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School of Architecture(s) – New Frontiers of Architectural Education

EAAE Annual Conference—Turin 2023

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Michela Barosio · Elena Vigliocco ·
Santiago Gomes
Editors

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EAAE Annual Conference—Turin 2023

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School of Architecture(s)

The Torino EAAE Annual Conference 2023 investigates the plurality of architecture as a discipline and the role of architectural education in training, questioning, and practising this plurality. This plurality is intended in terms of approaches, methods, topics, and values. The conference has been an occasion to think differently, reflecting upon the context of the discipline to understand the knowledge of the future, focusing on the question: what is Architecture in the age often described as post-architecture? This new perspective allows us to call into question some historical grounding principles of architectural education: the schools of architecture as a place where a style, a language is transmitted through the technique of the imitation of the masters, the everlasting character of the architectural artefacts built to last and the role of the architect as individual solely talented interpreter and author of architectural and urban artefacts.

A reflection on the ways of transmitting architectural knowledge, specifically design skills, in the age of post-architecture is needed. Several models of architectural education still coexist in the European context. Some of them still refer to the educational model of the Beaux-Arts. Settled in France at the end of the seventeenth century, this model was the first example of architectural schooling, further developed in the eighteenth century by François Blondel. It is still a pedagogical reference for many architectural schools. The central learning experience was structured around small independent ateliers where students learned directly under a “master”, following his direction and imitating his language and practice under a strict hierarchy. Two other activities completed the Beaux-Arts way of teaching: The annual Paris Salon, where the best students’ works were selected and displayed to the public, and the Parisian life of cafés, an informal extension of the ateliers, where design tendencies were discussed. Opposite to this model is the Polytechnic approach. Dating back to the Ecole Polytechnique, a military educational institution established in France at the end of the eighteenth century, this way of teaching aims to transmit technical-oriented knowledge, focusing on developing skills and competencies more than styles or tendencies. Contemporary schools of architecture tend to combine these two approaches with different balances. Some schools are still grounded on recognized masters leading the design approach of the school, while others decide to aim for the implementation of strategic topics to be developed through different learning experiences or to focus on specific design methodologies in order to build a school of thought more than a style of the school [1].

Thinking the Acropolis in Athens or the San Vitale di Ravenna in Italy as architectures built to last, together with Moneo we can say that buildings are always alone [2]. The architectures that have come down to us from the past have stood the test of time because societies have absorbed and inhabited them without distorting them. In the contemporary debate, however, we talk about the fragility of architecture and its temporary character. The contemporary question, however, is not the architecture itself but rather the modification of the reasons that determine its production. If Architecture was

celebratory in the past and built to restore authority and power, today, Architecture has seen this role reduced. In the past, only those with a role of power asked for Architecture.

On the contrary, today, the demand for Architecture manifests itself through countless possibilities and different objectives. The expansion of users with a demand for Architecture has increased the variety of designed themes. Furthermore, starting from the nineteenth century, the collapse of most travel restrictions has further increased the possibility of contamination, and what once belonged to a specific place is today worldwide spread—just think of the role that International Exhibitions have had in history. We can observe extreme situations in which the Eiffel Tower and the Egyptian Pyramids are rebuilt on a scale in Las Vegas, and in cities worldwide, we can see the same architecture resulting from a globalised culture. If contemporary architectures are often not designed for a specific context, they are more and more designed for a specific lapse, waiving the everlasting ambition of classical architecture.

At the same time, in parallel with the process of globalised homologation that seems to characterise a large part of the material outcomes of architecture in the contemporary condition, the complexification of production processes, the articulation of an ever-increasing number of subjects and demands, and the intensification in the possibilities of exchange, communication, and knowledge are radically transforming the profile of the architect [3]. The mandate that societies assign to architecture is constantly evolving and mutating and, as a consequence, the figure of the architect is also being actualised, leading to the redefinition of the central target of practice in a shift in which the construction and the building, the objects, lose centrality in favour of an ever greater focus on the individual, the community, and the subjects [4].

