Imagining and Re-imagining Place: Cultivating Spatial Imagination in Architectural Education

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Keywords: imagination, place, drawing, modeling, writing.

For pressing and complex spatial or social urban agendas, understanding and interpreting place has always been an important issue. In-depth and close explorative reading of a site—in which drawing, modeling and writing (the basic tools of architecture) become instruments to open up new perspectives—is vital for imagining site-specific architectural possibilities. We thus see creative imagination, related to and emerging from place, as a crucial source of innovation. As educators, therefore, we need to examine how to guide students explore their imaginative faculties. Our pedagogical approach is founded upon the philosophical thought of phenomenology, theory on place, findings from neuroscience, and examination of architectural precedents. Based on these underpinnings we developed a course that focused on enhancing students' spatial imagination and challenged them to think how the tools of architectural analysis and design can offer new imaginative ways to approach the local, social and historical aspects of a place. The paper illustrates how this framework is brought into architectural education by engaging the example of "Methods of Analysis and Imagination," a master level elective course we taught in 2019. It presents the course's overarching structure, as it unfolded over three intensive workshops on drawing, modeling and writing respectively. Investigating a selected site—through readings, conversations, exercises, hands-on and in situ assignments—the three workshops explored the way imagination can help us look at a place, and discover new and unique spatial or architectural relationships lurking in the banal and the ordinary. Through selected students' work the paper concludes situating the course in an educational context that cares to expand spatial and architectural imagination, trusting imagination to be the productive and valuable answer to the many critical contemporary conditions we face as architects.

IMAGINING AND RE-IMAGINING

In her article "Varieties of Architectural Imagination" (2016) educator Lisa Landrum discusses different imaginative agencies that are an essential part of architectural creation. She argues that since present-day architects work more through mediating representations—such as drawings, models, and words—these representations are the architects' primary imaginative means of sentient engagement with the works and worlds they propose.[1] She suggests that fully activating one's architectural imagination requires conscious practice. "Like exercising one's memory (or calves, quads and hamstrings), imagination develops greater strength, range, speed and agility, as well as more appealing vivacity when exercised regularly in a variety of ways."[2] Landrum is not the only voice advocating for the necessity of exercising and exploring imagination in architectural education (and practice). In the fourth issue of the *Writingplace Journal*: "Choices and Strategies of Spatial Imagination" (2020) a number of architects come to her defense, unpacking more specifically the possibilities of spatial imagination. The issue's editorial defines spatial imagination as "this wondrous capacity to envision possible futures for the built environment, (…) to visualize new constructions taking shape, evolving in time, and partaking of the cultural expression of a place or era."[3] The editorial also points to the sociological and psychological aspects that spatial imagination can account for, in foreseeing "how architecture can meaningfully contribute to people's lives, providing a sense of belonging, space for their needs and dreams."[4] Adding a further sociological element to this definition professor Swati Chattopadhyay, through her work "Architectural History and Spatial Imagination," (2014) claims that we can "think of spatial imagination as the attribute that (…) enables the translation of 'social and spatial metaphors into actual physical geometries.'"[5]

A number of insights from these sources inspired the point of departure for the architectural master-level elective course "Methods of Analysis and Imagination" we designed in 2019, interested in exercising students' spatial imagination through mediating architectural representations. Following Swati Chattopadhyay's reasoning we explored ways to translate social, cultural and spatial metaphors into physical geometries through drawings, models and writings. In alignment with the discourse that sees architecture as contributing meaningfully to people's lives, needs and dreams, we approached place as material, spatial but also lived. Henry Lefebvre's notion of "lived space," as unpacked in his seminal work *The Production*

Figure 1. In situ explorations with closed eyes. Image credit will be added after the blind peer review.

of Space (1974), came to our assistance and stirred our focus on the dimensions of space that can be heard, touched, seen and even smelled.[6] We developed thus a tree-partite structure for the course, based on three intensive workshops respectively titled "Looking Through," "Touching Through," and "Living Through," founded on relevant bibliography and architectural precedents. By paring our specific interest on lived space with the notion of "through", we wished to trigger students' imaginative capacity to see other worlds through the existing one; discover new possibilities through the prevailing ones; suggest new architectural representations through the commonly used ones. In short, we built a course to exercise students' spatial imagination by evoking architectural representations through a very close embodied reading of place, linking perception and imagination.

