# Architectural Education & Profession in Transition

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architecture at the edge
architecture at the limits
architecture beyond Limits
un – limited architecture

architectural studies and unemployment
architecture at the side of refugees, the poor….
the admiration of the out of the art buildings and the new
poverty
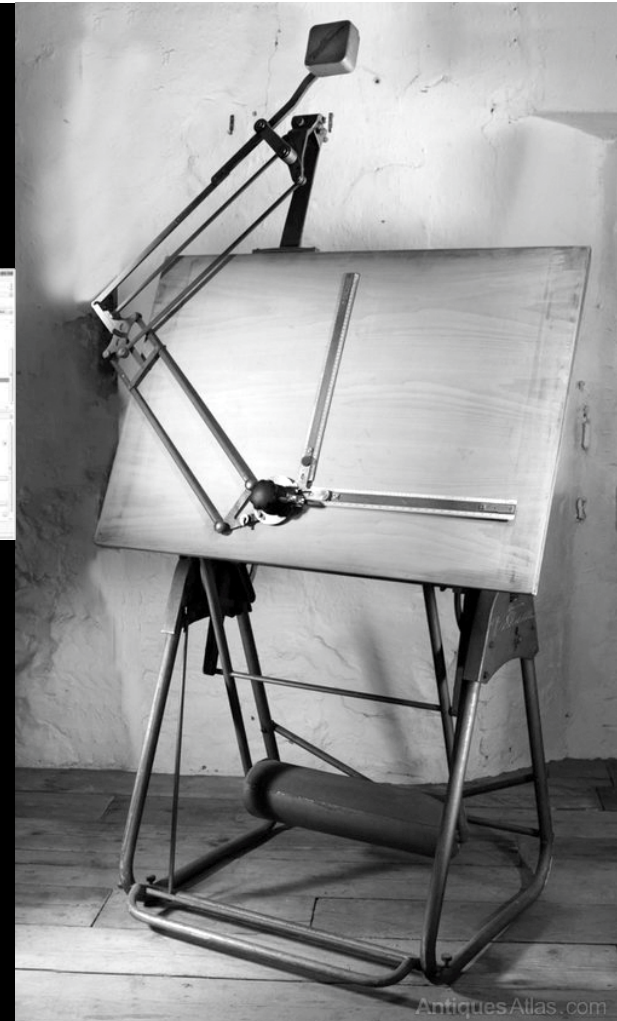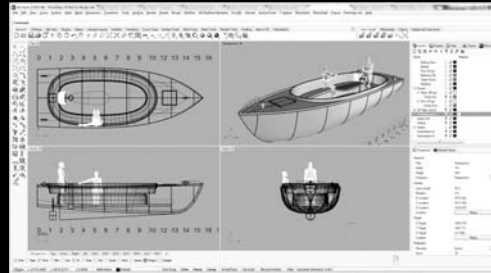
ARCHITECTURE

is a visual art in the sense that it can only be fully understood and appreciated through the eye
(what makes a good building, pp.7, criteria 69-71)

but also

ARCHITECTURE

is defined as "the art or science of building or constructing edifices of any kind for human use".

Reducing these definitions to their essentials for our purpose here, when we speak of transition in architecture we are speaking of principles as they may relate or apply to the art and science of building and the environment for human use.
Now, the points of entry that one might select to begin an exploration of this very broad topic, are virtually infinite in number, and I will make no special claim for the one since the variety of papers that will be presented by our colleagues and invited lecturers during the days of this conference will explore different aspects of engineering.

So this presentation is about the virtue of limits in architecture that are resulting by the global changes. Architecture has changed over the years.

From the time of Vitruvius and the ten Books on architecture, (Marcus Vitruvius Pollio 1 bc. Written at the 9th ac cent, firmitas, utilitas & venustas)

The Seven Lamps of Architecture is an extended essay, first published in May 1849 and written by the English art critic and theorist John Ruskin -........towards the period of Modern Movement in the 20th century that was linked to the expression of honesty in the construction, the interpenetration and continuity of interior and exterior spaces, characterized more and more of the openness and the use of glass on large surfaces, architectural form and space, as well as natural resources etc.

