THE LANGUAGE OF SUSTAINABILITY: A "METAMODERN" FRAMEWORK

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ABSTRACT

Sustainable development has often been described as the encounter of economical, ecological and social dimensions. However, since the turn of the Century, increasing attention has been given to the cultural premises of sustainability. Architecture should be at the center of the discourse, being structurally dependent from all these intertwining factors. Research is well started on developing technical means to attain a viable ecological practice. Nonetheless, not enough reflection appears to have been done on the cultural potential of architecture in the strive toward sustainability.

The modernist and post-modernist practices of the last Century were intrinsically unsustainable. Today, designers are required to overcome this dialectic by defining a new language. Possible cues for further debate come from various sources. The essay explores the potential for a new language by focusing on the concepts of "cultural sustainability", "mentalization" and "metamodernity", this latter as brought to academic attention by scholars T. Vermeulen and R. van den Akker.

Metamodernism is a category created to describe some recent developments in art, literature and cinema that defy well established schemes of modernist and post-modernist aesthetic, in search for a more sensible and, arguably, sustainable way to express the present.

Development of new materials and construction techniques remains essential to respond to economical and ecological issues. However, it is the author's opinion that bringing to the table some critical new ideas from arts and social sciences will help architects to develop a language that embodies the environmental challenge, instead of suffering it as an additional layer of sophistication and constrain.

KEY WORDS: Architectural language, Eco-cultural civilization, Meta-modernism, "Mentalization", Degrowth movement.

EL LENGUAJE DE LA SOSTENIBILIDAD: UNA PROPUESTA "METAMODERNA"

RESUMEN

El desarrollo sostenible se ha descrito como el encuentro de dimensiones económicas, ecológicas y sociales. Sin embargo, desde los últimos años, se está prestando cada vez más atención a las premisas culturales de la sostenibilidad. La arquitectura debe estar en el centro del discurso, siendo estructuralmente dependiente de todos estos factores entrelazados. No obstante, aunque la investigación está bien iniciada en el desarrollo de medios técnicos para lograr una práctica viable y ecológica, no parece que se haya hecho suficiente reflexión sobre el potencial cultural de la arquitectura en la lucha por la sostenibilidad.

Las prácticas modernistas y posmodernistas del siglo pasado eran intrínsecamente insostenibles. Por lo tanto, para lograr una arquitectura verdaderamente sostenible, los diseñadores deben superar esta dialéctica y encontrar un nuevo idioma. Las posibles señales para un mayor debate provienen de varias fuentes. La ponencia explora el potencial de un nuevo lenguaje al enfocarse en los conceptos de "sostenibilidad cultural", "mentalización" y "metamodernidad", que los eruditos T. Vermeulen y R. van den Akker han señalado a la atención académica.

El metamodernismo es una categoría que nace para describir algunos desarrollos recientes del arte, la literatura y el cine que desafían los esquemas bien establecidos de la estética modernista y posmodernista, en busca de una forma más sensata y sostenible de expresar el presente. El desarrollo de nuevos

materiales y técnicas de construcción sigue siendo esencial para responder a problemas económicos y ecológicos. Sin embargo, la opinión del autor es que aportar algunas ideas nuevas de las artes y las ciencias sociales ayudará a los arquitectos a desarrollar un lenguaje que incorpore el reto ambiental, en lugar de sufrirlo como una capa adicional de sofisticación y limitación.

PALABRAS CLAVES: lenguaje arquitectónico, civilización ecológica, metamodernismo, "mentalización", decrecimiento.

1. INTRODUCTION

“What we call progress could prove to be the development of an error.” It was 1962, when visionary artist Jean Cocteau addressed these words to the people of the third millennium. In an improvised monologue filled with metaphors, the French author suggested that, in the decades to follow, the worldview of modernity could suffer some radical shift [1]. Cocteau brings as example the ingenuity of the early thinkers of our civilization and implies that, as today we giggle for some medieval beliefs, similarly, the industrial age could soon be object of the same hilarity.