IMAGINING AND RE-IMAGINING PLACE

The notion of place was central to our quest in exercising imagination, and helped us guide students to see architecture and space in relation to the local, social and historical aspects of a given site. We departed from the phenomenological idea that architecture is part of, partakes of and contributes to its immediate and extended surroundings, in dialogue with the society, culture and identity of a place. It is a position we acknowledge to be crucial, but also inherently ambiguous. In his article "Emerging Place in Contemporary Architecture: The Problem of Context in a Cosmopolitan World" (2019) architectural theoretician Alberto Pérez-Gómez discusses such ambiguities of context in contemporary architecture. He warns us that "in seeking to transform the awareness of a place's spirit into a productive point of departure for architecture, we must ask how this meaning is actually given."[7] He argues that context (in all its historical, cultural and sociopolitical richness) is never given, like an unchangeable object. Instead, we have to make this context at every moment ourselves, through our careful and attentive observation, imagination and understanding; an understanding that becomes interpretation. In this interpretative engagement with context, our conceptual skills and background are very much part of our perception and imagination, which are never passive.[8] Thus a phenomenological approach to context for spatial imagination can bring to the fore the multiple aspects of a place along with the multiple perspectives of the designers themselves.

It is with these theoretical underpinnings in mind that we guided students to engage in a ten-weeks long period of observation and imaginative interpretation of context, during which they had to "make this context at every moment" themselves. The course was conceived as an extended-in-time and detailed-in-investigation site analysis of an actual physical location. During this site analysis students collected relevant information about the place on different levels (spatial, material, social, historical), which provided the ground for further analysis and imagination. The design process was halted indefinitely, freeing students from preconceptions and expectations, and allowing them to focus only on understanding and imagining place. Our pedagogical intention was to create the conditions for them to discover in place, elements, facts and stories that often go by unnoticed during a quick and hurried site analysis which rushes towards design; realities and atmospheres so fragile and temporary that require a careful combination of perception and imagination to be understood. Through experimentations on drawing, modeling and writing, along with rigorous iterations, we wished for them to imagine and re-imagine this place in multiple manifestations, scenarios and possibilities.

The choice of place was guided both by spatial and practical considerations. We opted to work with a centrally located urban enclosure—a historical public courtyard with residential, commercial, religious and social programs—a quite vibrant world-in-itself, relatively hidden, yet well connected to the city. From a practical perspective, we thought that the proximity of this urban enclosure to the University campus was also vital. The students could visit it as often as possible and spend actual time in situ, in order to observe it and imagine it anew. Alvaro Siza's imaginative understanding of site observation acted as an inspiration on that regard: "Observation is

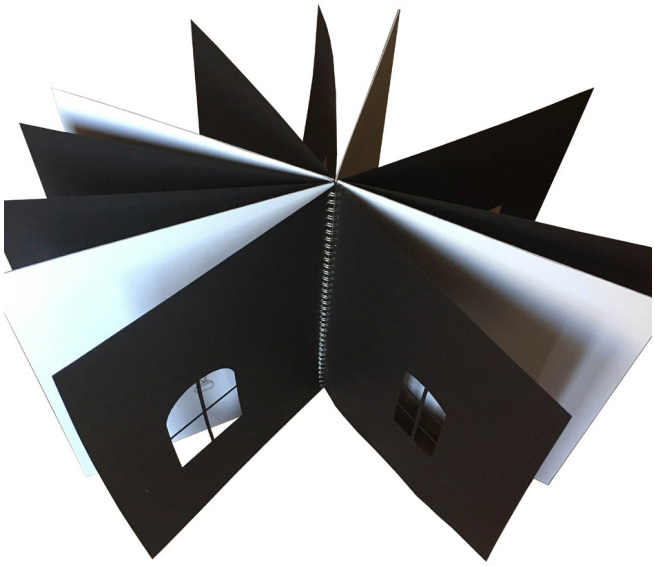

Figure 2. Rotating sequence of views. Image credit: Benoit Marcou.