Furthermore, while it is true that the discipline's interest in community practices, in the participation and inclusion of citizenship in the city's production processes, and the social role of the architect-designer is not new, and that these themes have characterised the debate for a good part of the last century, the scope and the reasons for the rebirth of this interest today have radically changed and transversally reach all professionals, regardless of their civic and political engagement and positioning. It is a transformation of practice that is reflected in the image that architects have of themselves, both inside and outside the discipline, which explains the radical transformation of working methods, the articulated and diversified cultural production of architects' offices and collectives, and the urgent need to rethink and redefine the aims and purposes of the pedagogical proposals offered by schools of architecture, or rather, of architecture(s).

In this context, the conference endeavours to elucidate a contemporary, more expansive, and inclusive definition of architecture by examining six pairs of antinomian concepts. These pairs include architecture as a method and/or as a discipline; architecture of the Masters and/or of the topics; architecture for architects and/or for the community; architecture as avant-garde and/or market-oriented; architecture inside and/or outside the wall; and architecture disciplinary and/or extra-disciplinary.

Michela Barosio
Santiago Gomes
Elena Vigliocco

References

1. Kaps V, Staub, P (eds) (2018) New schools of thought: Augmenting the field of architectural education. Zurich, Triest Verlag Fur Architektur.
2. Moneo, R (1999). La solitudine degli edifici e altri scritti. Torino, Allemandi
3. Gutman, R (1997) Architectural Practice: A Critical View. New York, Princeton Architectural Press.
4. UNESCO-UIA. Charter for Architectural Education (updated July 2023) https://www.uia-architectes.org/wp-content/uploads/2023/08/FINAL_UNESCO-UIA_CHARTER2023.pdf, last accessed 2024/06/04.

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Seeds of Architecture: Ways of Teaching



Seeds of Architecture: Ways of Teaching

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Within the general frame of the conference enquiring about the plurality of architecture as a discipline, the two sessions dedicated to the ways of teaching specifically addressed the different teaching approaches questioning two of the six dichotomies characterizing the contemporary debate on architectural education. The first tension explored is the supposed opposition between architecture considered as a discipline, with its specific field of knowledge and epistemology, and, on the other hand, architecture is regarded as a method, a mindset, a *modus operandi* that can be applied to other fields than the built environment. The second dichotomy concerns the origin of architectural education which can be grounded on the study and imitation of the Masters of Architecture, as it was when architecture was taught in the frame of the *École des Beaux-arts*, or can be grounded in training the student to face specific topics or burning issues of the architectural discipline.

In the sessions, several presentations focused on describing pedagogical experiences tackling contemporary challenges at different levels. They ranged from curriculum innovation and complete educational programs to single teaching activities.

Among those experiences some refer to methodological approaches proposing socially situated practice activities, pleading for interdisciplinary studios to mix cultural backgrounds and working methodologies, or international programs enabling collaboration between different countries and fostering cosmopolitan architecture. Other interventions are focused on urgent topics such as environmental sustainability, fragile territories and rural areas development, ethical approach to environmental and building design as well as the role and impact of artificial intelligence in the architectural pedagogy.

The type of Design teaching experiences presented through the sessions range from design studio teaching practice-based oriented and body-centered learning experiences to theoretical courses, questioning the role of the architect in contemporary society or the approach to the building demolition process. Despite these reflective activities, some interventions complain of a lack of critique, intended in the sense of a gesture that arrests, disorganizes, denaturalizes, and de-hegemonizes [1], in architectural education where new forms of critical theory should be enquired.

The discussion of the presentations seems to conclude that architectural education, both for its topics and its methods, can be considered a general education that can benefit many other fields [2]. This consideration leads to the conclusion that teaching architecture can be part of a non-architecture education, it can be considered as a minor of a different field major, contributing to developing skills such as team building, complexity management, or envisioning capabilities to other professional curricula. Architectural education also develops risk-taking skills, deals with the fragility of the environment

and the territories, and, through the pedagogy of mistakes, improves students' resiliency. Those specific skills are very valuable in tackling contemporary global challenges and crises that are characterized by a pervaded dimension of uncertainty.

