

Paper for presentation at the EAAE/ARCC 2008 International Conference on Architectural Research
COPENHAGEN 2008 (25 June - 28 June)
ARCHITECTURAL RESEARCH AND THE DIGITAL WORLD
Changes of Paradigms in the basic understanding of Architectural Research

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**To walk like an Egyptian:
Five points on the subject of "Architectural Research and the Digital World".**



1. In the text that first promoted the Conference that motivates this paper (the *EAAE/ARCC 2008 International Conference on Architectural Research*) there was a reference to an article in *Lotus International*, where Bruno Zevi claims that the *digital world represented the greatest change in conditions and the greatest potential revolution in architecture since the Renaissance*.

It is hard not to agree that we are living a great change in conditions for the practice of architecture, and today we can be sure that Zevi didn't see the end of it. But I'm not so sure if we can say that we are living the greatest potential revolution since the Renaissance, although the idea is becoming very fashionable these days: it seems to be tempting to believe that "the digital world" is so important (and will have consequences of similar importance) as the invention of the perspective drawing and the systematization of today's (or should I say yesterday's?) traditional means of presenting a project (plan, section and elevation) in the Renaissance; therefore, it is appealing to consider that new means of representation changed the role of the architect in the society then, and so, likewise, today's revolution in architecture processes of conception, representation and communication will create a new architect, if it hasn't been done already...

I believe that this is an extremist point of view: History shows that *it was during the fifteenth century that architecture came to be understood as a liberal art, and architectural ideas were thereby increasingly conceived as geometrical lineamenti, as bi-dimensional, orthogonal projections*.¹ Means of architectural conception and representation changed in the Renaissance because the role of the architect changed, not the other way around; the idea of architecture as a liberal art is the genesis of the modern architect, that needed new ways of communication: to show his vision to the client, to teach other how to build it, and even to test his ideas by himself; in short, to control the process of conception-communication-construction.

Today, the role of the architect is changing because of the recent evolution in his processes of work and research, not as a response to changes and needs of the present society.

2. In *A Passo di Gambero*, Umberto Eco ironically states that in the digital revolution we are always looking forward but sometimes we are walking backwards: the early Internet took us back from color TV to black and white photo, the Ipod is the new radio (musicians don't like it, because of the poor quality of sound) and, with Cable TV, we are walking backwards from wireless public television.²

We can reinforce this Eco's image of the *Crab Walk* with the belief that, in some of the discourses about the Digital Paradigm, we are repeating the manifestos of the early XX century:³ the period we are living is heroic; the rapid evolution, interlinking and merging of the Machines (television, computer and mobile phone) that altered all paradigms in the latter half of the 20th century is revolutionizing art and life; a great era has begun, there is a new spirit and we can feel the vertigo of the change. It's been almost one hundred years, the machines are not the same, but the fascination for the velocity of change is the same: for today's futurists, a new mobile phone surfing the net, rapidly skipping from site to site, is more beautiful than the Nike of Samothrace.

Since Marconi made it possible to hear the *sound of geography collapsing*⁴ for the first time, in the very beginning of the XX century, we could see a new geographic collapse every once in a while, with the generalization of the use of radio, telephone, automobile, television, satellite broadcasting, mobile phone and the Internet; therefore, every once in a while, theory of architecture presents us with a new version of the "Esprit Nouveau" type of discourse: this is a new era, there is a new spirit, our houses and cities must change, the architect must focus on the new reality. But looking back, it is clear that we all adapt to new conditions, but neither the role of the architect in society nor the way we live in our houses and cities changed so much as it was predicted.

You should also remember that this kind of ideal vision of the future, with great confidence in the unquestionable benefits of progress and technology, was soon questioned with the disasters of the Titanic and the Hindenburg, and the atrocities in World War II (with the atomic bomb being the most paradigmatic). We all learned then that there is a black side in technology; and once again, seven years ago, the attack on the Twin Towers reminded us that changes don't occur only for the better, and that globalization also means global violence...