Indeed, less than a decade later, the devastating entails of progress were brought to academic attention by pioneering economist Nicholas Georgescu-Roegen [2]. The Romenian-American scholar deserves credit for firstly introducing to the economic theory the premise that mineral resources are finite and will eventually be exhausted at some point. To this assumption, now mainstream, urgency follows of finding an alternative paradigm of economic development. This position would shortly make it to a broader public with the 1972 “Limits of Growth” [3], a milestone study on climate change promoted by the *Club of Rome*. Since then, public opinion, and consequently politics, have gradually incorporated in their vocabulary concepts such as global warming and sustainable development, this latter seen as a solution to all environmental and social distortions of advanced capitalism.

Nonetheless, while we’re witnessing significant evolution in energy production and handling, not enough is being done to avert the current trends, thus suggesting that only a radical change in economic culture will prevent an eventual collapse of the whole system.

How do architects fit in this picture? In the last fifty years, we witnessed the rise and fall of post-modernism and a deep transformation in the perception of the political role of the architect. As a result of this turmoil, first-world architecture seems to have suffered the new narrative of sustainability, instead of consciously questioning it. In fact, legislation and industry have been imposing materials and protocols to the architects, who end up incorporating them in their practice as part of a wider set of normative constrains.

According to a 2008 report by American Physical Society, commercial and residential buildings are responsible for about 40 percent of United States primary energy use [4] and data provided by the European Union (2014) [5] are in line with the northern-American counterpart. So, being buildings largely more impacting than industry and transportation, we should come to the conclusion that today architects have the burden and the opportunity to play a front-line role in the endeavor for a sustainable future.

However, it is the author’s view that, in order to develop a sustainable practice, architects should not rely passively on technology and legislation. Rather they should express a culture of sustainability through language and aesthetic. We will argue that the two main narratives of the last century, modernism and post-modernism, are intrinsically unsustainable and, while architects are forced to design more efficient buildings, they need to find a new aesthetic framework.

Purpose of this essay is to explore possible ways for architects to overcome the current impasse, by developing a 21st century language, in tune with the challenges of sustainable development. Possible cues for further debate come from various sources. In particular, we will bring to the attention of the reader the new categories of “cultural sustainability” and "metamodernity." Finally, we will attempt listing some points for a practical translation of these concepts.

This paper builds on the author experience in architecture faculties and design practices in Europe. While some examples and sources may only have regional relevance, the ideas exposed are universal and will hopefully give a positive stimulus for wider explorations.

2. SUSTAINABILITY: AN EVOLVING DEFINITION

The three-pillars definition

The first definition of "sustainable development" dates back to 1987, when the World Commission on Environment and Development (WCED) mentioned a form of "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." [6] While still valid today, this definition may be criticized for its vagueness and ambiguity. Indeed, as a result of the 2002 World summit in Johannesburg, the well-known "three pillars" definition was formulated. In fact, a United Nations resolution following the summit affirms that economic development, social development and environmental protection are "interdependent and mutually reinforcing pillars of sustainable development." [7]

Today, as we consider how the European architectural practice responds to the threefold nature of sustainability, we recognize some recurring patterns. In Europe, the construction industry is driven by the private sector, and economic viability is the fundamental premise of architecture. Indeed, the very existence of a building industry is largely due to its economical sustainability, that often is not in doubt. Conversely, the social and environmental spheres are regulated by the public sector, which imposes its agenda on behalf of the common good. This is done by channeling and limiting the exploitative tendencies of free market. Whether the public succeeds in its highly complex task of regulation, it is a political matter to be analyzed according to the peculiarities of every political entity.

In this picture, the architect's role is very marginal. Architects are not in control of these processes, in spite of being at the very center of them. They have not the power, nor the skills, to estimate the impact of their work on the social and the environmental planes. Thus, they eventually fight a rearguard battle over secondary aspects of their designs, while various professionals and authorities negotiate an evolving framework of regulations, ratios and coefficients for the architects to fit in.

So, even though there are architectural tools to improve energetic performance, their benefits are often limited by the urban context, and their effectiveness is difficult to measure, requiring a case by case approach. As a result, architects tackle sustainability by incorporating new technology in their projects, so to comply with increasingly strict energetic standards, without questioning the basis of their language.