no easy task, for learning how to see [is] a process that never comes to an end. The challenge, is to rediscover the magical strangeness, the peculiarity of obvious things."[9] Offering students the possibility to literally visit and re-visit the place allowed them to indeed experience this type of observation as an ongoing process.

CULTIVATING SPATIAL IMAGINATION

With the acknowledgement that our spatial imagination needs tools like drawings, models and words to be expressed and communicated, came also another recognition. These same tools, apart from allowing an architect's imagination to be expressed, also hinder many of its possible expressions due to their rules and conventions of construction. Plans or perspectives carry with them inherent guidelines for their making, but most importantly inherent concepts of what place is or should look like in its representation.[10] This can indeed limit expressions of spatial imagination that cannot fall into these categories, rules or conventions. A model of positive and negative volumes or of site-landmarks does not allow the imaginative possibility to express the wind that changes a place's atmosphere, or the raindrops that dump all its surfaces turning them cold and uninviting. A technical report written in a language meant for construction and communication of economic data will not capture the passing dialogues of the place's existing dwellers, the words associated with their everyday routines, their concerns or their favorite habits. Based on these limitations, we set off to expand our understanding and use of drawings, models and writings, to express different aspects of space and spatial imagination. In doing so—and aligned with architect Peter Zumthor's recent notion of "emotional reconstruction" for place—the assignments attempted to enable a playful curiosity in experiencing, understanding, imagining and re-imagining place.[11]

LOOKING THROUGH

The course started with an intensive two-weeks workshop on drawing. The workshop investigated the theme of "Looking Through," seeing in drawing the possibility to capture multiple layers of activities, events and elements of place simultaneously. Readings on the differences between "the drawing and the computerized hand," by architect and theorist Juhani Pallasmaa,[12] on "literal and phenomenal transparency", introduced in the 1960's by urban theorists Colin Rowe and Robert Slutzky,[13] and different examples of analytical architectural drawings, were precedents discussed and analyzed in class. "Transparency" and "looking through" were not approached just as optical characteristics of place. They were investigated as "simultaneous perceptions of different spatial locations" in the same place, that beyond revealing what might be "perfectly clear," actually exposed what might be "clearly ambiguous" and thus relevant or important to explore further, as Rowe and Slutzky suggest.[14]

The students worked on this topic while immersed in the place physically, engaging in various small experimental drawing activities, like drawing with closed eyes, drawing an object that they had only touched and not seen (figure 1), drawing from memory, or drawing with multiple tools and on multiple surfaces. By doing so, they could explore how drawings can capture two-dimensionally the multiple layers of a site. This challenged them to exercise their imagination, giving spatial expression to the multiple worlds these layers may accommodate. Following these initial in situ exercises, the students proceeded in crafting drawings, setting parameters and rules of their own, so as to present their findings beyond the commonly used orthographic projections, perspectives and renderings.

Student Benoît Marcou for example was fascinated by the multiple views of house's interiors that a person walking around the site could perceive, through the windows on the ground and first floor. With houses placed opposite and close to each other, he started imagining the spatial impressions produced from within some of these windows. These views included interior elements of the people's own houses, fragments of the public enclosure immediately outside the window, activities and happenings caused by passersby or elements of the weather, and the interior scenery captured by the frames of the windows just across. The multiplicity of these layers and the speed in which they could unexpectedly change, led him to create drawings for a rotating sequence of views (figure 2). Different window frames of the area, along with different interior objects, activities and sceneries could be placed in various

Figure 3. A soft ball collecting ground tectures. Image credit will be added after the blind peer review.

combinations in front of each other, expressing the multiple views and impressions of the given place through the eyes of the place's own inhabitants.