References

1. Foucault, M.: What is critique? In: Lotringer, S., Hochroth, L. (eds.) *The Politics of Truth. Semiotext(e)*, New York (2007)
2. Barosio, M., Boutsen, D., Ceko, A., De Loof, H., De Walsche, J., Gomes, S., Harriss, H., Marcaccio, R., Roth-Cerina, M., Sentieri, C., Sashore, N., Vannucchi, F., Van Reusel, H.: *Architecture's Afterlife. The Multisector Impact of An Architecture Degree*. Routledge, New York (2024)

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Bridging Methods and Disciplines: An Architectural Pedagogy for Rural Areas Community

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Abstract. Architectural pedagogy in rural areas necessitates a thoughtful consideration of both methodological and disciplinary approaches within the educational process. Is it enough to define the way of teaching Architecture as a method or as a discipline? In a constantly changing world, facing multiple fragile conditions (e.g., environmental crisis, social disparities, demographic changes), the way of teaching, and learning, architecture shall consider over-coming this narrow boundary. An effective balance between method and discipline is needed, where architectural pedagogy should be responsive to the variations of fragile territories and communities. This capability enables students and rural communities involved to develop more sensitivity to context, recognizing which design solutions are best tailored to their realities. Inner areas, for instance, which suffer from constant depopulation and lack of connection, though rich in historical/natural heritage, are entangled in a complex multiplicity of design scenarios. Especially in Italy, whose territory is 60% made of inner areas [1], this condition should be approached by universities for the architects of the future. Moreover, architectural pedagogy in rural areas should carefully consider the interplay between method and discipline as a participatory; a community-oriented method allows the co-creation of contextually relevant solutions within the educational process of teaching architecture. The contribution proposes a view on this challenge, in which architectural education has a profound role in shaping a desirable future, starting from the ongoing experiences developed in some inner areas case studies, such as the one of Vione (Valle Camonica, Lombardy) and of Morino (Valle Roveto, Abruzzo).

Keywords: Cross-Disciplinarity · thick boundaries · Italian Inner Areas · Rural Challenge · Participatory Education

1 Introduction

1.1 Rural Areas: The Perks of Architecture and Pedagogy

It is crucial to discuss the possible impact of architectural education in the frame of a global shifting condition under multiple layers of topics (environmental crises, social inequalities, population changes...). So, what could it be its role in shaping the architects

of the future? Nowadays, there can be a shift in teaching architecture from defining a specific knowledge inside the discipline or a series of methods that can be generalised and exploited for practice, as promoted in the call of this conference.

The following contribution addresses the topic in two stages: in the first part (*ch.2 Hypotheses*) reasoning around a broader and inclusive definition of our discipline and methods of teaching architecture. The visualization of the problem “discipline” vs “method” (the proposed couple of antinomial concepts) was the starting point for developing the *thesis* (*ch.3*). In the second part, *case studies* (*ch.4*), examples provide a double-faced analysis to overcome the strict separation between the antinomial concepts.

As the world faces multiple conditions of change, the topic is restricted to the intricate condition of inner areas. In Italy this term describes lagging regions; remote rural communities living with few or non-sufficient parameters of formal education services (at least a high school - liceo, ITS, or CFP), health structures (full operative hospitals at least in DEA di I Livello), and public connections systems (railways stations of Silver level) or that requires more than 27,7 min to reach a polarity of those services [2]. This inquiry transcends the realm of only architectural education and extends to a broader spectrum of addressing contemporary global challenges, though can and should be approached by an architectural pedagogy for a better framing of their situation.

Indeed, the method employed in architectural pedagogy for rural areas should be participatory, experiential, and community oriented. Traditional didactic approaches may not be suitable in fragile settings, such as rural ones, where local communities possess rich and various, knowledge and experiences that may not collide with the disciplinary knowledge of architecture. Students and rural communities must be engaged directly with a set of tools from various disciplinary and methodological nuances. This hands-on approach facilitates a co-creation process, ensuring that architectural interventions are contextually appropriate, meeting community’s actual requirements and student’s formative objectives.