Toward a culture of sustainability

If architects embrace the threefold definition of sustainable development, they consequently suffer sustainability as an additional layer of complexity and bureaucracy added to their job. The three-pillars narrative ignores the cultural implications of sustainability, preventing architects from realizing their potential for change. In fact, while architecture may influence the socioeconomic sphere, it does it tangentially, by operating on a cultural level, as other players are in control of technological and economical processes. However, in the context of a more evolved understanding of sustainability, architects (and cultural operators in general) can take part to the debate. This happens by working on cultural connotations of sustainability, even when the energetic issue could be reduced to a mere technical challenge.

Many are the advantages of including culture in the frame. The most immediate is that, as sustainable development requires concerted actions and policies, culture is the only medium that can bring together all the stakeholders.

Today, the threefold definition appears to be prevalent in public conscience. Nonetheless, during the last decade, the urgency to include culture as a "fourth pillar" has been explored extensively by a number of scholars [8]. Acknowledging the cultural entails of sustainable development is a constructive way to bring cultural agents on the front-line of the endeavour for a greener society.

Cultural sustainability, several definitions

Before we move on to the architectural application of this concept, it is necessary to precise what we mean by "cultural sustainability". The phrase is as suggestive as it is vague and ambiguous. This is the premise from which takes stand a 2016 paper [9] by scholars Katriina Soini and Joost Dessein. The article reviews the contemporary state of scientific literature on cultural sustainability. As a result, the authors recognize three main approaches to cultural sustainability, distinguished through different connotations over several categories or "structuring dimensions."

According to Soini and Dessein, the most simple "narrative" is that of cultural sustainability as the case for culture in the context of sustainability. The definition suggests restoration and maintenance of the cultural "capital" as the fourth premise of sustainability. If we visualize sustainability with an Euler-Venn diagram, this definition pictures it as four intertwining circles of equal size. A second interpretation is that of culture as a tool for implementing sustainability. In this approach, culture is no more part of a four-legged stool but is rather the plane on which economic, environmental and social pillars meet and cross-contaminate. This definition denotes a more organic approach to the matter.

However, it is the third "narrative" the most useful for our purpose: Soini and Dessein outline it as a worldview in which culture itself is an intrinsic expression of sustainability. There are at least three recurring themes in this latter "eco-cultural" approach. First of all, the critique of advanced capitalism; secondly the importance of demographic trends; finally, the need for some mass-scale rise of awareness that would make global significance of individual lifestyle shifts. While Soini and Dessein focus on 21 st century academia, the roots of this approach dates back the 1970s. Since that decade, academic experiences such as the "degrowth" movement and the counterculture "Whole Earth Catalog" [10], have been sharing the ultimate goal of building a global conscience, alternative to the consumerist mainstream.

More recently, the "eco-cultural" approach was carefully explored in a report promoted by the University of Vermont. The paper argues that unlimited economic growth is not only impossible; it is undesirable [11]. According to the authors, in order to change the paradigms of the capitalist discourse, we should redefine well-being metrics, thus acknowledging that current economical parameters, GDP *in primis*, are merely means to that end, not ends in themselves. Unfortunately, while the essay outlines some high-level priorities, it fails to propose some bottom-up strategy for their implementation.

The importance of a bottom-up strategy

Observation of the animal world demonstrates a correlation between amount resources and demographic trends [12], suggesting that current exponential growth of human population may well be the sign of an eventual catastrophic collapse [13]. From this standpoint, global warming, environmental degradation as well as increasing concentration of wealth are the side effects of an economy that is no more in service of humankind and that, on the contrary, seems oriented by a self-destructive agenda. Still, the intricate network of globalized economy makes hard to imagine a concerted change of attitude in the ruling elites of leading national and supranational entities.

This skeptic stand is corroborated by the uncertainty left by the 2015 Paris conference (COP21). The impasse following COP21 leaves us with the hope that high-level political initiative may actually follow and not precede a change in society.

Building a "mentalizing society"

In this regard, it is interesting to review the contribute of Italian philosopher Roberto Mancini [14]. Mancini heartily embraces the third "narrative" of Soini and Dessein's framework and makes a step forward, articulating a real-life strategy for change. Instead of calling for unlikely political stances, the philosopher embraces the idea that change will bloom first in civil society. To make it happen, cultural operators should foster the development of "mentalizing societal systems."