Also the universal plan which inspires, governs and tirelessly reconstructs the great universe, man was able to add a few pleasant footnotes. Particular cities and particular buildings can always be but imperfect realizations of these quasi-divine agenda. The house, the temple, the campanile, the roof, the column, the architrave, the frieze, the window, the door, the atrium, the street, the square and the city are inventions of man's genius, enriching nature's typological family. They are his proudest achievements, exceeding by far the discoveries of the wheel and fire, because for them he found no models but mere hints and analogues in nature. (Leon Krier).
The addition continues undisturbed…. Energy, atmosphere or architectural ambience

Nowadays, the symbolisms of architectural instruments, the design priorities have changed to respond / comply to the present social, political and financial reality. Today architecture aims to exploit and highlight the prestige and luxury of private and public works by creating an architectural shell etc. that makes a statement – or stands out as a landmark.

New Belgrade – 'Sleep City'

The Seven Lamps of Architecture is an extended essay, first published in May 1849 and written by the English art critic and theorist John Ruskin

1. *Sacrifice – dedication of man's craft to God, as visible proofs of man's love and obedience*
2. *Truth – handcrafted and honest display of materials and structure. Truth to materials and honest display of construction were bywords since the serious Gothic Revival had distanced itself from the whimsical "*Gothick*" of the 18th century; it had been often elaborated by Pugin and others.*
3. *Power – buildings should be thought of in terms of their massing and reach towards the* sublimity *of nature by the action of the human mind upon them and the organization of physical effort in constructing buildings.*
4. *Beauty – aspiration towards God expressed in ornamentation drawn from nature, his creation*
5. *Life – buildings should be made by human hands, so that the joy of masons and stonecarvers is associated with the expressive freedom given them*
6. *Memory – buildings should respect the culture from which they have developed*
7. *Obedience – no originality for its own sake, but conforming to the finest among existing English values, in particular expressed through the "English Early Decorated" Gothic as the safest choice of style.*

RESILIENCE

EMERGENCE, POVERTY ALLEVIATION, SPATIAL and GEO-POLITICAL ECONOMIES
(sub-theme for UIA 2014 Durban congress)

RESILIENCE, was the sub-theme for UIA 2014 Durban congress which was explored through several focus areas:
Resilience is defined as developed life strategies by communities, critical interventions that contribute to poverty alleviation and the important role of government, and government investment towards the re-configuring of the spatial economy to the benefit of all globally,
In order to find voice and solutions to problems within all forms of architecture and development practices.

ECOLOGY

TIME, EVOLUTION, SYSTEMS, PROCESSES AND ENVIRONMENT

focus areas:
TIME, EVOLUTION, SYSTEMS, PROCESSES AND ENVIRONMENT
diachronicity, timelessness, preservation, energy control, climate change, are intrinsically linked to the concept of time as it considers processes of architectural production that acknowledges people and place and an understanding of cities as ecosystems
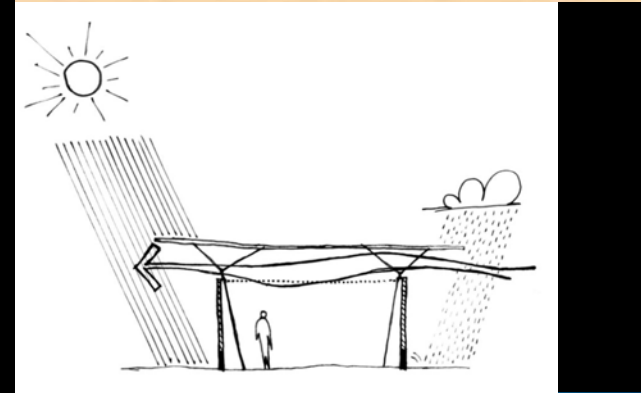
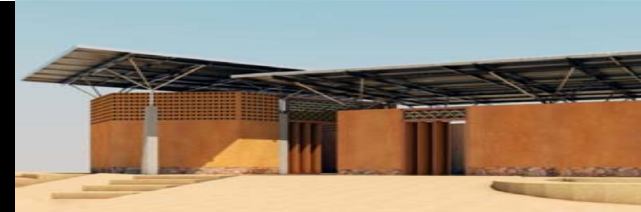*COMPETITION, NEWS, NIGER, PAVILION*
THE EARTH PAVILION
BY ABIOLA AKANDÉ YAYI AND ROBERT SOARES

'Walking through the scattered gardens, past fruit trees and students carrying books and shovels, the structures appear already at home, integrated'
Ecological construct: Studio FH Architects' and Light Earth Designs' college in Uganda