2 Hypotheses

2.1 Logical Assumptions/Thick Boundaries

Understanding the interplay between method and discipline is then crucial for effectively educating future architects who can address the unique challenges of rural contexts.

Method: Via Latin, from Greek *methodos* [μέθοδος] ‘pursuit of knowledge’, from *meta* [μετ’] (expressing development) + *hodos* [ὁδός] ‘way’. 1: A particular procedure for accomplishing or approaching something, especially a systematic or established one.

Discipline: via Old French, from Latin *disciplīna* ‘instruction, knowledge’. 1: the practice of training people to obey rules or a code of behaviour, using punishment to correct disobedience. 2: a branch of knowledge, typically one studied in higher education.

Starting from the above meaning and the etymological definition of the terms [3] while method refers to the instructional strategies, techniques, and tools utilised to deliver knowledge and skills, discipline pertains to the core principles; it frames the shape of thinking and practicing of one subject, sometimes also the philosophy beneath a

pragmatical subject. As per their definitions, the two are entangled; the author wonders whether practicing and teaching architecture is closer to the former or the latter.

Supposing a scenario where a *scientific status* serves as the arbiter, firmly delineating the boundaries of a discipline such *teaching architecture*, it would demarcate the domains within the discipline and those that exist outside it, prescribing the methods of teaching and learning that are permissible. The whole definition of *teaching architecture*, with its subjects, topics would be contained in this perimeter. And so, per the same logic, it would appear the same perimeter in every *teaching a subject*. However, when we step outside the realm of disciplinary boundaries and peer in from an external point of view, it would appear that specific knowledge and teaching methodologies operate in isolation (Fig. 1). These seemingly disparate entities may, at first glance, lack the interconnections. However, there must be something in between the isolated knowledge of the disciplines. They are not isolated monads but rather components of a rich tapestry of interdisciplinary interactions.

Indeed, addressing the definition of “Thick Boundaries” [4]: *In nature, we see many systems with powerful, thick boundaries. The thick boundaries evolve as a result of the need for functional separations and transitions between different systems. They occur essentially because wherever two very different phenomena interact, there is also a ‘zone of interaction’ which is a thing in itself, as important as the things which it separates.*

As Christopher Alexander presents in his exploration of 15 fundamental properties, these thick boundaries take on a life of their own, resembling zones of interaction. This zone of interaction takes presence itself. Likewise, in Aristoteles’ *Third Man Argument* (τρίτος ἀνθρωπος), these zones of interaction shall be something that stands in between each discipline. We can look at them in a different way: they evolve to accommodate the functional separations and transitions between distinct systems into becoming something that is an interplay between the systems themselves.

So, what could this zone of interaction be? In the imagined scenario in which every discipline could stand by itself, separate from the other, the author identifies the link in the tools and methods that are shared between disciplines (Fig. 2). Furthermore, the same concepts could be applied to the specialisations within the same discipline (e.g., Architecture and Landscape Architecture). They would serve as a bridge between disciplines, a role that assumes even greater significance when we focus on rural areas. These areas, characterized by their intricate blend of challenges, demand innovative solutions, which may be born out of the interdisciplinary.

2.2 Architecture as a Discipline/Architecture as a Method: Precedent Notable Bridges

Of course, connections between different realms of knowledge (disciplines) are not a novelty, and disciplines themselves can also become tools displayed in the learning of other disciplines. Indeed, for the proposed thesis, it is essential to stress the benefits of bridging methods in disciplines.