"Mentalization" is a term borrowed from the psychological jargon and defines as "the ability to understand oneself and others by inferring the mental states that lie behind overt behavior."[15] This concept was introduced in the 1960s and since then has been explored by a number of authors. Outside the medical field, mentalization is mainly known for its role in Bowlby's attachment theory and for the writing of Peter Fonagny. According to Fonagny, the "mentalizing" faculty develops in early childhood as the result of a healthy relation between the child and the care-taker. So, a society of individuals capable of "keeping others on their mind" will necessarily express a political practice focused on the common

good. Therefore, if we consider the vital bond between us and the ecosystem we can conclude that a "mentalizing" society will be also a sustainable one. While it can be questioned for its naivete, Mancini's argument is appealing. If reversed, it explains the masochistic drive of the so-called progress and brings to the light the ethical connotation of sustainability.

The most immediate corollary of Mancini's thesis is that change should originate at school, as teachers develop a new paradigm of education, in which the focus shifts from mnemonic performance to the fostering of empathetic attitude on problem solving. Still, we can object that this process of re-education of society should not be limited to school. It rather concerns everybody. Actually, it is widely accepted that the structure of society and the individual's role in it can inhibit or amplify one's propensity to empathize. So, it is realistic to state that cultivating a "mentalizing" culture may be fruitful as mentalization of society may happen on several levels at once.

3. TOWARD A SUSTAINABLE ARCHITECTURAL LANGUAGE

A "mentalizing" architecture

We argued that the path toward an eco-cultural civilization requires a general shift in collective conscience. For this to happen, a coral effort is required from all cultural operators. In this perspective, it is inevitable to bring the debate in the arts [16] and in those strata of society capable of the greater impact on public imaginary. Architecture is all pervading and, as the majority of human kind lives in the city, architects have a consistent share of responsibility for the "de-mentalizing" matrix of our society.

In the previous section we went through few milestones in the debate over sustainability. We will now bring our attention to the peculiarity of architecture, trying to understand how the concept of mentalization applies to architectural language.

Technology, industry and culture are expressions of society, and their products express varying level of mentalization. So, as we can sort more or less mentalized social constructs, likewise we can look for mentalization in architectural projects. The level of mentalization of a given piece of architecture relates to the level of "care" (from Latin "cura") used by its designers and builders. Particularly, an architect acts in a mentalized way if he is capable to "keep in mind" the common good, while tackling the complex processes revolving around the entire life cycle of the building. This care has to do with the quality of the design, the choice of materials and the socioeconomic premises of the construction. This is the realm of sustainable architecture today as legislation and frameworks, such as the LEED protocol, impose "on the mind" of architects the numerous aspects of sustainability.

Still, this approach is passive and arguably deficient. Even when it may not affect the energetic performance of the building, the architect should add a "mentalizing" intention to his work. The mentalizing power of architecture refers to its ability to foster mentalization in the people who get to experience it. This faculty lies in the architectural language of the building, in its ethical premises and in some pivotal features that affect its use and perception.

We can better comprehend what a mentalizing architecture should strive for by dusting off Heidegger's famous article "Building, Dwelling, Thinking." German philosopher wrote that "[o]nly if we are capable of dwelling, only then can we build." [17] In Heidegger, dwelling has a "fourfold" meaning: "saving earth, receiving sky, awaiting the divinities and initiating mortals." In more current terms, dwelling means connecting with natural elements, while responding to the existential and social strives intrinsic in human condition. Now, if we take the liberty to reverse Heidegger's statement, we can postulate that, when architects learn to build, dwelling is made possible. Ordering the space for the "fourfold" nature of dwelling is, therefore, the goal of a mentalizing architectural language.

How does this translate into practice? During the last century, architecture produced two main languages: modernism and post-modernism. They both are intrinsically unsustainable and yet contemporary architects keep on striving for the impossible compromise of sustainability and XXth century aesthetic. This unfortunate marriage consists in patching outdated repertoire with the minimal technological upgrade required by the political context. Conversely, we will argue that, in order to make a qualitative leap, architects should break free from this dialectic in favor of a new "eco-cultural" aesthetic.

