personal involvement and engagement into the poetics of space. This becomes obvious in cases where informality is emerging naturally, filling up the material and immaterial gaps that our formal productions leave open and covering needs that formal architecture failed to predict. There will always be gaps in our processes and the question shouldn’t be how to cover them in order to prevent informality because this will end up with cracks. The question then should be rather how we will manage to have an active dialogue between the formal and the informal that can be productive, how to create an intelligent formality that is able to inform itself by the informal instead of excluding it.

The idea is not to strengthen formality or establish new heteronomies that regulate autonomies, but to establish fields for communication and negotiation among individual autonomies outside of heteronomies. This presupposes the implementation of the users in the design process and the use of a different medium for communication. It needs a thousand little pigs instead of three, the establishment of a new communication among roles, the implementation of multiple subjects in the process.

To make it more tangible I will go back to the story of the little pigs… Once they build the houses they have already created a phylogenetic tank, an origin, and immediately after the demolition they know why their houses have collapsed, through trial and error and by building and rebuilding they accumulate knowledge for the process of building and for the built environment itself. But this cumulative process that informs a data tank (this of phylogenesis) with possible scenarios and possible activations presupposes communication and participation. A thousand little pigs that collaborate are more effective than three because there are more trials and errors, more causes and effects therefore this “autopoetic” process goes faster and accumulates both an origin and a variation.

Of course for this to work we need to understand that form is not a closed fixed mould, is not something final and conclusive, no matter it is often considered to be. Form is the field for communication and negotiation and we need to reestablish it as such. The answer to the imposed end, the problem of “form” and the formal (as described above), is not the refusal of form, the non form or the a-formal. It is the informal and the communication of it within a network of informalities or autonomies, an ecosystem.

The relation of the architect and the user

Therefore, it is vital is to reexamine the relation of the architect to other agents that participate with various roles in the architectural process and especially the relation of the architect with the user. We need to gain the consciousness that outside of the formality, rationality and individuality of the architectural practice there is a universe of things and situations that inform our praxis, filling the tank of the origin (phylogenesis) with possibilities.

In the architectural practice we often hear the cliché “we want to offer possibilities to the users”. The question is where from we gain the knowledge and the consciousness of the available possibilities that are to be offered and additionally who offers these possibilities. The answer is that the user also participates in the generation of those possibilities therefore what we need is to use the user as a source, not merely as a target. The idea is not only to offer possibilities but also to gain possibilities from the field of the virtual. Users add and have added historically an accumulation of multiple scenarios and characteristics that function as origins and we should let them to keep on contributing to this tank adding new characteristics and possibilities. Therefore
the users shouldn’t be regarded as passive receivers but as active participants that produce and unlock such possibilities making them actual and creating more and more possibilities. In order to make it more tangible I could describe the way how the “informality” of the users, when inscribed in space resembles the writing of Kafka.

In his works, Franz Kafka seems to multiply continuously the characters, the objects, the possible scenaria. He is not pushing them to an end or a fulfillment but often just brings them to existence without always having in mind a purpose or knowing the potential. When brought to existence many of them remain pending in a state of latency. In that way Kafka occupies more and more space in the field of the potentiality (Deleuze would name it virtual) creating constantly new possibilities for the development of his story. Obviously, he is writing in a linear way without going back to erase or exclude the inactivated possibilities since he may use them in the future. On the other hand, the development and activation of possible scenaria seem to be rather rhizomatic, occupying more and more space in the realm of the possible since new possibilities are constantly opening and branching out from the activated ones, while others remain in a state of pending for activation and may never be activated. If it was space it would be doors that when they open lead to corridors with other doors, the space behind the doors is empty, until the door opens and another corridor is being actualized, full of doors again. Kafka’s writing is a constant production-construction of the story which in turn is itself an abstract machine that creates the story in an open-ended way while all the possibilities are pending. It’s a continuous, perpetual routing without end.

Similar to the above, the growth of informality is a wave of activations like those of Kafka, that open up more and more possibilities, and for this to happen the participation of the user is vital.