These are the main reasons I don't understand why today, with the so called "digital revolution",

this old discourse seems to acquire a brand new sparkle:⁵ by now, we should be accustomed to the fact that the most stable feature of the contemporary world is the permanent increase of the velocity of change, and beware of its consequences...

3. So, if we all agree that, as it has been for the last hundred years, today's society is rapidly changing, we should not focus on the evidence of change, but on the understanding of what the main changes are.

Marc Augé defines the present as an era when time is no longer an element of intelligibility, where the plentifulness of information shows the multiplicity of events and increases the velocity of history, where the new paradigms are processes of excess and acceleration of time, space and ego. I believe that this acceleration and excess are related to a process of digitalization of our physical reality: more and more, the life of the common people takes place in "Non-Lieux", spaces that can not be defined or related by identity and history,⁶ as "Generic cities" and "Junk-spaces",⁷ and more and more they seem to choose "living" their dream life through Magazines, Television and Internet (where you can get a "Second Life" in more than one way).

The way we communicate is also changing fast: we now spend more time talking in mobile phones and sending SMS or email messages than actually talking to people face to face (I know I do...). Neil Leach calls it a *narcissistic condition* that defines those that live *locked into their interior worlds*, lost in *strange one-way conversations* on the cellular phone and *increasingly divorced from their immediate surroundings* on the computer. But the opposite model that Leach presents, the *Wallpaper* person*, living in *an enchanted dreamscape, an aestheticised and mythologised dreamscape*,⁸ is still someone that lives by images, in a process of representation of reality. Baudrillard has the most radical vision of this phenomenon of fusion between reality and representation: he claims that we are living a *simulation era* and all of the actual forms of activity tend to a *publicity shape* (and most of them go no farther).⁹

Architecture is a good field of research for this phenomenon: it has acquired a mass medium impact in the last twenty years because everyone is interested in images of architecture. Architects, of course, give representation more and more importance every passing year and there seems to be an increasing tendency to confuse good images with good building. This is a natural trend, because the actual "star system" of the architectural milieu is working like a globalized *École des Beaux-Arts* where the image of the "project rendu" in the various "concours d'émulation" (that now occur all over the world), published in books or magazines and accessible in web sites, is the key element for the possibility of increasing the public impact of the work of an office. The best example is the great publicity achieved by Koolhaas and OMA when *S, M, L, XL* was published: in the 1348 pages of the book we can find a lot of appealing images of competition projects and few realized works.

So, like in the *École des Beaux-Arts* in the XIX century, most of the young architects of the present believe that they can use images to fulfill all their architectural ends. But the perfection of the render is many times hiding a lack of sense of construction and the deficient understanding of the site, the program or the client: it represents too many hours of work, and we all know that, in the architect's activity, time does not grow on trees...

I believe that, today, we need to understand how the Digital World can help us to focus once again on *experiencing architecture*,¹⁰ instead of simply using it for creating projections of the reality...

4. Of course we all agree that computers, mobile phones and the internet are liberation realities, and instruments that change the way you live and work in many ways. So, the present revival of the "Esprit Nouveaux" discourse can make sense, in the disciplinary field of Architecture, if you believe that the role of the digital revolution can be so important today as the introduction of the concept of "space" in architecture¹¹ was in the first half of the XX century: it is opening new paths, different ways of looking at things.

But if you look at the heroic period of modern architecture, you see that this new concept is related to a very large number of phenomena that occur almost simultaneously: new geopolitical conditions, great changes in the means of production and transportation, a revolution in the liberal

arts, a fast modernization of society and new materials and construction techniques. I don't believe that the extent of change in the conditions of our world is comparable, today.

In the first half of the XX century the role of the architect changed, like in the Renaissance, because society needed it to change. But it changed in a way that is the opposite of what is happening now: the architect became less concerned about producing great images of architecture in a *Beaux-Arts* sort of way and more interested in the problems of his society. And, of course, this was just the beginning of a process of trial and error: it was only in the last CIAM reunions that the modern architect was able to free himself from the pre-established models of the Athens Charter and become aware of the reality of his surroundings.