Questioning the Corbusian canon

Architects build the environment for modern human living and interaction. The modernist revolution had the merit to introduce into the architectural critique the metonymy that substitute the container for the content, thus bringing the architect to the forefront debate on the forms of society. However, in historical perspective, we can question the "cultural sustainability" of the modernist canon. In particular, the Corbusian rejection of centuries of architectural know-how is a "de-mentalizing" move, because it detaches humans from the natural environment and dissimulates the complexity of our lifestyle under the language of abstract art. In fact, the Five Points bring architecture to an otherworldly dimension, where the natural element is ornament at most. In other words, the modernist sophistication transforms Semper's Hut into an uncanny *machine à habiter,* the house for an android.

The fragility of modernist architecture is well documented [18] [19]. During the last Century, reinforced concrete was largely overestimated and today many icons of modernism are in need for delicate restoration. Natural elements consume the facades and management of internal climate revealed to be surprisingly more challenging than in traditional buildings.

And what is more, the modernist paradigm does not only neglect the ecosystem but operates the same removal on cultural context. Brasilia is a city of atomized individuals as the non-human distances of the *ville radieuse* may only house a disintegrated society. It is of no surprise that talking about Brasilia, British urbanist Peter Hall stigmatizes the fragility of the modernist utopia. In his words, the south-American experience demonstrates how "hard is to build a City Beautiful amidst the confusion of democracy and the market" [20]. The myth of the *tabula rasa* is an entail of the never-ending growth myth. The pre-existent is enemy to the modernist ambitions to the extent that the even society does not to measure up to the utopia.

Questioning Las Vegas

The modernist architect played a lead-role in costume and society but failed to reform the destructive narrative of progress. The phenomenological approach inaugurated by Aldo Rossi reconnects architecture with history, but this comes at a price. The post-modern architect abandons the messianic attitude of "heroic modernism" and starts a new dialectic with society. The *modulor* gives way to the urban "type", the individual to the collective identity. The Modernist has an over-simplified vision of society. Conversely, the Post-modernist is overwhelmed by the endless instances that arise from the context in which he operates. If we consider Lévi-Strauss' dialectic between the archetypal engineer and *bricoleur* [21], the post-modern revolution relegates the architect on the side of the latter [22].

Still today, "Invisible Cities" the experimental novel by Italo Calvino [23], is a manifesto of the phenomenological approach to the context. Venice is portrayed by homesick Marco Polo as several fictitious towns that the adventurer claim to have seen during his wandering in central Asia. The post-modern architect confronts to the preexistence in a similar way. The complexity of the city, the number of stakeholders, do not leave room for certainty and reveal the futility of the modernist utopias.

Confronted to complexity, the architect can either pick a few story-lines and use them to develop the project or he can decide to engage with the context playfully. Whichever approach he chooses, he loses any ambition to bring about actual change in society.

The need for an alternative

We have shown how both modernism and post-modernism are intrinsically unsustainable. On one side, the Modernist acts ignoring the context and therefore is blind to the environmental issue. On the other, the Post-modernist is overwhelmed by context and does not dare to take position as he fears incompetence and naivete.

The post-modernist approach is not compatible with a progressive view of history. Evidence is the paradox of Fukuyama's "end of history", the apical product of that worldview. Indeed, it goes without saying that history didn't end in 1989, nor it seems to have slowed down. The 9/11, the 2008 financial crisis and the recent geopolitical developments concur to the urge for a new sensibility.

Today, a modernist revival is no more viable, for several reasons. Heroic modernism has become history and now it can be referenced only through the filter of post-modernist sensibility. Moreover, a radical

change in construction technology does not allow a faithful implementation of the Modernist canon. Let us consider, for instance, the Corbusian ribbon window. Today, regulation may force the architect to employ a double or triple glazed glass and the modernist thin iron profile would most likely become a thick aluminum frame. On top of that, some external solar protection would be required. This forces the designer to re-think completely the detail of the opening that now has to integrate blinds, thermal insulation, vapor barriers and structural fire proofing. The result is an aberration of the sheer simplicity of the original and betrays the intentions of the Swiss master. Finally, as the practicality of the ribbon window is essentially subjective, we are tempted to conclude that today, employing this Corbusian device is as legit as designing a renaissance-style *bifora*.