This is the case of John Snow’s *On the Mode of Communication of Cholera* (1855), in which the use of architectural knowledge, through diagrams and urban maps, demonstrated how to prevent the spread and fight back cholera, in Soho in mid-XIX century. John Snow employed a dot map to illustrate the concentration of cholera cases around



Fig. 1. *Monades*: it would appear that specific knowledge and teaching methodologies operate in isolation, Milan 2023 (original drawing by the author, property of Stefano Sartorio).

water pumps, effectively showing the intersection of disease spread with a geographical reference in the urban space. Additionally, he harnessed statistical data to highlight the correlation between the quality of the water source and cholera outbreaks. His groundbreaking work revealed that homes served by specific pumps faced a staggering fourteen times higher cholera incidence compared to others. During that era, the medical discipline possessed limited knowledge regarding the disease and its transmission. It was only through the innovative use of an architectural tool, enabling the spatial visualization of the issue, that Snow discerned the intricate connection between water distribution and cholera clusters. This interdisciplinary bridge, linking the realms of medicine and urban planning, led to a brand-new discovery. John Snow's study, thanks to the interpolation of tools from another discipline, thus stands as a pivotal moment in the annals of public health history.

Speaking of bridging tools between disciplines, Pagano's work for the VI Milanese Triennale can be described as an interesting example to dwell on. In his research, the architect sees photography as an instrument of truth, capable of rendering reality as it is, objectively. The aim was to promote "the true autochthonous tradition of Italian architecture: clear, logical, linear, morally and also formally close to contemporary taste" [5]. Although the architectural objective is stated in the exhibition catalogue, there is also another research undergoing the use of photography: an ethnographic survey on Italian regional traditions [6]. Indeed, the architect continued with his work of cataloguing the rural structures he encountered in his wanderings around Italy, always depicting the evolutionary scenario of those artifacts used by the rural population. In all his panels,

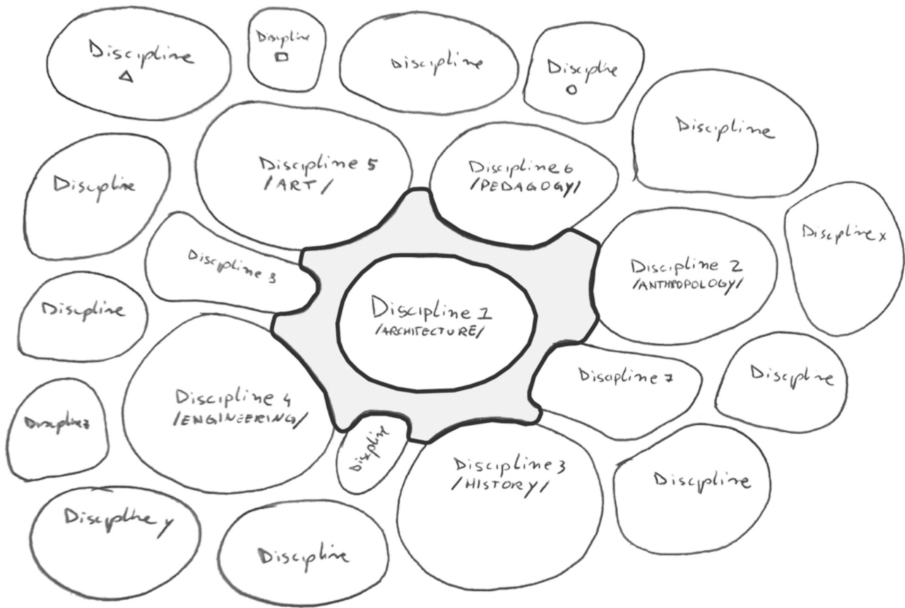


Fig. 2. *Thick boundaries:* In the imagined scenario in which every discipline could stand by itself, the link in the tools and methods that are shared between disciplines, Milan 2023 (original drawing by the author, property of Stefano Sartorio).

he showed a sequence picturing not only the architectural space but also registered and testimonies the instruments used by farmers, rural families, and shepherds. In this way, from Bilò's point of view, photography is a tool that transcends the mere role of documenting a spatial composition; it is indeed a method of recording human relations to the physical space of living and working; an undiscussable ethnographic portrait of rural populations.

