Local as Available: Redefining Tradition

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Abstract

Today, the meaning of local in architecture cannot be conceived without considering the effects of a global world. Available materials are not produced locally, as they used to be, and tradition — as a collective knowledge based both on locally obtained materials and on socio-cultural demands — is no longer a useful learning tool in metropolitan areas as Barcelona, where new architecture is designed and built without considering such historical link. The scale of knowledge has dramatically changed and became more generalist, but the requirement of real sustainability calls this scenario into question. In this respect, Vallès School of Architecture, ETSAV, Universitat Politècnica de Catalunya, is now reassessing its five-year undergraduate curriculum towards a gradual integrated learning approach around the work and reflection of studentsin the design studios, and the topic of this Conference is an opportunity to examine this reassessing process in the light of the interaction of local and global issues in architectural education. This paper exposes some recent academic experiences which could be used as a lever for the ETSAVredirection and explores the scope and potential of redefining tradition to regain the consideration and logics of a basic working tool, according to what local availability may involve in diverse areas of knowledge.

Keywords: availability; local availability; tradition; ETSAV; academic reassessment

1. Introduction

Vallès School of Architecture, ETSAV, Universitat Politècnica de Catalunya, is reassessing its five-year undergraduate curriculum — on the basis of different recent experiences — towards a gradual integrated learning approach around the work and reflection of students, i.e. around their academic experience in the design studios as the backbone of every semester.

The topic of 'place and locality versus modernism' is an opportunity to examine this process in the light of the interaction of local and global issues in architectural education. In this context, this paper exposes some of the experiences mentioned and explores the scope and potential of redefining tradition as a basic working tool, according to what local availability may involve in diverse areas of knowledge.

2. Available material

The meaning of local in architecture cannot be conceived without considering the effects of a global world. Defining tradition — from a technological point of view — as the most efficient way to use available material, what is local today should deal with the paradox that available items can now be global.

Some examples of academic experience can help illustrating how to cope with this paradox. One of ETSAV studios has a particular academic format. Faculties and students of fifth-year PUd Studio work in place with low-income communities in order to provide some of the facilities or commodities needed. They do not simply identify the issues and design plausible solutions; the Studio eventually builds those in a responsible hands-on approach.

Two years ago, the Studio detected the opportunity to recover and systemize an abandoned informal stairway as a means to improve pedestrian connectivity within a previously selected area. The academic project — named 'Ruta Ringo Rango' — was initially developed during the 2015 Spring semester in the neighborhood of Les Planes in Sant Cugat del Vallès, with support of the local community, the

municipality and ETSAV staff. Some online platforms as HIC Arquitecturadisseminated the exceptional academic experience.

Students themselves acted as a qualified workforce, but material had to have no cost in order to succeed. After some initial considerations, they reached a solution: using discarded concrete test samples of a nearby laboratory already regarded as waste material; a large number of cylindrical adaptable and resistant pieces of an adequate dimension to become steps (Fig. 1). A sub product of concrete produced somewhere else for a different purpose, became a local resource as it was available at the right site, in the right quantity.

Figure 1. 'Ruta Ringo Rango' academic project, built by students of PUd Studio with support from local community and the municipality of Sant Cugat del Vallès, Barcelona, 2015.

Similar instances can arise from the Rural Studio—an undergraduate program of the School of Architecture, Planning and Landscape Architecture at Auburn University that has been working in the deprived area of Hale County since 1993—which has been a reference forETSAV for many years. Second-hand steel barrels first produced to transport mint essence, now stacked as waste, became the building material of a new playground erected by the Studio team with professional help (Fig. 2). In both cases — PUd and Rural Studio — the leftovers of industrial processes were given a 'local' second life thanks to their availability (Freear, et al., 2014).

Technology has always developed local strategies considering availability. The difference now is that obtainable materials are not

necessarily produced locally or traditionally anymore. The challenge is to understand these dynamics and deal with academic responses without disregarding the growing demand of Km0 production and delivery of building materials.
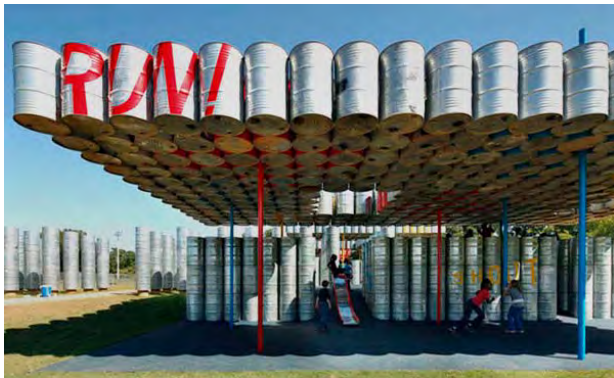

Figure 2.'Lions Park Playscape' designed and built by the fifth-year Rural Studio team. Greensboro, Alabama, 2010.