Mainstream post-modernist sensibility pretends that choosing the ribbon window instead of the *bifora* is a purely aesthetic stance. Still, as society struggles with the challenges of sustainability, it would be preferable for the architect to re-discover a critical, and perhaps *ideological*, approach to his language.

4. METAMODERNISM, A NEW PARADIGM

Breaking the impasse

Several categories have been proposed to describe the form of sensibility that is taking over post-modernism. “New sincerity” and “Post-postmodernism” are among the most used. However, for the purpose of this paper, we will focus on the concept of “metamodernism” as outlined in 2010 by Dutch scholars Timotheus Vermeulen and Robin van den Akker [24]. Authors claim that modernist and post-modernist aesthetics are no more able to interpret our present and that seemingly incompatible features of the two systems can coexist side-by-side in today’s culture. The word “metamodernism” features the Greek prefix “meta”, meaning “beyond”, and relates with “metaxis”, a lemma used by Plato to describe the condition of "in-betweenness." Metamodernist aesthetic is not a mere Hegelian synthesis of the two previous systems. It rather stands in between the two. In practice, metamodernist sensibility cuts through the post-modernist morass of contemporary culture by restoring some modernist tools.

The drive of the new sensibility is eloquently expressed in Luke Turners’ “Metamodern Manifesto” [25]. In this regard, the British author affirms that: “[w]e must liberate ourselves from the inertia resulting from a century of modernist ideological naivety and the cynical insincerity of its antonymous bastard child.” In other words, the current impasse is to be broken with the resurrection of “big narratives” that will concur to create new images of the future. These are to be conveyed through a restored sincere language, in which the modernist naivete is filtered by the vital acceptance of our hyper-textual present.

Practically, metamodernism is not a cultural movement but rather a “structure of feeling”[26] that copes with the fact that history continues and arts have to follow, even when everything seems to have been said before. Given this state of facts, the artist may consider a temporary “return to order.” This process is already in progress: painters re-connect to the basics of their discipline with a worldwide figurative revival and a new naivete, veiled by an ambiguous layer of “complex irony”, invests every artistic field, from independent cinema to pop music and literature.

Metamodernism: a sustainable choice

It would be daring to affirm that the metamodern stance implies the choice for sustainability. Nonetheless, recent developments in the arts suggest the environmental issue is one of the essential story-lines of the new sensibility. In this regard, let us consider the “Dark mountain” project, an artistic endeavor started in 2008 by British artists Paul Kingsnorth and Dougald Hine. Ten years after its foundation, the project gathers an increasing number of authors from all over the world, with anthologies published half-yearly. Their Manifesto is a pioneering example of metamodernist art project. The authors react to the burst of the financial crisis and bring it as the definitive evidence against the “end of history” myth. They then call for writers to inspire a shift in society, by bringing to public conscience the environmental and social issues of our time. The pinnacle of the pamphlet is a list of programmatic points for a new form of writing, here are two:

“3. We believe that the roots of these crises lie in the stories we have been telling ourselves. We intend to challenge the stories which underpin our civilisation: the myth of progress, the myth of human centrality, and the myth of our separation from ‘nature’. These myths are more dangerous for the fact that we have

forgotten they are myths. 4. We will reassert the role of storytelling as more than mere entertainment. It is through stories that we weave reality"[27].

We recognize in these words a strive toward a "mentalizing" form literature, capable of changing perception of reality through the deconstruction of the automatism that weld up our current worldview. As the writers of the "Dark Mountain" project struggles to reform literature, similarly architects may embark a similar path toward a new language. This will not be a mere change in fashion, but a radical reform that will hopefully allow architecture to embody the story-lines that will shape future.

5. POINTS FOR A MENTALIZING ARCHITECTURE

In the previous paragraphs we argued that, in order to avert the current trend, we need a disruptive change in worldviews. This coral effort will only happen when the environmental issue is widely "mentalized" by society. Architecture can help in the process. To do so, architects have to embrace the current turn of sensibility. This will allow them to re-gain control over their faculty to impact the mental constructs of society. Actually, architecture, even more than literature and the arts, is an effective tool to penetrate into the imaginary, because people are exposed to its manifestations during most of their lives. Architecture is our interface with nature. Therefore, the language of dwellings, offices and schools is crucial for understanding (or mentally removing) our bond with Earth. Eventually, we come to the conclusion that architects today are in the right position to initiate a wide process of transformation in society, by visually expressing through the *built* environment the link that insists between humans and the *natural* environment.