In Portugal, where I come from, the first awakening to the theory of modern architecture was very late, for political and social reasons: the so-called *first generation of the Portuguese modern architecture*,¹² in the late twenties, was only trying to use new materials, techniques and aesthetics in an eclectic way, and soon changed their language to the nationalist style that the fascist regime of Salazar imposed in the late thirties; it was only in 1948, in the first Congress of Portuguese Architects, that the ideas of the modern architecture and urbanism were defended by a new generation, more aware of the principles of the Athens Charter than of the reality of their poor and under-developed country, where the majority of the population still lived in a rural context. The confrontation between the international ideas of the young generation and the will to preserve a national identity by the old one seemed to be an impossible dilemma; but Fernando Távora, in his 1945 text "O Problema da casa Portuguesa", had already pointed the solution: you had to study both the international processes and the local conditions, to achieve an architecture that is both modern and Portuguese.

It was only ten years later that this "third way" had conditions to be achieved, with the *Inquiry on the Portuguese Popular Architecture*, that took place between 1955 and 1961; it was the first great moment of *Architectural Research* in the history of the twentieth century in Portugal, and the final report, published in 1961,¹³ was one of the most influential documents of the century for Portuguese architects, mainly because of the impact of the images it contained, in which all the representation techniques available at the time were used: photographs, drawings, maps, typology tables, etc. This book proposed a return to the roots of popular architecture, presenting a rural society that was already in the process of disappearing: it soon became a virtual reality. But, for the ones that were involved in the process, it was a real and unforgettable experience with practical results in architectural design: it showed that traditional architecture was rational and functional, and aimed to answer the needs of their promoters in an economic way, just like modern architecture. If you see the work of Fernando Távora, before 1955 and after, you can clearly understand the influence of the *Inquiry*.¹⁴

The second great moment of *Architectural Research* in the history of Portuguese architecture was catalyzed by the revolution of 1974, which ended the 48 years of dictatorial government. Then, in the 25th of April, everything changed: the society became more open and the population lost their fear. Everybody went to the streets to manifest its needs and concerns, and it became clear that the need for housing was one of the most serious problems, for the lower classes. Nuno Portas, Secretary of State of Housing and Urbanism, created the S.A.A.L. program (Mobile Service of Local Support) that mobilized architects throughout the country, projecting houses for the poor in a process of direct dialogue with the final client, trying to learn from popular culture, once again.¹⁵

The SAAL Process was, like the *Inquiry*, a paradigmatic moment of identity in the School of Oporto. Everybody was involved in the process, and the School was transformed in a place of production and practical research. It was a real and unique experience: to confront the scale of the city and the scale of the needs with the will to approach every project as a unique solution for a specific client.

It didn't last, and in 1977 the politics of economic housing were back to more traditional programs; like the *Inquiry*, it was an unforgettable experience for the few that lived it, and an Iconic moment for the others, this time with outstanding international impact. But if this was the first moment when the European milieu noticed the Oporto School and the name of Álvaro Siza Vieira, the image of the very few projects that were published then proposed a misleading conception of what was

the SAAL, the Oporto School, and Siza's work...¹⁶

I'm referring to these two paradigmatic references in the history of Portuguese Architecture since they were very important as an attempt to define it as a product of the mixture between global society and local individuality; but also because they can both be seen as a response to society needs, resulting simultaneously in a real experience, that defined the identity of our architecture in an epistemological way and as a creation of a virtual reality, that produced "styles", and originated trends that Portuguese architects explored to their limits.