3. Available reality

ETSAV is de facto reorienting some learning strategies towards the potential of local case studies in order to strengthen the involvement of students, work with real constraints and deepen in the decision-making and design processes. In the last years, studios have shifted from more abstract and global approaches to a more tangible relationship with local people, issues and resources. Not only materials but also architecture itself can be seen as one of these available resources.

PTEe Studio, among others, focuses on local scenarios where existing architecture — both abandoned or misused — is an available resource to meet the requirements and needs of nowadays inhabitants by reusing buildings and public spaces in an adaptive and sustainable way (Fig. 3). PTEe Studio is a fourth and fifth-year studio run between 2009 and 2015 under the motto 'Transient Conditions' by a team of four faculties at the departments of design and technology, including the authors of this paper.

Project-based learning gathers all disciplines around the students' work, so that both design and technology point towards the same direction (Fuertes, et al., 2012). Compared to this integrated

methodology, technology subjects tend to cover all the universe of possibilities in progressive levels of complexity. Those seem to be oriented in the opposite direction to a global knowledge.
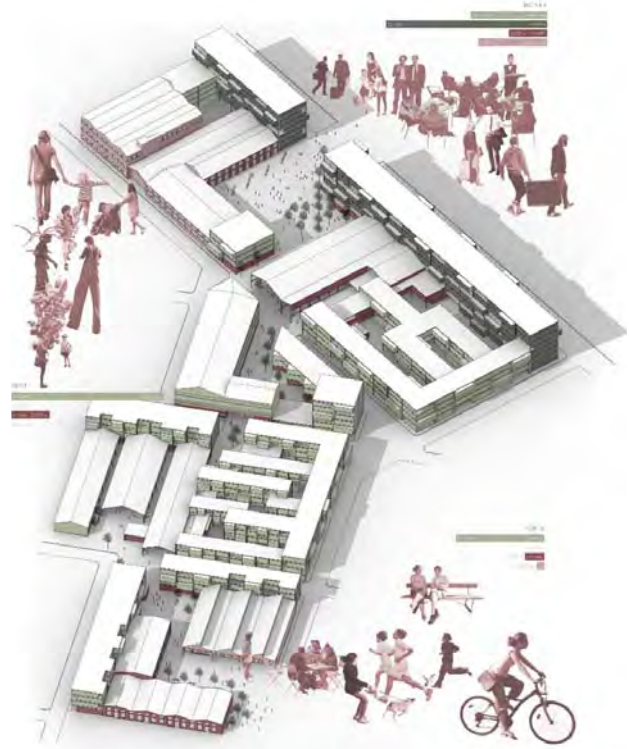

Figure 3. Reactivation of a former industrial area with potential to become central in the city. Clara Sánchez, Marc Serra, Susana Rubio. PTEe Studio, 2014.

In this respect, design and technology areas in ETSAV seem to have exchanged positions, according to the 'local and global' question, without finding a middle ground. Today, technology subjects have a more global scope while studios focus on local opportunities — a situation that needs further reflection, as they are part of the same curriculum. The experience of certain studios like PUd or PTEe, where design and technology cooperate in the same direction — towards local availability — should be taken into consideration.

The new syllabus of the Master's Degree — initiated in 2015 with a curriculum of 60 ECTS credits in two semesters—aims to solve the inconsistency detected in the undergraduate studies, so the Bachelor itself can benefit as well. Technology and design, along with theory and

urbanism, congregate around a single studio — that is to say, around the very project developed by students — and deal with specific issues, considering that students are mature enough and have an adequate generic background to operate simultaneously with all these conditionings. Reality is more consistent as more specific scenarios are considered and academic experience is less fragmented.

"A quality often attributed to architects [as to architecture students] is the ability to visualize a problem globally and to contextualize it, and we are expected to offer responses based on this principle. On the other hand, we have to be able to create very complex systems that take into account many very real conditioning factors at the same time. This is a difficult ability to teach because we often try to separate knowledge into convenient compartments that become too limiting. The success of the overall results — the design; the learning process or the curriculum — depends on how effectively the project integrates its responses to these conditioning factors, on how global its solutions are" (Farré, 2016). This consideration compels us to reassess the adequacy of the undergraduate studies methodology.

