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Architectural education: The core and the local

Alexander Tzonis

Department of Architecture, University of Technology Delft, Delft BL 2628, The Netherlands

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Perhaps, the most important challenge that architectural education faces today, perhaps even more serious than responding to the technological development of computer based design and drafting, is the recognition of the fact that next to the ‘global’, ‘universal’ ‘knowledge’ of architecture, - or ‘core’ as it is often called - there is ‘local’ knowledge that corresponds to each of the many regions of the world and that this ‘local’, ‘regional’ knowledge has to be taken into account in architectural practice and in architectural education.


Both Western classical tradition of architecture and the so called Modern Functionalist movement, even if they had opposed each other in many fundamental issues, they both shared the belief that there was a single, ‘universal’ architecture and a single ‘architectural knowledge’. Accordingly, they both ignored regional differences as something accidental and of less significance.

It was belief held by guilds and other early apprenticeship associations in China, in Ancient Greece or Rome, much before academic architectural education institutions were established. It dominated the Académie Royale d’Architecture, the first Western major architectural reflection, research and education institution founded in France in 1671, within which the foundations of architectural knowledge were debated publically for the first time. Till recently, mainstream schools of architecture kept to the same creed despite the fact that in their courses of history of architecture non-Western buildings were introduced and discussed. The ‘knowledge’ about these ‘regional’ buildings was only superficially addressed in a fragmented way and they had no impact on the design proper. Also, equally ignored were the research results produced, since the first half of the 20th century, by historians as well as anthropologists, about alternative ways of architectural thinking -‘utterly at variance with (those) that we are accustomed’.


On the other hand, dissenting opinions disputing the dogma of universal architectural norms were discussed publically at least since the seventeenth century - interestingly, the period the market emerged as the overriding master of human social relations.


A medical doctor, the main author of these dissenting new ideas, argued that the rules applied in the arts, including architecture, were ‘arbitrary’ and not ‘positive’ like the laws of nature in mechanics. Arguing from evidence Perrault refused the idea of ‘universal’ ‘knowledge’ of ‘global’ architecture.

E-mail address: tzonis.a@gmail.com

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Perrault was not concerned with regional architectures of his time. He was interested in the many centres of power in the world, the ‘courts’, and how they dictated architectural norms that could be at variance with each other, constituting, what we would have called today, ‘local’ knowledge of architecture. In fact, he argued architectural rules are like the rules that governed the manners in the court: ‘arbitrary’ conventions established by the royal authority.

Perrault’s ideas demystifying and finally subverting the doctrine of ‘universal’ architecture, revealing the ‘arbitrary’ nature of architectural rules as cultural ‘constructs’, and the particularity of their knowledge, were not well received by his contemporaries, and especially by the Académie Royale d’Architecture, mentioned above, where Perrault was temporarily attached. It was the same with almost all schools of architecture in the West, ‘modernist’ or traditionalist, which continued to adhere to the doctrine of ‘universal rules’.

I remember, when I joined the GSD faculty at Harvard in 1968 (coming from Yale), I was shocked by the central idea in the GSD curriculum that the first year of architecture was devoted to what was called, ‘basic’ architectural design, involving the ‘acculturation’ (sic) of the students whereby the students, through studios and courses were invited to leave behind their knowledge of their ‘local’ everyday particular environment seen as unprofessional, lowbrow, and kitsch.

The GSD approach, extreme but not rare among schools of architecture at that time, was later blamed to ‘modernism’ and to the ‘Bauhaus’. In fact, both modern architecture and even Bauhaus were more multifaceted and richer movements than the simplistic picture sponsored by post-modernist journalism and ‘theory’ writings.

One of the outputs of the Bauhaus approach to ‘basic design’ was the monumental book on design standards by Ernst Neufert. (1900-1986). Neufert collaborated with Gropius and with many of the Bauhaus artists however, his most significant work was Bau-Entwurfslehre book published in 1936. In the book Neufert succeeded to condense architectural knowledge needed to design mainstream contemporary buildings ranging from private houses to auditoria.

It was a fascinating book that helped students and professionals in their designs and contributed to the advancement of standardisation and industrialisation of buildings. Enormously useful and necessary as the work was, one would not claim that it was sufficient to constitute the basic architectural knowledge GSD thought of teaching to the first year students, despite the fact that the GSD first year ‘basic’ education was dominated at that moment by a post-Gropius orthodoxy. In many respects was excellent, it applied a reductive pedagogy, what was referred to as architectural ‘basic design’, echoing the Bauhaus six months elementary formalist first year course at the expense of environmental and cultural-social aspects.

The idea of ‘basic’ knowledge was inspired by psychology theories of the time and it was popular in many fields of education before WWII, especially in teaching English. Like the idea of universal knowledge of architecture, it was promoted as a civilising force, as a means to overcome world deprivations and to facilitate world peace. Yet, many intellectuals, such as H.G. Wells and George Orwell, criticised it as elite, totalitarian, promoting globalisation and supressing the ambiguities, complexity and cultural regional embedment of language.