This simple fact of the creation of internal references is relevant to our culture: all through the long history of our nation, Portuguese Architecture has always been the result of a combination of imported cultural values; our Architectural Research has never been a vanguard exercise or a completely original approach, but its endemic inertia favors changes in the way it applies imported models or systems, in the way it adapts them to the Portuguese reality: this is the main feature of our specificity.¹⁷

But in today's globalized world, this condition has changed: not only all of the western countries live in a combination of foreign cultural values (and so this mixture can no longer be considered a unique feature of Portuguese specificity), but also our reality is now no longer much different from the other European Countries: Portugal has evolved from a rural society to an urban and modern culture. Facing the Digital World, Portuguese Architecture finally has the conditions to surpass our endemic inertia in the modernization of the processes of Research, Conception, Representation and Construction, but is lacking the response to what has been, since the beginning of the XX century, a permanent obsession in our Architectural Research: the knowledge of a Portuguese specificity.

Aware of this new condition, the most famous Portuguese architects have learned to place themselves in the globalised market, playing their role in the new *École des Beaux-Arts*, producing great images without losing the real qualities of their work, as architectonic facts.

Alvaro Siza Vieira has made a career emphasizing the Portuguese character of his Architecture, mixing recognizable international references, adapting imported theories, models or systems to his critical view of the reality of the sites; the images of his work are often misleading, and sometimes tend to a *publicity shape*, but the real qualities of his work appear when you visit the building: most of his work has the *quality without a name which is the root criterion of life and spirit in a building*.¹⁸

Eduardo Souto Moura has developed a different path. The images of his work are very close to the reality of the buildings, so you are seldom surprised when you visit the actual site; the paradox in his work is that the construction itself that can be appealing as a architectonic fact and as a *simulacrum* of reality,¹⁹ a projection of an ideal world. Mainly in his houses, I see the materialization of a *publicity shape*, created to appeal to the *Wallpaper* person*...

Searching for a Portuguese specificity in the work of their masters, the new generations try to follow their footsteps, with more or less understanding of the meaning of the images they create. But I believe we are lacking a new paradigmatic moment in architectural research, to offer young Portuguese architects a new confrontation with reality...

5. "Walk like an Egyptian" is the title of a pop song, which I'm sure you all know...

According to the Wikipedia, composer Liam Sternberg wrote it after seeing a group of people on a ferryboat, walking awkwardly to keep their balance, which reminded him of figures in Ancient Egyptian reliefs. The song was recorded in 1986, by a pop group named Bangles, whose success was mostly based on the appealing image of its female members; it was regarded as a joke by the band, but became a hit and was one of the reasons why the album *Different Light* was the most successful record of the group. "Walk like an Egyptian" is still a popular song today, and the video is often showed in VH1 and one of the most visited in the "YouTube".

Of course, everybody knows that ancient Egyptians didn't walk like that, but this perception, which was already reflected in other items of popular culture, acquired an accepted meaning after 1986: *walking like an Egyptian* is to make a fool of yourself moving sideways, in a strange and funny manner that looks like you're dancing on the sand.

I used the name of this song in the title of my paper for two reasons:

First, because it is a good example of the processes of information in the digital world: it starts with

a misleading popular notion, based on an ironic and erroneous interpretation of images, intentionally disregarding the specific context and representation techniques involved in the media of representation; then, someone writes a song about an everyday episode that has nothing to do with the original subject using that misleading notion with a different ironic approach; then, a pop group (whose success is mostly iconographic) decides to use it as a joke and explore the theme in the video, appearing in such a pose and showing normal people doing what they call "the sand dance".²⁰

As a result of this process, the iconic popular notion was transformed into a second-hand reference and the original irony became a sarcasm disguised as a pantomime: most people like the song because it showed them a new way of looking silly when they went dancing in a disco club, while the Bangles laughed all the way to the bank. Today, if you say "Walk like an Egyptian", the memory of ancient Egyptians only comes to mind after you think about this "sand dance": the song and the video appropriated the notion and the new meaning was globalised in the media since 1986, and is still very strong today.

In short, I'm using this example to say that the misleading of the media of representation started five thousand years ago but is much stronger today: with the processes of handling information of the digital world, you can very easily lose track of time, meaning and judgment.

The second reason why I have chosen this title is the belief that today, in my country, it is very easy for those who are involved in *Architectural Research* to be either looking forward while walking backwards, or looking backwards while trying to walk forward.