While the user is an author like Kafka that expands into the field of the possible, the architect could be the navigator into this field of possibilities; not a mere detached specialist or a form artist that imposes ends, but both an observer and active participant; a mediator that understands the inherent capacities of each system and doesn’t attempt to impose a solution from the outside, but rather helps the inherent dynamics of the system to give birth to individual solutions that will be implemented in the system by the participants themselves. The new role would not be any more this of the ἀρχιτέκτων (=architect) which refers to his authority to build, but rather this of the ἀρχιτίκτων which refers to his ability to “give birth” (tiktein = give birth). Therefore, I refer to an architecture where there are a) a genesis, a moment of conception and a becoming, which is under the influence of the user, and b) the very moment of birth, the tiktein, which takes place under the mediation of the architect.

What we need is a more open approach; we need the participation of multiple subjects and the dynamics they encompass, but not through customization or as consumers. It should be more straightforward and for this to happen we need to use new media and understand the capacities of the traditional ones.

**Language as Medium**

The overall idea is not to avoid formality and form or tear down completely the models and structures that have been set in the past, but to realize that they are merely the media for the understanding of the reality and the production of space but not the space or the reality itself.

In the past I used to believe that what architecture lacks is a common “architectural” language, today I realize that I was rather wrong and that what architecture really needs is the understanding
of the fact that there cannot exist something like a “common language” and if it could it would
kill multiplicity. What we need to understand is that architecture is multilingual therefore we are
obliged to accumulate the capacity of being polyglots, being able to understand multiple
languages and systems and manage to work inter-textually and inter-contextually. This is why we
need to learn how to negotiate but in the same time stimulate multiplicity without narrowing the
negotiation by imposing an end. Therefore we need to postpone forms and implement them in
the process of architectural production in the end and not use them from the beginning. The forms we
could use for negotiation could be less formal and less formative, meaning more informal.

In order to stimulate and communicate informality we need to find processes and media (tools)
that are able to encompass the characteristic of informality (open ended, context specific) in order
to describe the qualitative characteristics (the quantitative are measurable e.g. economy). I cannot
think of another tool that can do that adequately than verbal language. As a medium it seems to
share the same characteristics with informality, it is open ended, it becomes, it constantly
encompasses change, it has cumulative abilities, it has an origin that accumulates new origins
(phylogenesis). No matter that it is also itself form and not a substance, still it is a non material
form therefore less stable, less fixed more open ended and more flexible. A language is a system
of flexible conventions, flexible empty tokens and it is the how the elements of the language
relate that give the language this flexibility to express the subject. Language has a syntactic
structure and a vocabulary. As a system, it consists of the “langue” (refers to the structural
characteristics of the language, the language as a mechanism), but in the same time we can use it
with absolute freedom (parole) and often play with its rules, invert them, ignore them and let us
be surprised. As Jacques Derrida says, “my own words take me by surprise and teach me what I
think”. This is significant of the power of the language to open up possibilities beyond the
intentions of the writer and the reader. As Umberto Eco might pose it, in any kind of text, there
are three intentions; the intention of the author (intentio auctoris), the intention of the reader
(intentio lectoris) and the intention of the text itself (intentio operis). The latter is an additional
field of possibilities.

Verbal language does not intend to be a language of forms or a language of types (as we often
think when we refer to architectural language), but a language that attempts to communicate the
variety of forms and types and their characteristics not as pure entities but as abstract and
multiply interpreted abstractions. In order to stimulate informality, what we need is maybe the
consciousness that we should trust more the dynamics of communication, which means to trust
more the bias of language and its misunderstandings. One could claim that this would deform the
initial idea but this is also a misunderstanding that comes as the result of an established Neoplatonic system of thinking according to which the idea exists prior to praxis and is superior to it.
In reality there is no deformation because the initial idea is not a form but an abstraction. What
language does is to communicate abstractions that are not being deformed but rather constantly
formed under the influence of reason and gnosis but also under the power of feelings, senses and
insights that is the one that charges with meaning our practices and productions. It is this meaning
that creates identity for both the object and the subject.
Teratogenesis

Teratogenesis is a medical term from the Greek, literally meaning monster-making (τέρας = monster), which derives from teratology, the study of the frequency, causation, and development of congenital malformations—misleadingly called birth defects.\(^{28}\)

Teratogenesis in the sense of deformation is an un-detachable part not only of the morphogenetic processes but of any kind of productive process; it is embedded in all the possible products of these processes. Evolution itself is a constant deformation, mutation and hybridization, actively participating in its processes creating new species and causing others to transform or even extinct.

