THE CRAFTSMAN ROLE APPLIED TO ARCHITECTURAL EDUCATION ANALYSED THROUGH THE CONCEPTS OF MIMESIS AND PHRONESIS

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Craftsmanship processes have been lost in the field of architecture due to a technophilic juncture. This situation leads to a lack of manual inputs inherent to the profession for practical application. Thus, the question arises: Is it necessary to return to artisanal practices as project inputs? This question prompts a rethinking of the methodology of the Architectural and Urban Design Workshop IV (DAU IV) at PUCE FADA, shifting towards an analysis of the cultural, vernacular and technical context. This initial section seeks to understand the reality of tectonic culture of the place through observation and experience. Subsequently, with the mimesis as a process of rationalization, the observational exercise is put into practice through exercises in material and tectonic exploration, with the aim of reclaiming the role of the artisan. Thus, the formation of the artisan lies in developing skills for mastery of the craft, phronesis, through direct experience in workshops and laboratories that involve the use of their senses for the understanding of different materials. The expected outcome is the direct application of this learning in the development of an academic architectural project.

Keywords: Artisan, Architectural project, Methodology, Architect formation.

1 INTRODUCTION

In the third decade of the 21st century, the world has been developing a technophilic juncture approaching the use of new technologies such advance software of design and Artificial Intelligence (A.I.) tools. This situation has created students who does not know how to use manual or artisan processes anymore. Also, in this «Infocratic Age», the digital world is totally opposite to the real facts (Han 2022). So, in an analogic interpretation, we can say that craftsmanship work has been lost due to digital technologies. Thus, the practice of the architect is relegated to an informatic and digital way, losing all aptitudes of manual developments because nowadays the world seeks to visual products characteristic of a visual culture. Today, the main references for an architecture student are visual information only, looking for mass media as project’s inputs like, Pinterest and Instagram. Moreover, this juncture provokes that the role of the architect has been forgotten from its original condition: learning by doing. This is the reason for the authors to propose an academic methodology to be applied in the Workshop of Architectural and Urban Design of fourth level (DAU IV) at School of Architecture of Pontifical Catholic University of Ecuador (PUCE). The main topic in the subject of DAU IV is the understanding of architecture practice as the capacity of building our artificial habitat. This methodology seeks to return the role of the architect in its artisan practice, by the understanding of mastery of the technic. One important...
condition is: if any student want to be an architect, first he has to be a carpenter, welder, ironworker, ceramist and mason. It is important to dominate the technic and tectonics before to aboard the architectural design complexity.

2 MAIN QUESTION

Is it necessary to return to artisanal practices as project inputs? In *Histoire d'une maison*, Viollet le Duc (2004) defends “the idea of a self-taught and direct experience formation beginning from the pure empiricism where will be deducting theoretical laws”. Nowadays, a similar situation is the whole breakup from the real world which detaches itself from pragmatic practices. In this juncture, Viollet le Duc (2004) said in the 19th century: “In short, the assumption of a pragmatic model from which, later, the theory and grammatical laws emerge, and not the other way around.” This has to be understood in a context, where instead of Romanticism, he prompts to seek the reasons of the medieval builders in the local vernacular architecture. For Viollet le Duc, it was also important to break the gap between traditional and modern architecture. The relationship between industrial and artisan systems is reflected in the 27th chapter of *Histoire d'une maison* (Viollet le Duc 2004).

“Here are the results acquired by experience from Antiquity to the present day; part of them, work like our ancestors, use your reasoning capacity when using the knowledge acquired, but always complying with the demands of the present. You are not allowed to ignore what was done before, it is a common good, [...] but add the contribution of your intelligence, take a step forward, do not go back.”

An analogy can be made between the 19th and 21st centuries; while Viollet le Duc had a rational vision to conceptualize the structure of a project by tectonic honesty thought as a precise machine or mechanism (Hearn 2003), John Ruskin used to asseverate it Romanticism with ornaments and decoration as an indispensable condition. It is the same Romanticism, but in the case of Viollet le Duc, architecture is thought as the application of the traditional reasons of edification in the present, while Ruskin proposed the use of decoration that evokes the past. That anticipated a century before some thematic of Frampton’s essay “*Toward a Critical Regionalism: Six point for an Architecture of Resistance*” written in 1983. Now, in the 21st century, happens the same dichotomy: the academic architectural field wants to rescue everything about traditional and vernacular constructions to seek an identity. But the main problem is that identity, vernacularism and tradition in this field is not addressed from the architectural discipline. In the 19th century, in spite of being in an Industrial Revolution Age, Viollet sought the reasons for vernacular. By the same way, in the 21st century’s Digital Age, is necessary to come back to understand the reasons of traditional technics of building.