If you focus on the velocity of change, it is tempting to look at the digital world as a paradigm in itself: as an end, not as a means. You end up using all of your energy and knowledge in the process of finding new uses for all the brand new digital technology and to keep up with all the advances in the field; in this process of permanent learning, you abandon the one-year-old devices and software that you didn't have time to explore to the limits of its potential and start exploring the brand new ones, again and again, disregarding all of the disciplinary knowledge in the architectural field that is not directly influenced by the evolution of digital technology.

On the other hand, if you focus on the traditional instruments of *Architectural Research* you risk refusing to see how technology can help achieve a better understanding of the architecture of the past and the necessities of the present and immediate future. This is still a tempting path, in the School of Oporto, where our traditional endemic inertia is treasured as an identity attribute, the only thing that still distinguishes us from the rest of the world.

So, I believe that Portuguese architects can, once again, search for a third way: we should try to *walk like an Egyptian*, looking around, dancing on the sand of digital technology without the fear of looking silly, moving sideways between global and local, technology and tradition, reality and simulacrum, images and architectonic facts.

¹ **Pérez-Gómez**, Alberto, "The revelation of order. Perspective and architectural representation" in **Rattenbury**, Kester (Ed.), *This is not architecture*, New York, Routledge, 2002 (p.6).

² **Eco**, Umberto, *A Passo di Gambero*, Milan, Bompiani, 2006 (p. 6-7 of the Portuguese edition: *A Passo de Caranguejo*, Difel, 2007); I can add to this Eco's discourse that LP records in vinyl are fashionable once again: the last electronic device that I have purchased, early this year, was a record player...

³ Among many others, I suggest: **Marinetti**, *Le Futurisme*, Paris, 1911; **Corbusier/Ozenfant**, "Domaine de l'Esprit Nouveau", *L'Esprit Nouveau*, n° 1, Paris, 1920; **Corbusier**, *Vers une Architecture*, Ed. Crés, 1923.

⁴ **FAT**, "Everything counts in large amounts (The sound of geography collapsing)" in **Rattenbury**, Kester (Ed.), *This is not architecture*, New York, Routledge, 2002 (p.6).

⁵ See, for example: **Garreau**, Joel, *Edge City*, New York, Anchor Books, 1988; **Ascher**, François, *Metapolis ou l'avenir des villes*, Paris, Odile Jacob, 1995; **Mitchell**, William, *E-topia: "Urban life, Jim; but not as we know it"*, Massachusetts, M.I.T., 1999.

⁶ **Augé**, Marc, *Non-Lieux*, Éditions du Seuil, 1992.

⁷ **Koolhaas**, Rem, "Generic cities" in **Koolhaas**, Rem; **Mau**, Bruce, *S, M, L, XL*, New York, Monacelli Press, 1995; **Koolhaas**, Rem, "Junk-spaces" in **Koolhaas/AMO/OMA/ &&&**, *Content*, Köln, Taschen, 2004.

⁸ **Leach**, Neil, "Wallpaper* person. Notes on the behaviour of a new species" in **Rattenbury**, Kester (Ed.), *This is not architecture*, New York, Routledge, 2002 (p. 232-233).

⁹ **Baudrillard**, Jean, *Simulacres et simulation*, Éditions Gallée, 1981.

¹⁰ I am referring directly to the book of Steen Eiler Rasmussen (*Experiencing Architecture*, Massachusetts Institute of Technology, 1986) but there are similar ideas in the work of Gordon Cullen (*Townscape*, Architectural Press, 1961), Christopher Alexander (*The Timeless way of Building*, New York, Oxford University Press, 1979), Herman Hertzberger (*Lessons for students in architecture*, 010 Publishers, Rotterdam, 1991) and many others.

¹¹ See the work of Siegfried Giedion (*Space, Time and Architecture*, 1941) and Bruno Zevi (*Saper vedere l'architettura*, 1949 and *Storia dell'architettura moderna*, 1950).