4. Redefining Tradition

The concept of local, as defined in this paper, has changed. On the one hand, available materials are not produced locally as they used to be — which opens a different and essential discussion. On the other hand, tradition, as a distillation of 'conventional' local materials, has come to a dead end in metropolitan areas like Barcelona, where traditional techniques do not fit into contemporary architecture requirements. In rural Majorca, on the contrary, ingredients and techniques are much obvious because tradition and locally produced materials are still alive, as we can observe in recent quality architecture (Fig. 4).

ETSAV faculties and students, as it happens in many other schools, are learning how to produce the architecture of today out of the existing structures and buildings — not limited to heritage but including all constructions in a good condition to undertake a conversion (Fuertes, 2014). As a

consequence, other instruments and methodologies are needed to forge a new paradigm. The expected results should completely differ from those that apply to new constructions. Reusing the built environment should not derivate in poor copies of new buildings and preconceived typologies but in a challenge to reformulate them, taking what already exists as a starting point.

Figure 4.TEd'A Architects, 'Can Jordi i n'Àfrica', Montuïri, Majorca, 2015. Jaume Mayol and Irene Pérez, principals of Ted'A, are ETSAV Alumni.

The American Professor Richard Sennett describes in The Craftsman (2008) a sort of repairing that he refers to as dynamic. He claims that such repaired objects improve their original use and condition since they gain from our knowledge and ability. Sennett attaches to repairing the qualities of a design process so, in this regard, we can observe 'dynamically' repaired architecture as a chance to redefine the process itself (Fuertes, 2014). We should not only expect different solutions, but a diverse approach to the design process as well.

One of the most remarkable case studies developed in the PTEe Studio was the conversion of a former telecommunications building, placed in a central urban environment of Barcelona, into apartments and work space. The dimensions and characteristics of the construction were not suitable for conventional housing — with a plan measuring 30 x 30 meters and a clearance height of 4.20 meters each floor. The most interesting proposals were those considering alternative typologies according to the building features instead of forcing standard housing through severe alterations of the structure (Fig. 5). Ingredients are different, but the knowledge of the basic rules of domestics in our culture is the same.

Figure 5. Re-inhabiting a former telecommunications building(above) with residential units and associated work space in Barcelona. Alex Ruízdesign (below), PTEe Studio, 2013.

A comparison with another discipline may stimulate discussion. Restaurant Somodó in Barcelona is run by Japanese chef Shōjirō Ochi who follows strictly the precepts and techniques of his traditional native cuisine but with quality ingredients that are always locally available. As emphasized on the restaurant's website "in Boqueria market, Shōjirō is well known, buying there for Somodó restaurant five days a week […] The fundamental concept is that raw material must be chosen personally"(Fig. 6).

We should ask ourselves to what extent can this scenario be described as Japanese cuisine? Does this redefined tradition underlie in ingredients and flavors or in the basic knowledge itself, also referred above to reuse architecture? In other words, given an unexpected context — different from the one that originated a particular tradition — how does knowledge adapt to new circumstances? We might consider if a Japanese person would recognize the cuisine of restaurant Somodó as familiar but probably the question lies in the very definition of tradition.

Figure 6. Two images from the website of restaurant Somodó, Barcelona [www.somodo.es].

The Merriam-Webster online dictionary defines tradition as "an inherited, established, or customary pattern of thought, action, or behavior". According to the previous remarks, tradition in architecture should not be observed as a materialization of specific techniques or as the use of some architectural elements and typologies. Tradition, at both material and spatial levels, lays in the knowledge of the relationships stablished between those and a particular environment.

Materials, techniques, elements and spaces could be considered as generic but the interaction we stablish is strictly local — that is to say, we act *locally*. In this connection, architecture can be described, from a taxonomic viewpoint, as a set of basic elements — walls, floors and roofs — and their elementary spatial combinations — patios, porches, halls and tridimensional structures

(Devesa, 1971). The former may be generic, but their mutual relations differ both historically, culturally and locally.

Therefore, tradition is the depuration of these relationships and the substance of the curriculum in a school of architecture, aiming to be rooted in a specific region. In this context, local and global — as operational patterns — should not reduce to be the motto of a particular design studio, but a structural topic in the curriculum.

Acknowledgements

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