Declaration of the UIA 25th World Congress, Durban for responsible architecture

"recognizes the important role of the architectural profession in creating a safe, resilient, & responsive built environment that strikes a balance between development and the ecosystem" resolves that architects:

have a moral responsibility of being part of their community and the earth as a whole, to ensure that in the course of their practice, they minimize the impact of the built environment on the natural settings.

must always be ready to respond to emergencies brought about by natural and man-made calamities, such as war and conflict, in assisting the displaced communities, in finding sustainable solutions to loss of shelter, community and heritage.

must be catalysts and take it upon themselves, to create architectural projects, that are universal in terms of accessibility, taking into consideration the welfare of all persons requiring assistance.

must practice, as a primary design principle, sustainable planning and design, adopting the use of renewable resources and energy efficient principles to reduce carbon emissions; promoting healthy buildings; and protecting the ecosystem and its biodiversity.

working in another country must collaborate with local architects, in order to achieve a culturally sensitive design and to foster mutual respect particularly in the sharing of knowledge, work and skills.

must reach out to their national and local governments to inform them the vital role of the profession in achieving the goals and objectives of their communities.

That architects have the obligation to act, to benefit society at large as a primary consideration for the practice of responsible architecture.

VALUES

With focus areas ARCHITECTURAL PRACTICE AND EDUCATION

Local Practice in relation to global practice

collaborative interactive education platforms (standards – measures – rules etc.) for communities and professionals

In order to re-assess professional values, to interrogate the ethics associated to architectural and design practice, establish a sense of respect through diversity and humility,…….

RESEARCH

In the 50's & 60's there was so much paid research concerning the heart of *architecture: the fields of psychology, the* **functionality, the development of standards and guidelines** …….. *Then there was a long period of emptiness, absence of research implying that everything has been said!!* *Today research is directed to the relationship of:*

- *the identity of cities*
- *the Material with the intangible,*
- *Digital and Analog,*
- *the Actual and the Perceptual,*
- *Permanent and Ephemeral,*
- *Dilemma on what to preserve or demolish,* *etc*

All our efforts (discussions, theoretical searches, knowledge of materials, the un-material, the limits of perception and its properties, etc.) are aiming to develop "**A strong architectural design**". *Which isn't about architects!* ⌈⌐⌐⌉ ⌊SEP⌋ "*I really hate this* **demeaning** *of architecture as an* **icon**… *Because of the reading of architecture as icons, there's a really unfortunate way that contributions of* **other partnerships and other forms of knowledge are ignored.** *The best buildings are resulted when architects work on a* **multidisciplinary base** *(trans-disciplinary,…) (engineers speak of half engineering and half architecture)* and *therefore completely dependent* on the contribution of other sciences, the arts, philosophy etc."

RESEARCH

Architecture's lack of a comparable mediator—between personal preferences and formal prescriptions—may be at the heart of a disconnect between architects and the people they design for. And for good reason: non-architects expect a system of empirical reasoning to support the creation of something as fundamental as shelter. As a result, a primary concern for the discipline should lie in developing its own common structure of systemized knowledge to distinguish between subjective judgments and design decisions.

Though largely separate from the scholarly pursuit of philosophy, architectural theory, going all the way back to Vitruvius, is philosophical in the respect that it seeks to discern the reasoning behind architectural decisions. Referring to architectural theory in the Stanford Encyclopedia of Philosophy, ..

Architectural "theory" is mostly written by architects for architects and, depending on one's level of belief, either justifies design decisions or confuses reluctant detractors into baffled submission. ("Parametricism," anyone?)

While there are some notable exceptions of actual philosophers contemplating architecture, the two fields have limited formal overlap, though a relatively recent flash did occur in the late 20th century. Many high-minded architects became fixated with their counterparts in scholarly philosophy in those decades, a dalliance that apparently peaked with a collaboration between Peter Eisenman and Jacques Derrida to design part of the Parc de la Villette in Paris. It's worth noting, however, that by at least one account their working relationship was usurped by Eisenman to become what the author Stefano Corbo called "an astute exercise in self-positioning within the architectural debate." (Ross Brady, http://commonedge.org/how-architectural-theory-disconnects-the-profession-from-the-public/)

Connecting to the past, is a necessary historical recall for understanding the current and future critical activities towards tradition and innovation and the ethical principles of architecture.