TOUCHING THROUGH

The workshop on modeling investigated the idea of "Touching Through." Bibliography on the mediating representation of modeling agrees on the fact that the word "model" is a "surprisingly flexible term even for architects, so much so that it is rarely seen in dictionaries of architecture."[15] Mark Morris, in his study *Models: Architecture and the Miniature* (2006), collects the majority of the assumptions that usually accompany the tool of modeling, such as: "Models represent buildings; models are at a smaller scale than the space that they represent; and models make it easy to comprehend the architectural idea."[16] As counter points to these assumptions Morris also argues that "models are not always representational; size must be considered in relation to scale; and rather than being a technique for translating design into built form, the model directly enters the design process."[17] We encouraged the students to think critically about these common assumptions and their counterarguments, and find in modeling ways to imaginatively depict spatial elements that usually remain unstudied, or unobserved. Our emphasis was on tactile analogue models and not digital ones, tactile models made by hand instead of computer-aided manufacture (CAM) techniques, and with unusual or creatively inventive materials. In the workshop, touch was not understood only as a capacity of the hands, but of the body as a whole, and its intention was to help students embrace the site in all its sensorial richness. Textures and sounds, smells and tastes, tangible impressions of place, observations or even spatial hypothesis were explored through the three-dimensional mode of modeling.

The three dimensionality of the tool connected students with space directly. It prompted them to select specific elements from the area to work with and take a conscious choice on how to represent them or even more, on what new to create out of them. Following Marx W. Wartofsky's philosophical suggestion that a "model is not simply the entity we take as a model but rather the mode of action that such an entity itself represents,"[18] we urged students to think on how spatial imagination is expressed while making their choices for model making. As Wartofsky explains, when we choose something to be a model, we choose it to (…) aid the imagination or the understanding. In that way the model is normative as it represents abstractly only certain features of the thing we model and not everything all at once. These features are taken to be important, or significant, or valuable.[19] Thus by selecting what is, or might be important, a model "is more than an action; it is at the same

Figure 4. Floating bikes. Image credit: Nancy Williams.

time a call to action."[20] "Models generate creative action,"[21] in the imaginative faculty of the students and tangibly expand, as we wish to argue, their spatial imagination. By working directly in space, albeit at small scale, concepts were formed and reshaped as a result of their exploration in three-dimensions; a process in which options remained open—options which might not appear available to the designer trapped within the confines of paper.[22]

Student Winnie Goldsteen, worked with the many different scents and odors of the area. Instead of looking at the place as the open public courtyard it is, she imagined it as a valuable and fragile small perfume bottle. Such a spatial metaphor was triggered by her experience that the strict and imposing materiality of the place was disappearing in the presence of the tree fragrances and the smells of home-made food coming out of the different houses. To express these, she imagined brick as deprived of its heavy materiality, and created small-scale light-weight bricks instead. She used them to build a model that gave the impression of a heavy brick structure, but as soon as it was touched and lifted, its lightness was manifested. Through carefully inserted cracks in the model, aromas of the area were diffused in the air as soon as one was interacting with it. Student Julia Linde cared to explore the textures that the area's inhabitants engage with, in their everyday lives. She knocked on people's doors and asked them to give her domestic objects that they had readily at hand, objects cheap and not vital to them though still abundant in their daily activities. She collected these objects and used them for three dimensional structures that captured the space of the area through the inhabitants daily, prosaic and ordinary doings. Student Koen Huijben was fascinated by the many textures sensed by one's feet while crossing the area. He imagined that such textures (from harsh to smooth ones) follow the walkers that pass by and created a ball that like a sponge could collect and carry with it all these ground textures (figure 3)