The 2014 Venice *Biennale* is evidence that a new critical attitude may already be blooming. Rem Koolhaas invited his colleges to re-discover the "fundamental" elements of architecture. These were, quite literally, the basic parts of the building: floors, windows, roofs and doors.

It is too early to attempt a generalization of what metamodern architecture will be like, still, we can outline some of its probable characteristics (table 1).

Table 1: Architecture and cultural narratives of the last century.

	Modernism	**Post-modernism**	**Meta-modernism**
Role of the architect	Active / Political	Passive / Intellectual	Active / Intellectual
Cultural context	*Tabula rasa*	History	Eco-cultural systems
Social context	Individual vs mass	Globalization, *salad bowl*	Ruling *elite* vs people
Drive	Progressive	Hyper-textual	Sustainable
Language	Iconoclast	Evocative	Pragmatic
Time orientation	Futuristic	A-temporal	Future-oriented
Research approach	Avantgarde	Inter-disciplinary	Holistic
Psychological attitude	*De-mentalizing*	*Mentalized*	*Mentalizing*

Some practical proposals will follow. The list does not pretend to be exhaustive nor to be the umpteenth manifesto. Still, it is the author's wish that these points will stimulate further elaboration and debate from peers architects.

Back to the Caraibic hut

In her 2005 research, Swiss author Sabine Rabourdin claims [28] that observation of patterns in traditional societies may benefit our civilization. A pivotal point in her argument is that traditional societies have a "mental image of nature" that went lost with modernism. Evidence of this trend may be found in history of architecture. European designers had made use of generations-old forms until the end of XIXth century. Traditional and neo-classical languages express a deep understanding of how the natural elements affect the building. In facts, water infiltration, overheating and ventilation are generally not issues in pre-modernist buildings as the thick massive walls, the prominent roofs and the high-ceiled spaces of the antiques and renaissance prototypes do not distinguish between practicality and aesthetics.

It is not hard to find the moment when environmental and aesthetic instances detached. Early modernism had its root in the elaboration of traditional prototypes, such as the Japanese house and the Caraibic Hut. However, the Modernist did not question the functioning of these forms of architecture and

misunderstood their significance. He considered anonymous and primitive architecture as mere visual references for a new minimalist style. In fact, the modernist was seduced by the thin structure of Semper's Hut and literally translated the textile fence into the curtain wall. Conversely, the Hut should not be considered of any aesthetic guidance. It is rather an effective reminder of the basic needs that architecture should fulfill. Actually, every element in the Hut declares its function and answers a primary need of human dwelling. This is not the case of the Ville Savoye, an aseptic container that dissimulates its functioning and thus makes the dweller oblivious of the natural factor.

Intuitive understanding of the building functioning

In a culture of dissimulation, we need to bring back transparency.

We should question the dogmatic flat roof of our present time. The roof protects us from rain, when reduced to a slab it negates its function. The flat roof is impractical, it causes problems of waterproofing and, in spite of the modernist dream, it is under-used if not completely inaccessible.

Similarly, we should refrain from the minimalist fashion of avoiding cantilevers. These are fundamental for keeping the façade dry and shaded. Today, gutters are hidden as they are generally considered unaesthetic but a "mentalizing" architecture should have them apparent. People should be able to see how the building shelters them from the sun and rain. They have to understand the pipework. The path of water flowing from rooftop to ground should be evident.

As far as walls are concerned, the textile fabric of the Hut's skin is sincere and comprehensible. In a similar fashion, the structure of a sustainable building should be exposed and intuitive. Even insulation, as far as possible, should not be disguised. Furthermore, the user should be able to understand the orientation of the building in relation to the cardinal points. Façades should be the compromise between sun path, dominant winds and internal functions.

Re-viewing Rudolf Steiner's expressionism may be a positive stimulus in this sense.