(see the book by Robert Venturi, "Complexity and Contradiction in Architecture' "argued that, a new added building can not be always incorporated harmoniously in the environment either this is the intention or not: contradictions are common place. …. "to exploit this challenge as an opportunity"

Erasmus programs
Movement of people (students, academic staff, etc.)

Azerbaitzan: heritage cities and the challenges of mass tourism

Angelo Renna developed the project for SUCCESS, in a project exploring the potential of using soil for carbon capture. This kind of quarried soil is believed to have a high capacity for capturing carbon dioxide

San Cataldo Cemetery, Aldo Rossi

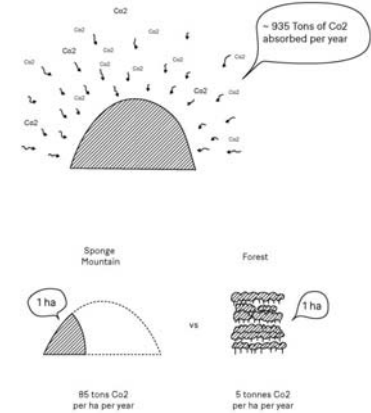*Spain's San Telmo Museum Boasts a Perforated Green Façade. Nieto Sobejano architects*

Pompidou cultural center, Rogers & Piano

Parasol in Seville, J. Mayer H. Architects

DAVOS Declaration 2018

Baukultur, as an aspect of cultural identity and diversity, holistically embraces every human activity that changes the built environment, including every built and designed asset that is embedded in and relates to the natural environment. Baukultur calls for contemporary creation and the existing buildings infrastructure and public space, including, but not limited to, monuments of cultural heritage, to be understood as a single entity. Thus, Baukultur refers to both detailed construction methods and large-scale transformations and developments, embracing traditional and local building skills as well as innovative techniques.

Three central aspects define the overall concept of Baukultur underlying the conference and declaration:

1) The existing construction, including cultural heritage assets, and contemporary creation must be understood as a single entity. The existing construction provides an important Baukultur reference for the future design of our built environment.

2) All activities with an impact on the built environment, from detailed craftsmanship to the planning and execution of infrastructure projects that have an impact on the landscape, are expressions of Baukultur.

3) Baukultur not only refers to the built environment but also to the processes involved in its creation.

Since the turn of the millennium, the term "Baukultur" has been used in the German-speaking world in this all-encompassing sense. As there is no term with an exact equivalence to this concept in English, the conference will introduce the German term Baukultur in English. The German term has been chosen in contradistinction to closely related terms such as architectural quality, so as not to limit the concept to architecture alone.

Within the international political context, the fields of cultural heritage conservation, urban development and architecture refer to each other whilst still maintaining their independence and, at times, competing with each other. The cultural value of the quality of the built environment as a whole, with cultural heritage and contemporary creation being understood as a single entity, is hardly ever defined as a political goal. The Davos Declaration is an attempt at addressing this gap by offering an all-encompassing concept of Baukultur, which treats the care and preservation of cultural heritage and the extensive shaping of the environment by means of construction and development as a single entity and formulates cultural expectations with respect to the appearance of our built environment, for the common good.

While the concept of Baukultur refers to many activities and processes that impact on the spatial environment, it does not imply any value judgment. The term 'high-quality Baukultur', however, expresses the idea of an improved, high-quality built environment.

High-quality Baukultur is therefore expressed in the application of conscious, well-debated, high-quality design to all building and landscaping activities, ensuring that cultural values are placed centre-stage and human social and cultural needs are satisfied.

The objective of high-quality Baukultur is to create and maintain a high-quality built environment. This quality promotes crucial societal values such as improvements in the quality of life, wellbeing, social cohesion and social integration. High-quality Baukultur provides affordable, decent housing, including vibrant and habitable neighbourhoods, and creates the conditions for the generation of positive economic added value.

With its vision, that encompasses the entire built environment and is geared towards the common good, the concept of high-quality Baukultur adds a crucial aspect to the idea of sustainability.

EDUCATION

X.1.3.b. Teaching requirements

Programes are required to fulfill all the fundamental objectives defined in Article II.3 of the UNESCO-UIA Charter for Architectural Education. Failure to meet threshold standards in any of these 16 points, as demonstrated through the evidence provided to the report group, will result in failure to receive full validation, and the programe will, usually, be validated with conditions. As a guide to report groups this should be demonstrated through the mapping of the programes curriculum against the following 16 points using the "Curriculum Matrix" template provided online.