Similarly, another case of bridging tools between disciplines is the innovative contribution of interviews (from the socio-psychological disciplines) to urbanistic research in *the image of the city* [7]. This example perfectly shows the interplay of interviews and drawing to discover a psychological fact: people's perception of the space. Lynch's research led to find out of people's orientation (mind maps) and the drawing interviews were bridging the two disciplines: architecture and psychology.

Further examples can be found if we consider that a discipline itself can become a method of inquiry (a tool) for another discipline. Architecture as a discipline can be considered a third educator for pedagogical purposes, becoming a proper tool for the discipline of pedagogy; and *vice-versa* pedagogical knowledge can lead and modify spatial decision in the discipline of architectural composition [8].

3 Thesis

3.1 Application on the Field

As per the example given in the precedent paragraphs, and following the syllogism of *ch.2 Hypotheses*, it is plausible whether the definition of a scientific status is to remain within the dominium of “Architectural education” but using tools and methods from a different discipline. More than that, overcoming the strict separation of knowledges, framed in disciplinary dominiums and disciplinary methods can lead to various positive impacts. Methods can be seen as bridges between disciplines (Fig. 3). Indeed, teaching (and learning) architecture by merging with other disciplines may lead to new solutions to the global shifting conditions we are living in.

To conclude, there is no need to revolutionise one discipline to evolve the way of teaching/learning it. Especially in the field of architecture, which involves intricate interactions among the physical environment, the technological one, and the structuring of cultural and social aspects within the profession. We can look at what stands at the margins of the discipline (Fig. 4), exchanging tools and methods between knowledges, and having benefits to the core of the discipline that deals with current global emergencies.

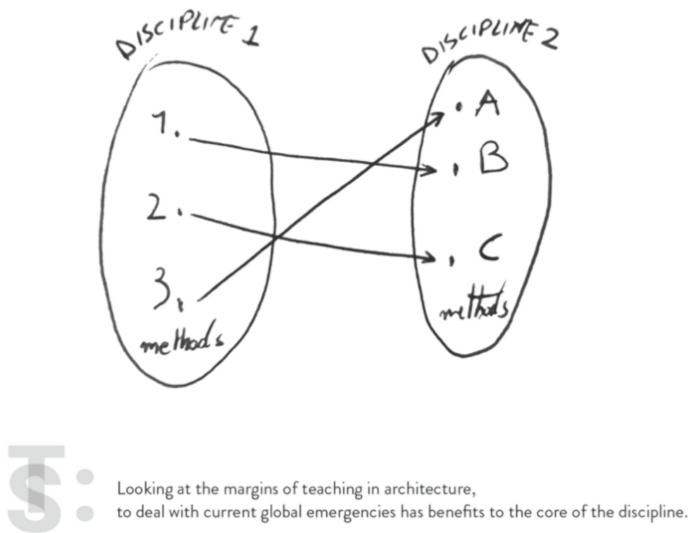


Fig. 3. A bijective function: Methods can be seen as bridges between disciplines, Milan 2023 (original drawing by the author, property of Stefano Sartorio).

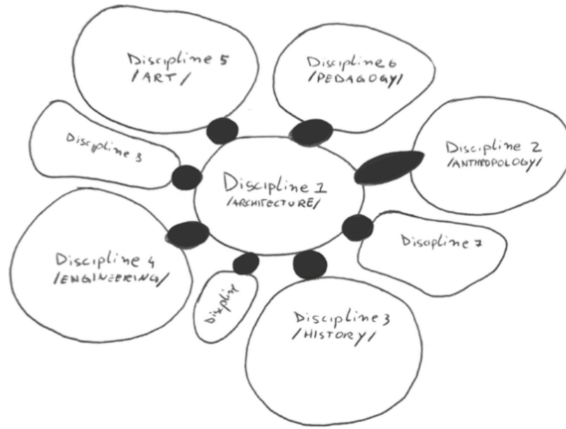


Fig. 4. *What stands at the margins of the discipline: exchanging tools and methods between knowledges, and having benefits to the core of the discipline, Milan 2023 (original drawing by the author, property of Stefano Sartorio).*

4 Case Studies

Considering the condition of Italian inner areas, they are recently become of central interest in various disciplines. Design studios and researchers of various universities had described and analysed those territories. Amongst the many, two specular examples of architectural pedagogy, related to the lagging rural areas are presented.