Finally, methodology of DAU IV, appears as a critic of the infocratic phenomenon where A.I., social media, Big Data are not only destroying public sphere of mankind (Han 2022) but also individualism is raising toward a destruction of identity of a person. In the ’80s, Kenneth Frampton (2020) said “At the same time as a promotion of humanity, the phenomenon of universalization constitutes a kind of subtle destruction”. The paradox exposed here is the same question that DAU IV asks: “How to modernize and return to origins? How to dawn an old culture and be part of a universal civilization?” (Frampton 2020).
3 CONCEPT OF MIMESIS AND PHRONESIS APPLIED TO ARCHITECTURAL TEACHING

With this preamble DAU IV aims an academic methodology which rescue artisan practices toward a tectonic culture of each particular site that develop skills to be applied in architectural projects under the condition of the real context. This method is based by the application of two philosophical concepts. Aristotle’s Poetics bring us an understanding of the creative processes through various philosophical concepts. Poetics, comes from the Greek word poiesis, and in its verbal form poien, which means to make, to produce or to fabricate (Beardsley and Hospers 1997). Aristotle defined art as technai, nevertheless, the purpose here is not to create “poiesis” but build something based in an expert knowledge of that. “This is the essence of any practical art, techne” (Curran 2019), or what is known today as the role of an artisan: a person who is an expert in the technique of his craft.

In consequence, poiesis is the creation of something with a purpose, such as the role of an architect. Here the aim of this method, is to defend that before being an architect, a student has to be an expert in building techniques. Under this interpretation, architecture and construction are part of one form of art. Angela Curran (2019) in her philosophical context points out that there are “disciplines which requires the virtue of a practical wisdom”.

3.1 Mimesis

Greek term mimesis, literally means imitation (Beardsley and Hospers 1997). But it should not be confused with literal copy, since Plato and Aristotle, this concept has been fundamental in all aesthetic comprehension of art. So, when we refer to mimesis, it is “alien from an insignificant reproduction of things’ appearance” and “too far to be a copy” (De Prada 2012) but it implies a productive creation, like a poiesis is looking for (Curran 2019). Mimesis concept has nothing to do with an artistic reproduction, as it fundament the human necessity to identify and understand the intrinsic reason of objects, thoughts, and ideas that create sense of a culture’s hearth (De Prada 2012). In architectural practice, Miranda (1999) established a difference between mimesis and mimetism, where the first one is “not referred to a copy of any concrete model that exists but, concerns to the interpretation of an abstract ideal type” and mimetism as an “unconscious plagiarism with originality pretensions” (Miranda 1999). In the proposed methodology it can be interpreted when each edificatory input as a constructive element constitutes two kinds of knowledge; a concrete one and an abstract model too.

3.2 Phronesis

This term means practical wisdom (Curran 2019) and it maintains the balance between “extremely realistic and practical aspects of techne” (Koutsoumpos and Zhuang 2016). In such way architectural education can be improved in the contemporary world were students “imitate situations that they would deal with as professionals” (Koutsoumpos and Zhuang 2016). In today’s technophilia, is important to realize how understanding of phronesis let to craftsmen conciliate theory and design by practical skills that have been abandoned in favor of high technologies. Costello (2020) says “Aristotle and his concepts of phronesis as an antidote to the growing pervasiveness of blind technological thinking and tendencies to technological somnambulism”.
4 CASE OF STUDY: DAU IV AND THE APPLICATION OF PHILOSOPHICAL CONCEPTS AS LEARNING METHOD AT THE PRESENT AGE