1. Ability to create architectural designs that satisfy both aesthetic and technical requirements.

2. Adequate knowledge of the history and theories of architecture and the related arts, technologies, and human sciences.

3. Knowledge of the fine arts as an influence on the quality of architectural design.

4. Adequate knowledge of urban design, planning, and the skills involved in the planning process.

5. Understanding of the relationship between people and buildings, and between buildings and their environment, and of the need to relate buildings and the spaces between them to human needs and scale.

6. Understanding of the profession of architecture and the role of the architect in society, in particular in preparing briefs that take into account social factors.

7. Understanding of the methods of investigation and preparation of the brief for a design project.

EDUCATION

8. Understanding of the structural design, constructional, and engineering problems associated with building design.

9. Adequate knowledge of physical problems and technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against the climate.

10. Design skills necessary to meet building users' requirements within the constraints imposed by cost factors and building regulations.

11. Adequate knowledge of the industries, organizations, regulations, and procedures involved in translating design concepts into buildings and integrating plans into overall planning.

12. Awareness of responsibilities toward human, social, cultural, urban, architectural, and environmental values, as well as architectural heritage.

13. Adequate knowledge of the means of achieving ecologically sustainable design and environmental conservation and rehabilitation

14. Development of a creative competence in building techniques, founded on a comprehensive understanding of the disciplines and construction methods related to architecture.

15. Adequate knowledge of project financing, project management, and cost control and methods of project delivery.

16. Training in research techniques as an inherent part of architectural learning, for both students and teachers.**

'Maybe it is high time to redesign human-computer interaction. Analysis of what is at play while doodling with a pencil and how it facilitates creative thought, may suggest handier tools for computational thinking while fixing thought patterns into numerous retrievable creative possibilities.

Submitting multiple creative possibilities unique to an individual artisan to computational analysis using artificial intelligence, haptic feedback and augmented reality could escalate creativity instead of hampering it.

If your computing devices could learn associations between your personal touch, typical creative strokes and preferred solutions, it could open ways to collaborate with your ingenuity. Like a painter mixes colours on a palette to provide choices from which to select outcomes during the creative process, computer-aided collaboration at the level of hand-computer interaction could offer suggested solutions in tune with cultivated styles of the artisan. On the other hand, it could suggest alternatives sourced from collected globally submitted trends or artificially computed possibilities.

Computer-aided drawing software offers choices regarding the level of "constraint" with which coordinates chosen on the drawing plane jumps to accept points on pre-determined grids, to align and order drawing objects, or not. A user may choose settings which determine constraint or free-form involved in the drawing process. Nowadays, even PowerPoint highlights arrows between objects with which you could quickly release your grip and allow objects to automatically align with similar sizes or spacing dimensions you chose earlier in your creative process.

If a computer interaction stylus could, if chosen to, slip the motion of your hand into grooves of typical thinking you regularly use, or guide you into new possibilities, exciting experiences may accompany creative processes. How enjoyable are some interactions we have with inanimate objects like bicycles or higher-order mechanical objects like sports cars? If bicycle handle bars, automotive steering wheels and pedals could provide so much satisfaction while negotiating turns and straights, we may have a long way to go in terms of a computer mouse.'

Architects life before autocad

Touch It, Smell It, Feel It: Architecture for the Senses. Metropolis Magazine
Architecture You Can Smell? A Brief History of Multisensory Design
"People go to museums because they want an authentic experience with real things, but their only experience is visual; how is that authentic?"

COMPETITIONS

Why an international UNESCO-UIA competition?
The UIA promotes excellence in architecture, sustainability and cultural diversity
The International Union of Architects has many years (for almost sixty years since 1956) of experience overseeing and assisting in the organization of international competitions in architecture and urban planning & has developed, with UNESCO, framework of regulations for international competitions. Setting as priorities equal treatment, transparency, qualified adjudication, quality and innovation as well as ethics and prestige in the realm of international competitions globally

Sydney Opera House, a UNESCO World Heritage Site, Utzon arch

Jean-Marie Tjibaou Cultural Centre, Nouméa, New Caledonia, Renzo Piano architect (1991)

The National Museum, Seoul, Republic of Korea, Chang-il Kim architect (1995)

