Of all aspects of architecture what mystifies most the layman is the power of architects as ‘creators’, their apparent capability to invent, conceive and construct ‘out of nothing’ unprecedented daring forms.

In the West, the idea of ‘creators’, defined as those who can ‘make things out of nothing’, is very old. It had and has far reaching influences, not always benign, that are still felt today in many disciplines related to the production of the human-made environment including architecture and architectural education. In the broad sense of the term, (that comprised poets but also the makers of machines), the definition of ‘creator’, one who ‘makes something out of nothing’, goes as far back as Plato’s Symposium (II,201,c), while the specific idea of the architect as ‘creator’, emerged later, during the late Middle Ages and the Renaissance, when the architect was called demi-god, ‘come semidei’ – to quote Cesare Cesariano, the Renaissance military architect and theoretician of architecture – “Wittkower, R., 1962. Architectural Principles in the Age of Humanism, London Lefaivre, Liane and Alexandre Tzonis, 2004, Emergence of Modern Architecture: A Documentary History, from 1000 to 1800, London” and his gift to give birth to new forms was claimed to be miraculous.

Accordingly, the belief in the wondrous nature of architects ‘creating’ ‘out of nothing’ ‘microcosms’ was so strong that people gathered to watch the famous ‘inspired’ seventeenth century Italian architect and sculptor Cavalier Bernini designing in public, supposed to be following divine instructions.

The creed was carried on up into our days, not only in the West but also globally, though it was deprived if its theological ramifications. The contemporary belief stresses even more the ingenious abilities of, what came to be known since the 1980s, the ‘star’ architect as ‘creator’. While the medieval belief had the ‘architect creator’ creating communicating directly with God, the modern ‘man in the street’ is under the impression that the architect acts autonomously, invents, brings out into his work his, not yet seen before, private imaginations.

However, the contemporary scientific view contrasts with this view of the layman. For scientists today, the general idea of creativity as the ability to ‘make something new out of nothing’ as well as the specific notion of the quasi-god ‘creative’ architect are considered superstitions, confusing, and potentially, even harmful, as many superstitions are. They are seen as misdirecting the understanding of the nature of human creativity, a most important cognitive quality of human beings, and in the particular case of architecture, obscuring the comprehension by non-experts of how architects work in reality, their epistemological, ideological, and moral presuppositions, and how they influence the social and physical quality of the environment and of everyday life.

Oddly enough, contemporary press, not only the popular but also the professional one, tends to prolong the enduring myth of imaginary, mystical creativity.

“However, in China newspapers such as China Daily and People’s Daily have occasionally published articles critical of
the recent architectural practices that architectural editors have been often been silent about.

Lefaivre, Liane and Alexander Tzonis, ‘Region Making’, Journal of New Arts, 2013, China Academy of Art, Hangzhou:

Paradoxically, so does architectural education in many places of the world. And the results are not so positive neither for the accountability of the profession nor for society.

Even more puzzling is the fact that little attention was paid by the architectural press and by architectural educators to studies carried out by historians and anthropologists who, since the beginning of the twentieth century, investigated, wrote, and demystified the political function of the architect as ‘creator semi-god’ in archaic and later in absolutist societies which they identified having been to a great extend the legitimization of the supposed God-given rights of the despotic ruler to rule. Why did this happen?

“Lefaivre, Liane and Alexandre Tzonis, 2004, ibid”.

Why this long term apparent continuity between the archaic belief in a creator ‘semi-god’ architect and the one in the ‘creative star’ architect of our time? In both cases, the traditional religious and the current secular, creativity was perceived as something arcane, beyond rational scrutiny, demanding veneration by the public and denying public inquiry and analysis. Accordingly, a popular contemporary view, expressed even in Hollywood films, has it that to enable creativity be expressed, the creator, being any producer of the human-made world including the architect, has to be ‘free’. Any restriction, any outside interference with the creative impulses of the designer results in obstruction and destruction of birth of the new. Corollary of this view is that the educator of architecture has to liberate the student from outside or self-imposed shackles, unleash his creative force of inspiration to express itself. Thus the student who succeeds to demonstrate his ‘freedom’, that is the one who without any set objective to satisfy produces forms, several times computer generated, that appear new, uninhibited, and arcane, is the one rewarded and not the one who responded, perhaps tediously, cautiously, and silently, to real conditions, wants, and aspirations of a given context and region.

Why this archaic way of thinking continues to exist in our time within a very different way of life, a different society and economy, and a different kind of architecture? Why present architectural journalism and architectural education has so often adopted this anachronistic worship of creativity as ‘making something out of nothing’, while not only snubbing historical, anthropological, and sociological studies that ‘deconstructed’ such arcane views about creativity but also overlooking recent cognitive science research on human creativity?

Perhaps, the key to understand this puzzle is not so much by inquiring into the mentality of architectural journalists, critics, and educators but by looking into the recent events that shaped and shape the way our human made world evolves.

Perhaps, the apparent continuity of the archaic beliefs about creativity and the mystical and flattering identity of the architect as ‘semi-god’, that helped in the past legitimize the claim of the despotic ruler to rule, making his ruling appear God-given, today, as the financial and legal role of the public sector and the state in designing, planning, and producing the human-made environment is shrinking all over the world, the ‘semi-god’ architect translated as ‘star-architect’, help to legitimizing the rights of private development to promote unreal needs and sustain the rightfulness of fabricated values dictated by the market economy inciting consumption, and to conceive and construct buildings and even parts of cities, beyond public scrutiny.