In the schools of architecture there was not much opposition. However, the situation started to change markedly during the 1960s. It followed the emergence of post-colonial states questioning the uniqueness and universality of ‘Western knowledge’, the rise of the populist and the ‘critical’ movements in architecture, as well as the failures of the major urban renewal and social housing projects in the West.

Several times exaggerated and sensitized by the press as well as exploited by politicians, the reports about these architectural failures did shake the certainty of the belief in a ‘universal knowledge of architecture’ and ‘basic design’. For the first time in the USA, the UK, Germany and Switzerland, schools of architecture and even professional associations considered - through highly emotional arguments - the idea of multiple cultures, ‘multicultural’ or even ‘counter-cultural’ design. As a result, some sporadic, mostly short-lived experimental courses emerged such as ‘field service design’ as well as user- and neighbourhood-participation trying to bring ‘local knowledge’ in the design process.

Nevertheless, by the middle of the 1970s, following the rise of post-modernism, the subsequent emergence of ‘star-architecture’, and most importantly the wave of aggressive ‘globalisation’ aimed at flattening the earth and its architecture, the debate about ‘local’ knowledge as well as regional diversity were suppressed for a period of at least 30 years.

Many attempts were made to rationalise this suppression in education, the most important one being the revival of the idea of education as ‘acculturation’ and the idea of ‘basic design’ under the rubric ‘core’ architectural knowledge.

As ‘basic design’ was inspired by pre-WWII psychology theories, ‘core knowledge’ of architecture was stirred by analogy to the theories of ‘core systems of knowledge’ in contemporary cognitive science.

However, as Professor Elizabeth Spelke, one of the greatest cognitive scientists of our time, has argued, ‘these systems have some critical limitations’.

[Elizabeth Spelke, 2009, ‘Core Knowledge and Cognitive Development’, Second Annual Anne and Benjamin Pinkel Endowed Lecture, Philadelphia]

Current research has shown that they are much more domain-specific and dynamic in evolution than people thought. The usefulness of the metaphor of ‘core knowledge’ to organise about architectural education was rather unproductive, if not misleading - as unproductive and misleading was the ‘basic design’ metaphors in the past.

In addition what makes humans intelligent and special in invention and design, in solving problems but also in making great music and great architecture is to have systems that combine these special ‘core knowledges’, so they ‘go beyond their core knowledges’, ‘beyond what one sees’.

So, where do we go from here? Call it a fashion, call it an economic necessity, today, in most countries of advanced economy, an increasing number of architectural practices undertake projects in regions outside their own base. Never before the mobility of the architects was so vast and the number of projects affecting the local environment so enormous. The same time global practice has an impact on the architectural firms themselves, their personnel, and the organisation of design production.
By now it is clear that this global practice does not lead always to a world of happiness as promised. Globalisation has been ‘creative’ in the short term but in the long term it proved to be most ‘destructive’.

Especially, during the last three decades, fuelled by mindless growth of cities, senseless gigantic construction of buildings, and disregard of ‘local knowledge’ the natural, social, and cultural uniqueness and diversity of the regions, what we called ‘peaks and valleys’, has been reduced to flatland by imposing ‘global’ design stereotypes enabled through the ‘universal clichés’ of core knowledge as it is spread today with increasingly negative consequences in the ecology, economy, social ties, and quality of life, not only regional but global.

There are philosophical, moral, and political issues associated with this problem. Should architectural education aim at producing ‘global practitioners’ through core knowledge or designers that would serve regional communities through local knowledge safeguarding environmental and socio-cultural resources and diversity?

A difficult question that as a student in a recent symposium in TU Delft, devoted to the question of Critical Regionalism, a student declared: ‘as young designers, we are facing several design problems, that are located around the world. Schools should be concerned about these issues.’

[Marta Rota, 20 March, 2014, Critical Regionalism Symposium, TU Delft]

Yet, perhaps the question is not well stated. Perhaps we should try to redefine what local knowledge is about and subsequently what core knowledge means today.

Perhaps education for knowledge based design for the local and the regional is not knowledge of the local as such, whether it is building style, life style, site, or materials. It is knowledge as competence to judge local knowledge and the thinking means of design before design practice, and the competence to ask from where this local knowledge comes. Uncritically embracing local regional clichés misinterpreting them as local knowledge good to guide practice can be as damaging as adopting ‘global’ clichés.

Thus, the question of architectural education is not about core or global knowledge, or information about local particularities or identities. It is about how to teach how to critically construe and construct within the reality of the potentials and constraints of a region, any region. This is what the core of architectural education facing the challenge of the local and the regional is all about today.