## WHO KILLED ARCHITECTURE

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Architecture as a discourse and as an epochal, cultural indicator has always fluctuated in quality, influence and innovation. As far back as recorded history allows us to go, we have seen the rise and fall of great eras, heavily influenced by the instrumentation and monumentality of Architecture; whether it is the great pyramids and mastabas of the Mesopotamians and Ancient Egyptians, the ingenious temples of the Greek, the colossal domes of the Romans and Byzantine, the intricate detailing of Islamic Architecture, the pointed arches and flying buttresses of Gothic Architecture, the rejuvenation of the discipline during the Renaissance and Baroque period, or more recently the reimplementation of fundamental values during the early 20<sup>th</sup> century Modernist era. In between these great epochs, humanity has also witnessed generations of conservative, static engagement with the discourse, for example; the Romanesque era which was an awkward and unnecessary effort to revive Roman Architecture, the Neoclassical typologies which failed and continue to fail today, the Postmodernist era which criticized Modernism but failed to replace it as a sustainable solution, and lastly (and most likely the least) Contemporary Architecture today which is not only stagnant but lacks convergence and definition, both as a style and as a theory.

Creativity has always exceeded productive capacity, all through history humans have always been too innovative for the scientific development of the time, which pushed the discourse further as it forced engineers to meet the needs of the creative. In the 21<sup>st</sup> century, for the first time in history, technology has surpassed the imaginative capacity of designers – not due to the brain's potential, but as a result of the specialization of métiers. Heavily influenced by the industrial revolution, universities and schools have since encouraged people to only focus on one career choice. During the Renaissance era, artists were just that, artists. They were multidisciplinary and explored all different aspects of art; Michelangelo was a painter, sculptor, engineer, poet and an architect; Leonardo da Vinci was a painter, sculptor, architect, engineer, musician, poet, astronomer, historian, mathematician, anatomist, geologist and scientist – this was common in that era. In 2015 we could not even imagine the synergy between Norman Foster and Damien Hirst - they are now two totally separate worlds. The last time we saw real implementation of art into Architecture was before the Neoclassical eras, since then there has been a separation and almost a segregation between the 'art world' and the 'science world' which coincided with the introduction of the formal education system.

A word that is now commonly used (or overused) as justification for a range of design preferences is 'Sustainability'. Global warming is a fact – at certain times in the earth's vast history, there has been noted increase in temperature; for example, 1911-1941 and 1964-1998, all other periods in the past century have actually witnessed global cooling. There is a lot of skepticism around the whole notion of global warming and especially the fact that humans are responsible for it; firstly, most of the graphs that we are shown with the temperature increase in the last century do not show the absolute temperature but rather the anomaly, which is "the difference from an average, or baseline, temperature" (NCDC, 2015, pa. 1). Larry Bell, an endowed professor at the University of Houston, states that "it's also worth remembering that about half of all estimated warming since 1900 occurred prior

to the mid-1940s despite continuously rising CO2 levels. Also consider that, even today, about 97% of all current atmospheric CO2 derives from natural sources." (2013, pa. 10). There is no certainty to the cause of global warming, neither is there certainty invoking that what we have witnessed in the last century is abnormal in the grand scheme of the atmospheric data. Some conspiracy theorist would even go as far as to say it was a ploy to create a multibillion dollar industry. Sustainability in Architecture is nothing new, the only change/development we are witnessing is in its implementation and the amount of attention it is receiving. Architects have always been known to design vernacular compositions that address problems, both contextual and contemporary (to the time). Marcus Vitruvius Pollio, a 1st century BC Roman architect, author, and engineer said, in his famous treatise 'Ten Books on Architecture', that a structure must encapsulate three qualities "firmitas, utilitas, venustas" (Vitruvius, ca. 15BC, ch. 3) translated in English by Morris Hicky Morgan, PH.D., LL.D. the book reads "All these must be built with due reference to durability, convenience, and beauty."(1914, pg. 17) in this case the word for 'utilitas' used is 'convenience' but it is also interchangeable with 'comfort'; which is the bases for late 20<sup>th</sup> century sustainable design pertaining to thermal, aural, olfactoral, tactile, and visual comfort, inevitably resulting in a building that is 'ecofriendly'. Interestingly enough, Vitruvius intended for these three qualities to be underlying principles that each design considers as a unified body. "From the Enlightenment onwards, however, these different aspects of design have become increasingly divorced from one another, with 'firmness' and 'commodity' usually approximated to structure and comfort respectively, and defined in technical terms; and 'delight' to aesthetics, as a matter of what can be drawn or conveyed visually." (Steane & Steemers, 2004, pg. 5)

Nonetheless, architects need to understand their role in society, which differs between regions. This is not to be conflated with radical Political Architecture or mere shallow political correctness but in fact every human being has a social responsibility and accountability, but what is often misunderstood is the degree of influence (or lack thereof) architects currently have. In less economically developed countries, they (as well as other professionals like lawyers and doctors) are of high social standing in the pecking order or 'pillars of society' so the relationship with the client is of a more balanced dynamic to where they can impose and dictate certain ideologies. In more economically developed countries however the client bodies are especially more sophisticated and the architects are expected to merely support the client's agenda and transform it into a visual representation, so here the social aspect of the project is attributed to the client and the architect's role is in the creative spatial organization and formal articulation. Architecture should be environmentally friendly, it should consider short term and long term effects on the ecosystem and it's inhabitants. But this is not our priority as a discipline, it is no more important than the aesthetic qualities of a building or its functional parameters.