LIVING THROUGH

The workshop on writing investigated the topic of "Living Through." The larger philosophical framework of the workshop emerged from the work of thinkers like Paul Ricoeur, Richard Kearney and Evan Thompson, who have argued that language is the substance of the imagination, and that images appear in the brain prompted and encouraged firstly by words.[23] This prioritization of language in relation to imagination is now an insight also corroborated by experimental neuroscience. In his study ***The Architect's Brain: Neuroscience, Creativity, and Architecture*** (2010) Harry Francis Mallgrave explains how imagination emerges initially from words and then is translated into images.[24] Philosopher Richard Kearney in his work ***The Narrative Path*** (1989) had long now asserted that imagination is assessed as an indispensable agent in the creation of meaning in and through language.[25] Replacing the visual model of the image with the verbal, Ricoeur affirms the more poetical role of imagination—that is, its ability to say one thing in terms of another, or to say several things at the same time, thereby creating something new,[26] an aspect of imagination truly valuable for architecture.

In his article "Learning from Stories: Narrative Imagination in Urbanism and Architectural Design," (2016) literary theorist Bart Keunen argues that narrative imagination can be a very important element in architectural studies. He explains that "in a fictional world, associations of the imagination are brought into line, (…) and tuned into a coherent whole with one purpose: to make it possible to experience these associations, and comment on them, in the same way as real situations."[27] The workshop capitalized on this idea and explored it in the real world of the urban enclosure under investigation. As its short title "Living Through" implies, the workshop guided students to explore the place imagining how it appears through somebody else's life, through other people's perspectives and points of view, through other characters' histories.

The workshop prompted the students to engage diverse literary techniques in order to imagine characters, events, and conditions, "as real situations" that could transform the site. Based on the fascinating variety of literary techniques for architecture, explored in the work ***Urban Literacy: Reading and Writing Architecture*** (2014) by architecture scholar Klaske Havik,[28] two main lines of investigation were explored in the course through writing. On the one hand, imagination was engaged in order for the students to reinvent ways to describe common qualities and experiences of the place, and thus see it anew. On the other hand, students developed multiple spatial scenarios for the future of the place, or imagined its past and tried to bring older stories again into the present. This provided an understanding of the role of imagination as capable to predict future conditions but also engage realities of a place's historical context. More specifically, the students worked on narratives of different topics and through different writing modalities. Either through the first-person perspective of a contemporary character of the area (particularly of an age-group substantially different than that of the students), or through the third person perspective of a journal article that captures an event/ happening in the area, they developed their spatial imagination, "living through" the lives of other characters, different time eras, or future possible happenings.

Student Nancy Williams worked on a narrative inspired by one of our global conditions most pressing issues: global warming. She imagined that in fifty years from now the area's ground floor would have been completely flooded and living would happen on the existing structures' higher levels, appropriately refurbished to account for the new reality. She imagined daily routines of the inhabitants in these conditions and new spatial possibilities for architectural intervention. She even imagined new modes of transportation, like floating bikes, that could create unique ways of communication among the peoplein this future scenario (figure 4).

LOOKING, TOUCHING, LIVING THROUGH

Alongside the three intensive workshops, the students were engaging with the area on a daily basis, through two more tools of communication: their diaries and their social-media account. A notebook collecting elements from the area on a daily basis— impressions, thoughts, ideas, imaginative visions, or even memories—was a constant companion fueling and sustaining their spatial imagination. The students were encouraged to use any kind of medium, and any possible means in order to capture their entries. This diary was a personal and intimate log of their site explorations and spatial imaginations (figure 5). Based on the fact that imagination (along with inspiration for new ideas) is unpredictable, the diary was meant to be with the students at all times, so that they could pen down their ideas when they were not physically present on site, or when they were not even working on each workshop's specific assignments. Selected pages from these diaries were uploaded weekly on a closed-network social media platform (through accounts created specifically for the course alone), so that the members of the course, could have a pick on each other's engagement with the site, comment on each other's ideas and create a dialogue outside the classroom and through-out the week.