The first one (*Ch. 4.1*) stems from the acquired experience as Teaching Assistant during Architectural Design Studio 3 at Politecnico di Milano and held by prof. Emilia Corradi and prof. Alisia Tognon between 2020–2023. The didactic activity takes place thanks to the project “Digital Twins Laboratories” funded by the AUIC school, Politecnico di Milano.

In this former case, teaching architecture involved the use of other disciplines methods and tools, meeting one community’s need. The second one (*Ch. 4.2*) is an ongoing experience, in which one rural community hosts students from various disciplines. In this case, both the rural community and the students passed through an architectural pedagogy for learning.

4.1 Academia Meets Rural Community for Architecture

During this first experience the site survey of meeting the rural community has totally changed the design result of students’ work. Indeed, after the *contamination* of other disciplines’ methods it was visible a shift of the architectural outputs. Students experienced for few days a research stay in Morino (Aq) in direct contact with the community. Each group could focus on different tool and method to conduct the inquiry: they had the opportunity to read extra disciplinary book of the library and were free to use the tool of investigation they preferred. Indeed, it was mainly an ethnographic survey, in which they could relate with people, place and objects within the rural community. The

field research indeed has been the joint between ethnography (relating to people) and architectural design (relating to the place). Only after the inquiries they came back to the architectural core, proceeding to a self-revision of their own works (and we could spot the tremendous effort on self-judgment and re-elaboration).

Discipline, on the other hand, provides the theoretical framework and critical thinking tools necessary for architects to navigate complex design challenges. In rural areas, the discipline of architectural pedagogy should embrace an interdisciplinary approach, integrating knowledge from fields such as sociology, anthropology, environmental science, and engineering. This interdisciplinary lens allows students to holistically understand the multifaceted dimensions of rural life and design solutions that address social, cultural, economic, and environmental aspects. It broadens their perspective and equips them with the tools to think beyond a conventional architectural definition through boundaries.

4.2 Rural Community Meets Academia Through Architecture

The central question that guides this architectural pedagogy experiments shows all is dealing with the problem of living in an inner area. The answer is multifaceted and for sure does not follow a singular trajectory and Vione envisioned itself as an experimental laboratory for exploring these possibilities.

Indeed, *Vione laboratorio permanente* [9], is hosting students for its workshops to develop communication tools for a project that encourages reflection on the theme of living in a mountain village. By temporarily utilizing spaces in the borgo, the Municipality and the Parish of Vione are embarking on regenerative initiatives throughout the region, fostering new paths for development. An alliance of stakeholders has been formed to accomplish this ambitious objective against its inner area depopulation, including the Municipality of Vione, and other political administrations. Additionally, numerous other local and Alpine network institutions within the education field (universities and technical high schools) have been invited to actively support reshaping the community spaces through their disciplinary knowledge. The peculiarity of this experimentation lays in its community involvement in the architectural pedagogy process. The rural community first took part in informative meetings about architectural reuse, and then it was involved in hosting the participants of the workshops. Indeed, inhabitancy necessitates residing in a place, and VIONELAB's experimentation includes hospitality programs in private houses and municipal public spaces, targeting students, especially university students, and professionals. They are invited to engage in campus activities, sector workshops, training sessions, technical meetings, and team-building sessions. By gradually extending this hospitality initiative across the community, VIONELAB aims to reinvigorate underutilized or abandoned spaces, actively involving the local population. The presence of young people and their instructors is intended to open new horizons into the town, stimulate local people's curiosity, and spread awareness of design possibilities among the participants. This represents a continuation of Vione's journey that began in 2019, exploring the path towards its future. The Vione community seeks to establish dialogue with young individuals and educators from various universities and training institutions, engaging in discussions about their ideas and aspirations for change and transformation. The residency calendar is rapidly evolving and weaving a network of fresh relationships. With VIONELAB, Vione has already initiated the process of change