Social construct and Architecture have always had a seductive relationship of a 'push and pull' nature through the course of history. Ancient Egyptians were very spiritual and had a strong belief in the afterlife, it is no coincidence that they built pyramids – formed with triangles, the most stable shape known to man, to represent an eternal structure; a convergence at the apex to delineate a direct relationship with their various gods; monumental scales to remind the population of their miniscule proportion compared to the great rulers and deities. The Romans, in contrast, did not only influence Architecture, but used it to influence a large

portion of the world, with their basilicas, amphitheaters, forums, temples, villas, and even infrastructure; Europe, northern Africa and the Middle East were subsequently subdued and became a part of what history now calls the 'Great Roman Empire'. This has happened throughout history, and by no means a mistake, the built environment has always been a direct result of political control and monetary influence. In the 21<sup>st</sup> century it is no different, the wealthiest and most powerful countries in the world have the 'best architecture' and the less wealthy countries are still stuck designing buildings from the hegemonic Modernist era. The oversaturation of métiers is a direct precursor for what will be known as the 'superficial generation'- shallow, with short concentration spans, and a lust for aesthetics, 2015 is the embodiment of Architectural abyss. In relation to the notion of Architecture and social construct, it is understandable that almost \$100 million can be spent on an abomination like Frank Gehry's Guggenheim Museum in Bilboa, or over \$2 billion for the less than mediocre Princess Tower in Dubai, or in fact all the other catastrophes displayed along Sheikh Zayed Road. Governments and other clients/institutions usually have agendas like tourism, attraction or other monetarily driven raison d'etre, for monuments of today and that reflects in the brief given to the architects. I fear that the next millennium will look back at this one as a superficial, shallow façade.

There are of course architects that believe this generation has birthed and nurtured great infrastructure. They believe we have amassed a portfolio that can compete with the best works of architecture in history, they cite buildings like the Burj Khalifa, claiming 'we have built the tallest man made structure ever' or the Flevopolder, saying 'we have built the largest artificial island ever', or even the Emirates Palace, declaring 'we have built the most expensive hotel ever'. Another 'great feat' they cling on to is the sustainable construction that has been developed and the energy performance we have been able to reach, with buildings like the Shanghai Tower in China, the World Trade Center in Bahrain, or Masdar City in Abu Dhabi. According to a few architects, this makes us the greatest generation; better than the Greek, better than the Byzantine, better than the Renaissance.

The sad truth of the matter is that non of the accomplishments proclaimed above are purely architectural/design accomplishments. They are all technologically embedded – we are able to reach great heights with skyscrapers due to the invention of the elevator and the structural integrity of steel and steel-reinforced concrete. We can build artificial islands of reclaimed land because of the large machinery and specialized ships we've invented and the precise calculations and predictions of factors like water velocity and impact force, and also the extensive data that has been collected over decades by marine researchers. We build expensive hotels because we have still not evolved from our Capitalist, monetary driven mentality and prodigious bragging; we still don't understand where true value lies, we are still as primitive as the animal that is attracted to the shiniest object. Shanghai Tower and the Bahrain World Trade Centre are both failed attempts at true Sustainable Architecture, they have replicated the same exact typology and building envelope of high rise building that has been used since the 50s, and have just equipped it with the latest technology, instead of maximizing the potential of passive design strategies into the buildings form and function, for example perforation, porosity, atriums, and (passive) sun responsive facades. Bernard Rudofsky was right with the title (and in fact content) of his work 'Architecture Without Architects' because we are currently witnessing it happen, we need to step out of the shadow of the Modernist era or we might cease to exist as a discipline.

Parametricism. That is the answer, we have been looking and searching and developing and failing, but that is the answer. The great new epochal style after Modernism. The greatest era since the Renaissance. We are going through a dark period, which might be necessary for us to wake up, it might be necessary for a global convergence within the discourse, and we can already see it happening. Starting as early as the 70s with the experimental work of Frei Otto, in a more industrial form, and pioneering in the 90s in Avant-Garde Architecture, we can now see Parametricism mature into a respectable style, led by a virtuoso and theoretical genius, Patrik Schumacher. It might have been developed, and pioneered in the 90s, in terms of digital animation (as a theory mostly) but it only fully emerged and became the dominant form of Avant-Garde Architecture in recent years due to the development of advanced parametric design systems. It does not negate factoring users or creating art that is livable, quite the opposite. It goes beyond that and forces architects to engage with the complexities of forms, inter-articulation of subsystems, parametric accentuation, figuration, responsiveness and urbanism, to name a few. Modernism was the last great style, followed by transitional episodes like Postmodernism and Deconstructivism, Parametricism is the great new style. Allowing architects to design, with minimal compromise, for a post-fordist society of multilayered complexities with polycentric urban and architectural fields. All the top Schools/Universities/Institutes of Architecture are now armed with this knowledge and tool. "Architecture finds itself at the mid-point of an ongoing cycle of innovative adaptation retooling the discipline and adapting the architectural and urban environment to the socioeconomic era of post-fordism. The mass society that was characterized by a single, nearly universal consumption standard has evolved into the heterogeneous society of the multitude." (Schumacher, 2008, pa. 2).

We did it. We killed Architecture. We humans, and we architects. But there is a way to resurrect it, we need to find the balance between the fundamental principles and contemporary technological advancement and synergize them in a way that will see us through the darkness into the light. We need the Architecture Revival Kit.

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