It does not take much to show that as the archaic semi-god creative architect did not deal with the social and environmental quality of his environment (not to be blamed since it would have been absurdly anachronistic if he did so) so the contemporary ‘star-creative-architect’ suppresses such issues.

Thus, even the recent cognitive science studies that focused empirically on the phenomenon of human creativity looking into the way mathematicians and engineers, chess players and other ‘miraculous’ champions ‘create’ new solutions to tackle unprecedented hard problems were ignored. The studies demonstrated that creativity is far from making something out of nothing a privilege of elite ‘semi-gods’. It is a human faculty that involves cognitive processes - visual thinking and visual analogy a very important component of these processes - mobilizing memory, experience, and rules derived out of practice, recruiting, and recombining precedent cases, reinterpreting and reusing previous findings. Last but not least analyzing the constraints, potentials, and unique characteristics of a given situation, matching them to knowledge constructed in time.

Our own research on creative design and the role of precedents using archival material investigated two cases of most important designers in history: Leonardo da Vinci and his invention of the triangular bastion, possibly, the most significant innovation in military architecture. Leonardo made extensive use of precedent theories of vision and methods of shadow drawing which he recombined into a new system of representation of ballistic orbits optimizing defenses. Ironically, while Leonardo constructed a new method to confront a new problem by relying on empirical evidence and by analogy to preexisting theories bringing together different domains of knowledge, he was been very often referred to in popular writings as an emblematic designer-semi-god making new things out of nothing.


Another celebrated case we investigated is that of Le Corbusier, the most important ‘creative mind’ in architecture of our time. Although most writings about him stress the inspirational, irrational, elite side of his design, in reality Le Corbusier’s implied hard conscious intellectual work, what he called, ‘patient research’, compiling a memory thesaurus of precedents from a very early age and developing a skill to recruit and recombine them if and when needed to confront the challenges of an evolving increasingly dynamic and perilous world.

Taking into consideration such studies could have helped improve the capability of students to be really creative, that is, like experts, proceed systematically, analyze context and situations, objects and regions, detect real constraints and explore actual potentials, investigate alternatives, recall and mine precedents, and in this way find answers to questions that had not been answered before. Clearly recalling precedents in this sense has nothing to do with sterile ‘design by rote’ chained to the past formulas and stereotypes that many freedom promoters educators are so much afraid, and correctly so. On the contrary it invites the making of new things critically, out of the thesaurus of experience which is how culture constructed and bloomed through history.

By contrast, the current cult of creativity as an elite process in architecture has been obstructing real creativity discouraging many students of architecture to reflect and rationally for the fear that they will damage their ‘creative instinct’. Even worse, they were often encouraged to drop out of the study of architecture if they failed to produce early results demonstrating their ability to ‘create’ forms spontaneously ‘out of nothing’, whereas patient instruction would have helped them overcome fears, uncertainties, and hesitations that inhibit in many people critical thinking, while the same time releasing the student’s real creative promise available in every human being.

What architectural education needs under the present circumstances of unparalleled, ecological and socioeconomic, environmental crisis is not boost of freewheeling narcissistic ‘freedom’ from constraints faking newness, but real creativity, capturing and embracing ecological and human reality through method, knowledge, and public responsibility.

[The references to the state of architectural education in many schools around the world (but certainly not all) used material from observations made during the last almost fifty years of my academic life. However, a most important source for this article has been following the case of a recent master’s diploma at TU Delft. I am deeply indebted to the generous contribution by the student supplying information and critical comments.]

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Prof. Tzonis has been General Editor of the Penguin Books series The Man-made Environment, and of the Garland Architectural Archives, one of the biggest architectural publications, which has published the complete archives: of Le Corbusier (32 volumes), L. Kahn (7 volumes), a Choice Outstanding Academic Book, Mies van der Rohe (18 volumes), W. Gropius (4 volumes), Schindler (4 volumes), H. Sauvage (2 volumes). American Institute of Architects Book Award, Alvar Aalto (12 volumes).

In 1975 he has been Director of the research project Système conceptuels de l’Architecture en France de 1650 à 1800, the Genesis of Contemporary Conceptual Systems in Architecture, between 1650 and 1800, sponsored by C.O.R.D.A. - C.N.R.S. / France, and Harvard University.

Early in his career, he worked in the theatre and the movies and was art director of the film Never on Sunday. In 1990 he published his first novel, a murder story about problem solving, computation and morality, Hermes and the Golden Thinking Machine (MIT/Bradford Press).

He has headed the organisation of several major international conferences among them: The German Werkbund, 12 April 1980 (Harvard University), Automation Based Creative Design Education, May 1992 (a 150th Anniversary of TU Delft Conference), Value Learning In a Changing World (1993, 27-29 October) and The Spiritual in Architecture, a Symposium dedicated to the Holocaust Memorial in Berlin, April 12, 2000, both hosted by Her Majesty Queen Beatrix at the Royal Palace in Amsterdam, under the auspices of the Royal Palace Foundation. The Mediterranean Landscape, Representation, Designs and Identity (Van Leer Foundation, Mishkenot Sha’ananim), December 1997, Jerusalem, The Mediterranean City (Mishkenot Sha’ananim), May 2002, Jerusalem.