for this small Upper Camonica Valley town. Progress is marked by incremental steps, focusing on the region's needs, intentions, projects, and resources. Collaborative efforts with universities, academies, and higher education institutions have reevaluated the public and private spaces within Vione's historic centre. Though the aim was to fight against rural depopulation, learning and studying architecture had become the method through which students from different disciplines could propose new ideas for the town. At the same time, architectural pedagogy was a tool to approach the rural community's interest in achieving the program's primary goal.

5 Conclusion

5.1 Looking at the Margins to Redefine One Discipline's Core

The outcome of this reflection on architectural definition, whether as a discipline defined by a scientific status or as a *modus operandi*, stands on the idea that within the architectural pedagogy need not be a rigid constraint but rather a flexible framework that accommodates a diverse array of tools and methods. This approach accommodates a wave of positive transformation, particularly as we navigate the dynamic currents of contemporary global challenges [10]. Rural areas, for instance, often at the forefront of these challenges, an example of bridging methods between disciplines that have shown benefits from this dynamic approach. Understanding the interplay between method and discipline is crucial for effectively educating future architects who can address the unique challenges of rural context. Rural areas, marked by depopulation, limited connectivity, and a trove of historical and natural heritage, emerge as complex terrains where architectural pedagogy can make a substantial impact. To address the multifaceted challenges posed by these unique environments, architectural education must embrace a panoramic, interdisciplinary approach. By drawing insights from sociology, anthropology, environmental science, and engineering, students as well as rural communities, are equipped with a holistic perspective that extends beyond the traditional confines of architecture. In conclusion, the confluence of method and discipline within architectural pedagogy in rural areas emerges as a pivotal point of innovation. A participatory, community-oriented method beckons students to actively engage with rural communities, fostering co-creation of solutions deeply rooted in the local context. Simultaneously, a disciplinary methodology can be adopted in different disciplines to vehiculate community engagement in innovative processes. The interdisciplinarity interplay of methods and tools equips students (or better: anyone who wants to learn) with the theoretical knowledge and critical thinking skills necessary to navigate the intricate world of shifting conditions. By striking a harmonious balance between method and discipline, architectural education, especially in rural areas, emerges as a catalyst for sustainable development and positive change in one's community.

References

1. Agenzia per la coesione territoriale, Strategia nazionale Aree Interne. <https://www.agenziacoesione.gov.it/strategia-nazionale-aree-interne/>. Accessed 20 Feb 2024

2. Openpolis, Parole. <https://www.openpolis.it/parole/che-cosa-sono-le-aree-interne/>. Accessed 15 Oct 2023
3. OxfordLanguage English Dictionary. <https://languages.oup.com/google-dictionary-en/>. Accessed 15 Oct 2023
4. Alexander, C.: The Nature of Order: an Essay on the Art of Building and the Nature of the Universe. 1: The Phenomenon of Life. The Center for Environmental Structure, Berkeley (2002)
5. Pagano, G., Daniel, G.: Architettura Rurale Italiana, p. 6. Milano, Hoepli (1936)
6. Bilò, F.: Le Indagini Etnografiche di Pagano. LetteraVentidue, Siracusa (2019)
7. Lynch, K.: L'immagine Della Città (Ed.Trad. 2001). Marsilio Editori, Padova (1960)
8. Weyland, B., Attia, S.: Progettare Scuole Tra Pedagogia e Architettura. Guerini Scientifica, San Giuliano Milanese (2015)
9. Vione Laboratorio permanente. <https://vionelab.it/#eventi>. Accessed 15 Oct 2023
10. Settis, S.: Architettura e Democrazia: Paesaggio, Città, Diritti Civili, 1st edn. Casa editrice Einaudi, Cles (2017)

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