Sydney Opera House, Australia, Jørn Utzon architect (1956)

Georges Pompidou Centre in Paris, France, Renzo Piano, Richard Rodgers architects (1971)

La Grande Arche, in La Défense, Paris, France, Johann Otto von Spreckelsen architect (1982)

La Villette Park, in Paris, France, Bernard Tschumi (1982)

Tokyo International Forum, Japan, Rafael Viñoly architect (1989)

François Mitterrand Library in Paris, Dominique Perrault, architect (1989)

Grand Egyptian Museum, in Cairo, Egypt, Heneghan Peng Architects (2002)

Grand Egyptian Museum, in Cairo, Egypt, Heneghan Peng Architects (2002)

Bibliotheca Alexandrina, Egypt, Snøhetta architects (1989)

The Ministry of Foreign Affairs in Riyadh, Saudi Arabia, Henning Larsen architect (1980)

Grande Arche, Défense, Paris, France, Johann Otto von Spreckelsen 1982

Profession

There are valuable data-source for practitioners and academics. As someone who worked both at academia and practice, I can say that it is necessary to *"taking the pulse"* from both but also of the business sector.

None of what we know and **discuss is a panacea**; but taken together and supplemented with more **de facto transparency** & greater **investor and consumer interest**, we might have the outlines of a more sophisticated and comprehensive *"enabling environment"* for responsible business practices and corporate sustainability. It needs some visionary leaders to act to get a "multiplier" effect from the interaction of these different developments (David Grayson April 2015).

It needs some visionary leaders to act to get a *"multiplier" effect* from the interaction of these different developments

Social Responsibility of the Businessman & **Corporate Social Responsibility** (Εταιρικη Κοινωνικη Ευθυνη, ΕΚΕ): …Closed-loop supply chains, climate resilience, sustainable Development Goals (SDGs),..(Αποσπορη Ελ. Κοινωνικες Ηθικες και περιβαλλοντικες τασεις στην ΕΚΕ..)

Good design is good for business, says McKinsey as it unveils new design division

Design is a key driver of business success and is "the only way that companies can stand out from the crowd", report by management consultancy McKinsey &Co

Michelle Obama speaks to A'17 on the impact of design ..
Th. Vonier asked Michel Obama what the quest for better work-life balance from the female perspective, …about her perspective on balancing imbalances and empowering underrepresented groups…
Closing the gender gap
Building a diverse profession.." So many kids don't even know what an architect is," she added. "They don't think about how buildings are built; they don't know anything about developing or planning. …" "You need to go to schools, neighborhoods, communities, any place where underrepresented minorities exist, and start talking. Start small. Make a friend."

Poverty, Refugees, wars , calamities …..

- *heritage cities and the challenges of mass tourism (Baku conference , April 2019*
- *Tourism and the refugees in the Greek islands of (Mitilini island and ......)*
- *Designing for extreme conditions or / and shelter design in emergency: better and comfortable living spaces for post migration and disaster situations for different locations, culture, available & affordable materials…………..*
- *Our efforts could be directed at creating a resource for other studies for the housing needs of people in post disaster situations*

- *Cultural Tourism: a lever for Sustainable Development across Europe (ECTN)*

3D printed underwater city would be made out of found ocean trash

'What would it mean to "water without water" as a form of emancipation from weather, whether there are water cuts, increasing temperatures or recurrent droughts?' AR

The *demolition of pensions, the capitalization of supplementary pensions, the assumption of education, welfare, ….. by NGOs and the "third sector"*, etc., will only be the beginning. Yet these policies have been "scientifically" (ideologically) prepared for years when the spokesmen of cosmopolitan social-liberalism, among others A. Giddens, oU. Beck et al., Suggested that we rebuild our biography, as in the societies of the Third Road (the New Labor and the Social-Liberalism) where the market and social Darwinism are being held "you have to sleep as you have done" (U. Beck). And from behind, the "local intelligentsia" to make conferences and conferences under the aegis and funding of sensible EU institutions. and the US "about what the poet wants to say?"
 To "refine the cone" to discover the subjective meaning of unemployment, poverty, social discourse, as the mass unemployment of one and a half million people can be explained individually. In order to be responsible for unemployment, individual failures and not the social organization of work? In "work to be" or, as Brecht said, "the happy people talk about the hungry."