The result of any process, any kind of thing that could be considered as product, is always deformed therefore impossible to be absolutely predefined or predetermined. But on the other hand, also initiations are being deformed in the process of working towards the result. Maybe, even the word “result” is just a convention since everything is in a state of constant “becoming”. I can find no better way to illustrate this than what Henri Bergson said “Reality... is a perpetual becoming. It makes or remakes itself, but it is never something made.”

The praxis of creating this text, the “becoming” of its body and content, is consistent with the basic idea of it and somehow underlines it. This text didn’t start with an aim towards an end; it didn’t start by knowing a problem and aiming at a solution. The text itself, both as a content and a form, became as a result of various manipulations and negotiations among its parts and the whole, among the linearity of the text and the intertextual connections of the different parts of it while it was growing and becoming, attaching new words and excluding others. It is the result of a “derive” (as the situationists defined it), the record of an aimless vagabond that constantly attempts to find ends and link them but never concludes. It is a theory made by the praxis of its own writing, a praxis that has as an aim the writing and not the end of it.

The text grew in a rhizomatic way and this is why there are branches that end up nowhere but are still pending for further growth or connection with other branches. This fragmentation is the result of the attempt to synthesize the anchoring points for the development of a continuum; it is not a text of accomplishments but a text of intentions. Not concluding is for keeping open the possibility to conclude. This is why there should be no end. What we need is not a conclusion or a fixed answer but rather the constant elaboration of a consciousness.

(To be continued)

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\(^{28}\) Source Wikipedia: http://en.wikipedia.org/wiki/Teratogenesis
Ithaka

As you set out for Ithaka
hope the voyage is a long one,
full of adventure, full of discovery.

Laistrygonians and Cyclops,
angry Poseidon—don't be afraid of them:
you'll never find things like that on your way
as long as you keep your thoughts raised high,
as long as a rare excitement
stirs your spirit and your body.

Laistrygonians and Cyclops,
wild Poseidon—you won't encounter them
unless you bring them along inside your soul,
unless your soul sets them up in front of you.

Hope the voyage is a long one.
May there be many a summer morning when,
with what pleasure, what joy,
you come into harbors seen for the first time;
may you stop at Phoenician trading stations
to buy fine things,
mother of pearl and coral, amber and ebony,
sensual perfume of every kind—
as many sensual perfumes as you can;
and may you visit many Egyptian cities
to gather stores of knowledge from their scholars.

Keep Ithaka always in your mind.
Arriving there is what you are destined for.
But do not hurry the journey at all.
Better if it lasts for years,
so you are old by the time you reach the island,
wealthy with all you have gained on the way,
not expecting Ithaka to make you rich.

Ithaka gave you the marvelous journey.
Without her you would not have set out.
She has nothing left to give you now.

And if you find her poor, Ithaka won't have fooled you.
Wise as you will have become, so full of experience,
you will have understood by then what these Ithakas mean.

Translated by Edmund Keeley/Philip Sherrard

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Today’s Customers Prosumers.
Acknowledgements

Many people have helped me for making this text, not all of them knowingly. In particular I would like to thank my teachers, Patrick Healy and Machiel Van Dorst for their direct contribution but also for the help and the support they offered me in everything I needed. Additionally, I want to thank Dimitris Fragos, Lois Papadopoulos and Petros Martinidis for their influence. I thank all my friends for the interesting discussions and the feedback. Last and certainly not least I want to thank my parents for their support and understanding.