The course culminated in a holistic assignment that gathered and shed new light on the results of the three respective workshops. From the two dimensions of drawings to the three dimensions of models and the fourth dimension of time emerging through the writings, the students completed this final assignment thinking collectively on their work. Each student created a unique container to store the drawings, models and writings produced during the semester. The container, which was also meant to express the character of the area under examination, was understood as an alternative suitcase, a suitcase that could help them carry all the elements they worked with through the semester. If in the near future, students had to design an architectural intervention for this specific area, they could open their suitcase, to use and reflect on the imaginations they had gathered, triggering new explorations.[29]

CULTIVATING SPATIAL IMAGINATION IN ARCHITECTURAL EDUCATION

In his work *The Spell of the Sensuous* (1996), philosopher David Abram supports that "the singular magic of a place is evident from what happens there, from what befalls oneself or others when in its vicinity. To tell of such events is implicitly to tell of the particular power of that site, and indeed to participate in its expressive potency."[30] The elective course "Methods of Analysis and Imagination," managed through the students' drawings, models and writings to indeed "tell of the particular power" of the site under investigation, its expressive and imaginative, as we believe, potency.

Through its tree-partite structure, that linked the phenomenological themes of looking, touching, and living through to the tools of drawing, modeling and writing, the course connected embodied perception to imagination for the study of place. In dialogue with the social aspects, culture, history and identity of place, the students imagined and invented ways to describe common qualities and experiences of architecture, and thus see them anew. They developed trust in the fact that by exercising, through rigorous iterations, their imaginative faculties, imagination expands, develops and opens new worlds; imagination is not something static that we either possess or not. Lastly, they became confident in experimenting with, and not taking for granted, means of representation in use for centuries in the field of architectural discipline. These tools can reveal unforeseen and unexpected potentials in our reading and interpretation of place, if approached imaginatively, critically and thoughtfully. The students' imaginative capacity to think them anew and re-invent them, is precisely what we expected from them as architects-to-be during this course, and what will introduce a more imaginative approach to architectural practice in the future as a crucial source of spatial innovation.

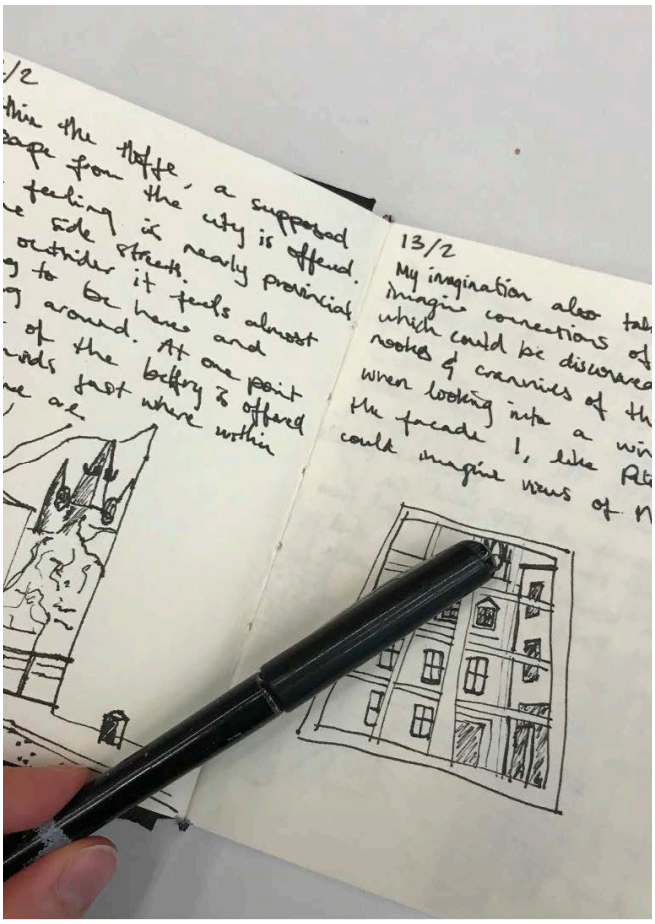

Figure 5. Diary as an intimage log of site explorations. Image credit will be added after the blind peer review.

ENDNOTES

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