Electric, telematic and hydraulic systems should be visible as well. The dweller, thus exposed to the technological frame of the house, will develop an intuitive understanding of how electricity, internet access, water and gas affect their lifestyle. Furthermore, keeping the systems apparent simplifies the diagnosis of an eventual malfunction and the intervention required to fix it. Ideally, the user of the building should be able to intervene in first person in most cases.

Today, architecture rejects this increasingly complex infrastructure as legitimate part of its vocabulary. The network of pipes and cables is kept hidden in a strive for "decency" that recalls the Victorian practice of hiding the legs of tables for their (alleged) disturbing resemblance with the womanly counterparts.

The lesson of the Smithsons' New-Brutalism may be a starting point to bring back structure and technology into aesthetic (and ethical) discourse.

Language, economy and the need for intervention

The third industrial revolution is being characterized by the invention of the useless [29]. Architecture is a product of its time and is not immune from the current process of technical sophistication. As a reaction, architects should question the necessity of high-energy solutions even when they are economically viable. An inspirational reference in this regard may be the pioneering "bio-economic" plan by Georgescu-Roegen [30].

Gray energy should be a primary meter of judgment when choosing materials. As an example, the usage of aluminum should not be, as it is becoming, a default choice for window frames and façade cladding. Even glass should be employed more sensibly, to avoid the paradoxes of the "international style." Extremely large windows are often designed a-critically with the pretext of their technical and economical viability. In today's building industry, cleaning, uncomfortable direct lighting, summer overheating, and winter dispersion can be approached through additional layers of complexity: synthetic films, foams, multi-layered glazes *et cetera*. Still, it would be preferable to prevent these aberrations on the architect's desk. Modulating openings according to the sun path and using mass to filter and store solar energy should be priorities from the first day of the design. Moreover, low-energy techniques, such

as wooden and rammed earth constructions should be explored as much as possible, even in the context of urban and commercial architecture [31].

Holistic approach to the life-cycle

Simpler construction is a prerequisite for easier re-conversion and dismantling. Restoration and re-conversion should be always preferable to demolition and reconstruction, even when the latter may be equally viable. Internal partitions should be lightweight, in order to allow adjustments and plan reconfiguration throughout the entiere life-cycle of the building. Indeed, as society evolves, apartment buildings should be able to adapt to changes in lifestyle and demographic.

Aging is a taboo in the consumerist society. The Freudian "removal" of death is strictly related with the exclusion of the environment from the economic and architectural discourses. As a reaction, architects should welcome the *patina* of time back. Colour shifts typical of *in-situ* concrete, the natural aging of timber, copper and terracotta will concur to build the "feeling" of a place. From the *stimmung* comes the identity of a "mentalizing" community. From the community will eventually flourish the will for change.

6. CONCLUSIONS

At the end of *magnum opus* "War and Peace", Leo Tolstoy included a theoretical essay, that condensates the author's understanding of the historic process. Confronted to the catastrophic events of the Napoleonic wars, Tolstoy downsizes the role of emperors and commanders and rather suggests that people in place of empowerment are the effect of a contingent collective will. The Russian writer concludes that Napoleon's decision-making power was illusory as he could not force thousands of people to immolate themselves if they do not accept to sacrifice in the first place. From this standpoint, he was a mere symbol of the mysterious drive that pushed an entire army in its fatal march to Moscow.

Today, the race of humanity toward self-destruction is strikingly similar. In this war against climate change and inequality, the architect is a pawn in a world-wide network of interests. But Tolstoy reminds us that, if French soldiers refused to shoot, Napoleon would have no power on them. Similarly, we should embrace our responsibility and reject a system based on inequality, without waiting for high level change in policies as they will eventually follow a generalized shift in sensibility.

For today's Architect, refusing to shoot translates in consciously questioning the default mechanisms of building industry. This can be done on several levels, one being that of language. In Orwell's *1984,* an artificially impoverished language prevented people from standing against the regime, analogously our Modernist and Post-modernist vocabularies do not feature appropriate words for sustainability. However, we demonstrated that cross-contamination with social sciences and the arts can turn out fruitful. And that a re-established architecture may be to the fore-front of the endeavour for a sustainable future.

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