¹² **Portas**, Nuno, "A Evolução da Arquitectura Moderna em Portugal: uma interpretação", chapter XV of the portuguese edition of **Zevi**, Bruno, *Storia dell'architettura moderna (História da arquitectura moderna*, Lisboa, Ed. Arcádia, 1970).

¹³ **S. N. A.**, *Arquitectura Popular em Portugal*, Lisboa, Sindicato Nacional dos Arquitectos, 1961.

¹⁴ Fernando Távora (1923 – 2005) was one of the architects that worked in the *Inquiry*, as the responsible for the research in the region of Minho, Douro Litoral and Beira Litoral. He once said "I am Portuguese Architecture"; it was ironic, but if you think of the fifties it was also very much true. You can see his work in **Esposito**, António; **Leoni**, Giovanni, *Fernando Távora, opera completa*, Milano, Electa, 2005.

¹⁵ About the SAAL process, you can see various articles published in the European architectural press in 1975 and 1976: *CAU Construcción Arquitectura Urbanismo* n° 30; *Citá Classe* n° 4; *Lotus International* n° 13; *L'Architecture d'Aujourd'hui* n° 185; *Casabella* n° 419.

If you can read Portuguese, see also **Portas**, Nuno, "O Processo SAAL: entre o Estado e o Poder Local" in Revista de Crítica de Ciências Sociais, n° 18/19/20, Fev. 1986; **Portas**, Nuno, "O Serviço de Apoio Ambulatório Local / SAAL – como processo autogestionário no serviço público" in *Cadernos de Intervenção Social*, n° 2, Set. 1979; **Costa**, Alexandre Alves, "A Ilha Proletária como Elemento Base do Tecido Urbano" in *JA – Jornal Arquitectos*, n° 204, Jan./Fev. 2002; **Costa**, Alexandre Alves, "O Elogio da Loucura, 1974-1976", in *Textos Dados*, Coimbra, e|d|arq, DA FCTUC, 2007; **Bandeirinha**, José António "Processo SAAL, o direito à arquitectura" in **Figueira**, Jorge (et. al.), *Porto 1901 / 2001...*; **Bandeirinha**, José António, *O Processo SAAL e a Arquitectura no 25 de Abril de 1974*, Coimbra, e|d|arq, 2007.

¹⁶ Paulo Varela Gomes says that Siza flies to Berlim in the winds of an equivocation ("Arquitectura, os últimos vinte e cinco anos" in **Pereira**, Paulo, *História da Arte Portuguesa*, 3º volume, Lisboa, Círculo dos Leitores, 1995, p. 565) because the SAAL process brought him the label of "specialist in social housing" that Siza himself recalls and rejects (see **Cruz**, Valdemar, *Retratos de Siza*, Porto, Campo das Letras, 2005, p. 101).

¹⁷ **Costa**, Alexandre Alves, "Notes pour une caractérisation de l'Architecture Portugaise" in *Architectures à Porto*, Liège, Pierre Mardaga, 1987.

¹⁸ **Alexander**, Christopher, *The Timeless way of Building*, New York, Oxford University Press, 1979 (p. ix-x): "(...) There is a central quality which is the root criterion of life and spirit in a man, a town, a building, or a wilderness. This quality is objective and precise, but it cannot be named (...) when a building has this fire, then it becomes a part of nature (...) its parts are governed by the endless play of repetition and variety created in the presence of the fact that all things pass."

¹⁹ In the Caminha House (1991-98), for example, Souto Moura proposed a new modulation of the site, using the same rocks of the existent walls: as a result of this profound earthwork (that cost more than the construction of the house) the site looks like it was not touched by the intervention (see the project and Souto Moura coments in **ESPOSITO**, António, **LEONI**, Giovanni, *Eduardo Souto Moura*, Barcelona, Ed. Gustavo Gili, 2003).

²⁰ "All the old paintings on the tombs, they do the sand dance don't you know" are the first verses of the song.