4.1 Theorein: Traveler Phase

This exercise began with an experiential phase in Cuenca and Cajas National Reserve in Ecuador. Under this methodology, it was expected that students would develop the experience of learning from their observation. This objective would be achieved through an empirical investigation of the tectonic culture of the site. Remembering the concept of theorein, this is the first characteristic of contemplative arts according to Curran (2019). It was expected that students have learned traditional technics of construction through the observation of some monuments and domestic buildings of different times. At Cuenca city, examples from colonial, republican neoclassic, modern and contemporary architecture. At Cajas National Reserve, different climate and environmental conditions. Finally, the Ingapirca Ruins, an Inca location, as an archeological issue. Thus, this tour has brought to students a great variety of examples of tectonic solutions around various ages. This phase was compiled in sketchbooks drawn and discussed in situ. That was the experiential understanding of a collective building knowledge. As conception of mimesis, with the making of sketchbooks, students could extract the essence of building by the critical observation of reality.

4.2 Mimesis and Phronesis: Artisan Phase

The next phase called “the artisan” where all of the theoretical knowledge is applied practically. They put their experience in facts. Their wisdom acquired by the trip, was materialized as a technical work. With the conception of phronesis, students developed technics to understand building processes under their interests and interpretation of a tectonic reality. At this part of the methodology, students do not know how will be their architectural project, because the aim of this part is the formation as a craftsman. After an induction by instructors, students have to materialize “tectonic devices”. Remembering El Lissitzky’s Prouns or Chernikhov’s Fantasies (Cooke 1984), this methodology let to speculate a tectonic technic applied in a non-architectural object. All of these devices had to be different, exploring different materials, textures, and processes, in order to develop a tectonic posture. Finally, this repertory of objects would allow to have a tectonic catalogue to be applied in a future project.

5 LABORATORY AND WORKSHOP RESULTS

All of these architectural exercises demonstrated a learning through direct experience with immediate reality. Thus, the first phase, “The Traveler”, was verified by a collection of sketchbooks developed by the students. It is important to understand that the drawing of some architectural inputs is irrelevant, so the most important of these parts is the capacity of synthetize and rationalize onto its essence, being it architectural details, sensations or genius loci characteristics. After, one of the most relevant inputs was the open discussion and feedback between students and tutors. Students’ sketchbooks were exposed in order to have the experience of a discussion taking over the open public space sharing ideas and learnings.

Likewise, in Quito, at PUCE School of Architecture’s Laboratories, students put in practice all practical wisdom to be applied developing artisan technique works. “The Artisan” the second phase to the methodology, where the students developed processes and material experiments until have a tectonic posture to be applied in their devices. So, each device is an object product which verifies the craftsmanship learned. The entire exercise has prepared students to address constructive details and elements of architecture without the necessity to make a project. The variety of exercises
allows apprentices explore a range of possibilities towards the consolidation of a tectonic comprehension (See Figure 1).

Figure 1. Exercises of mimesis and phronesis respectively: Traveler and Artisan. Visit to archeological site of Ingapirca, DAU IV students. Sketchbooks exposition in Cuenca. Student at PUCE woodwork workshop. Some “Tectonic Devices” from DAU IV PUCE FADA students: Juan Realpe, Alejandra López and Joel Mateus.

6 CONCLUSIONS

Both sections of this methodology have applied concepts of mimesis and phronesis, in the first case as a rational understanding of reality’s essence, and the second as a practical learning which applies mimetic analysis materializes in an artisan job developing technical skills. Both mimesis and phronesis are preparing the student to consolidate a poetic work, architectural poiesis. Both concepts let students introduce building and construction complexity in a nearby architectural project. This method induces to begin from initial details until the full development of the project, like the importance of the syntactic meaning of a constructive joint. As Frampton (2020) points out “The joint is the point where both the physical construction and the syntactic construction of architecture take place”. Thus, according to Frampton (2020), joint in its Indo-European etymology means art, and Greek’s etymology define art as techne or technique. Therefore, a fundamental condition in the process of making art is the comprehension «Theorein», interpretation «Mimesis» and practical application «Phronesis».

Finally, the global goal of DAU IV is the developing of an architectural praxis as a conclusion of all applications of empirical knowledge obtained by mimesis and phronesis. The future results of this academic experiment will be verified if students reflect these lessons in their final term
architectural project. All of these concepts are part as a process to get a poetic work. Get the condition of *poiesis* as a form of architectural and construction knowledge.

**References**