- *Investors, entrepreneurs, sociologists and politicians will soon have to decode the motives that shape the behavior of Millennials (born between 1980 - 2000) and their own models of expenditure. Their basic characteristics are:*
- *Young, who have learned more about life through the digital world / Internet than reading books.*
- *People with a higher percentage of atheists than any previous generation. • People who seek experience rather than ownership.*
- *A higher percentage of unemployed than their parents at the same age and the majority with lower purchasing power than the previous generation. In any case, they are at the same time potential voters who "lift" or "downsize" governments.*
- *And these are just some of the characteristics attributed to them by both sociologists and researchers. Already, the economy and markets have begun to change based on their behavior and their own spending patterns. Entrepreneurs who have identified this new reality and have responded appropriately or just happened to be in the appropriate industry at the right time are better aware of all the changes in standards, travel, entertainment, technology, online gambling, social media, pay-TV, restaurant chains, air and digital distribution or video and music playback platforms know much higher rates growth of their sales than traditional consumer companies such as automakers or television manufacturers. Even in economies that have not been hit by the crisis as much as Greece, the trend to experience vs property is evident, say firms such as Bank of America Corp, universities such as the University of Warwick in the UK and opinion polls such as Harris Poll.*

The capitalistic way of production. The exploitation. The linear, one-sided, realized time. The city - commodity, the nature – a merchandise, the art – a merchandise, the eros – a commodity, life – a commodity,
The Panopticon as Big Brother in the working place, assembly, habitation. Ghettoisation of the cities ...... the war of classes and conventional war, antidote to systemic crises .....

we may once again see our lives and the collectivity of the city as an artwork under continous modification. we might try to retrieve the public space ...... to replace the centrality with the multitude ... It is possible to unite the uncovered (open) spaces and to write / design new meeting paths…. *(Α. Μαράτος. Ουτοπία κρυμμενη στο σώμα της πόλης, Ιανός, Θεσσαλονίκη 2014, σελ.213-214)*
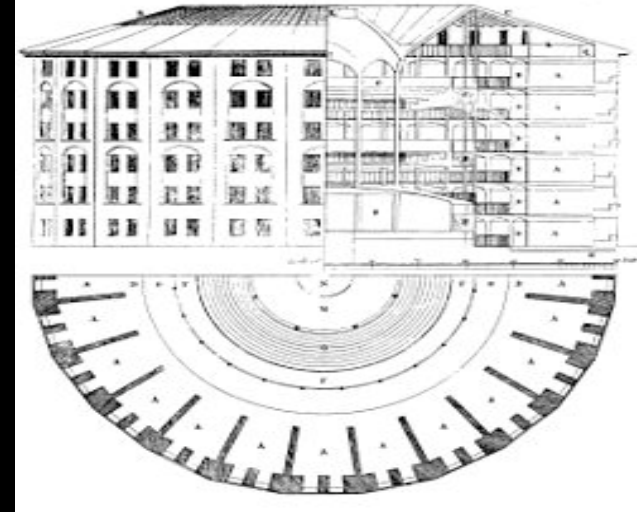
Question: *We can be aware of things but we can not do so much e.g..* How much architects can do to protect the environment?
The materials, the construction techniques, …. Or by designing buildings to last for centuries rather than decades.?!....

Hesiod in Theogony *(poem 8th -7th c BC) is very explicit (116-118):*

Chaos *was the first to arose,*

followed by **Gaia** *(Gaea or Gaia Ancient Greek: Γαῖα, was the personification of the Earth itself)*
("the ever-sure foundation of all")

with the broad-chested
(open arms for a hug),

always the unshakable seat
(the ultimate stability)
of all the immortals…

for everyone a place eternally secure …"
Ο Ησίοδος στη Θεογονία, είναι σαφέστατος… (116-118) «… από όλα πρώτο, λοιπόν, ήταν το Χάος και έπειτα η Γη με την πλατιά αγκάλη, για όλους τόπος αιώνια ασφαλής …»

The agony of architects is, finally, an effort of a continuous creative marriage of art and pragmatism.

But into a collaborative / interdisciplinary process for architects mastering their own projects - or bringing ideas - where does the spark of creativity come from, for whom, for what cost…?

How is it harnessed into the development of great design?

What the architects have to propose for the great challenges (unemployment, natural disasters, wars….) of a world in transition?
World Architecture Day 2018 had the theme

"Architecture for a…… better world"

Can architecture be a healer of the world? !