

# Life stories, storyboards, and animatics in architectural education

## Histórias de vida, storyboard e animatics no ensino da arquitetura

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**ABSTRACT** – How can we introduce emotional conditions in architecture that would allow for the design and expression of existential space? Architects do not currently have the appropriate methods or the right tools of representation for articulating such subjective information during their design process. This article addresses this issue by evaluating a didactic approach and alternative means of representation in the architectural studio. This studio experience aimed at articulating people's life stories in audiovisual narratives, which later inspired a number of students' designs. First, the students conducted interviews with local people, and later worked with two tools – storyboarding and animatics – to analyze how space was signified through these people's narratives. This article evaluates: (i) the introduction of interviewing and the particular audiovisual tools; (ii) how these students articulated the studio experience into their learning processes, and (iii) into the resulting architectural designs.

**Key words:** life stories, means of representation, storyboard, architectural education.

**RESUMO** – Como podemos considerar a emoção na arquitetura de forma que de conceba e expresse o espaço existencial? Os arquitetos não possuem os métodos apropriados ou as ferramentas adequadas de representação para articular tais informações subjetivas durante o seu processo de design. Este artigo aborda esta questão avaliando uma abordagem didática e a utilização meios alternativos de representação no ateliê de arquitetura. Esta experiência visou articular histórias de vida em narrativas audiovisuais, que posteriormente inspirariam os projetos arquitetônicos dos alunos. Inicialmente, os alunos realizaram entrevistas com uma população e mais tarde trabalharam com duas ferramentas – o storyboard (roteiro gráfico) e o animatics (roteiro gráfico animado) - para analisar como o espaço foi significado através das narrativas dessas pessoas. Este artigo avalia: (i) a introdução de entrevistas e de ferramentas audiovisuais específicas, (ii) como estes alunos articularam a experiência do ateliê em seus processos de aprendizagem e (iii) nos projetos arquitetônicos resultantes.

**Palavras-chave:** histórias de vida, representação, storyboard, ensino em arquitetura.

### Antecedents

Personal narratives such as those evoked in regular conversations are a rich source of inspiration for design. Architects are sensible to such insights since space, far from being an external container, is expressed, embodied and signified through these personal experiences. How might architects contemplate this essentially lived space as another dimension of their design?

The means of representation are essential in the dialogic process of architecture creation (De la Puerta, 1997). Drawings, physical models, annotations, and an ever expanding set of tools being incorporated into the process allow the designer to cyclically make decisions and reinterpret his/her design concepts<sup>1</sup>. However diverse and versatile such means might be, representation has

developed historically into the portraying of spaces in an objective view, exterior to the observer (Pérez-Gómez and Pelletier, 1997). In this space there is no contemplation of how the multisensory perception or the individual's significance influences the understanding of space.

This paper discusses a studio experience where people's life stories were articulated into audiovisual narratives that would later inspire student designs. The experience was a two week exercise developed in a second year architectural studio at the Universidad del Bio Bio, in Chile. The focus developed during the second year studios was the relevance of places for architectural designs. The exercise focused on the means to investigate and express a sense of place at an early stage of an urban context analysis.

In a traditional approach to an urban context, students register and analyze the visible-observable features

<sup>1</sup> De la Puerta (1997) described these dialogues as intimate wanderings through one's thoughts, and at other times as a way of communicating design features to others such as team members and clients. During this dialogic process, choosing one type of representation significantly influences the outcome of the project, since the choice inevitably enhances one design solution over alternative options.

of the city: buildings, space proportions, and human interactions. Such an approach, however, leaves unregistered the local people's meaningful constructions of the place. In order to foster student understanding of how urban space is signified through people's stories, this studio experience introduced the collecting of life stories from local subjects. People's life stories provide evidence of significant urban paths, collective rituals, the relevance of no longer existing buildings, and qualities only perceived in everyday life. But most importantly, these stories could reveal such features of personal significance to the narrator, embedding them into their emotive personal experiences.

The collecting and coding of themes from life stories is not new. The process belongs to methods within qualitative inquiry, which are deeply rooted in the social sciences. During this studio experience, however, the method was used as a preliminary approach to understanding place. The exercise aimed at allowing these students *to listen* to the local people and articulate the subjective dimensions of the remembered space into their designs. In particular, the experience aimed at imagining the spaces and the spatial qualities recalled. Therefore, these life stories required tools for reporting and analysis to be appropriated by the designers. The emotive space evident from these life stories would be typically expressed in a written form called a 'thick description.' However, we needed tools that would help architects elaborate upon their designs by other means of representation, where concepts could be expressed synthetically into images and physical models.

Developed for more than a century and very popular among the younger generations, film has provided codes of representation that could express meaningful places within the context of a narrative. The use of film in architectural projects is not novel. Among the most notorious is Tschumi's (1995) study of the relationship between event and space in order to establish sequential rules for form generation. Several other authors (Bridges, 1993; Mark, 1997; Rafi, 1998; Temkin, 2003) have also studied such filmic codes in the classroom, with the purpose of producing architectural animations from three-dimensional digital models. Yet other architectural endeavors (Cairns, 2007; Knox, 2007) have studied the translation opportunities of films-inspiring-projects-inspiring-films in studio applications. Most of these experiences, however, centered on the potential for generating architectural forms from film features more than on exploring the emotional content of the film's narratives.

Since cinematography is a highly specialized art, we looked into tools that could rapidly allow the students to experiment with visual narrations. Storyboards

are drawings produced during a film's scene-planning process which allow for quick and preliminary views of the narrative sequence. Similar to the sketch made in architecture, storyboard drawings are generally quick, black-and-white, linear sketches. Through these drawings the designer plans for changes in point of view and for different shots, framing sizes, angles, and character participation (movements, gestures, and dialog). Due to its eminently narrative function, the main feature of the storyboard is the sequential and synthetic expression of the scene. However, the storyboard drawing does not allow the artist to perceptually reconstruct the illusion of movement produced in films. Animated storyboards – called animatics – allow for a qualitative change in perception, because time, which was only imagined in prior depictions, can be perceived directly in an animatic. Animatics simulate the passage of time by offering a rhythm, montage sequences and transitions that may appear in the final production. Animatics still remain sketch-like, but as such they help to demonstrate the need to extend, reduce, add or delete certain views, etc., according to the time and order of the presentation.

Both mediums of representation, the storyboard and the animatic, allow the artist to incorporate the concept of scene – the place where the narrative occurs – into architectural design. From this starting point, the designer is able to rethink space from the narrative position and, therefore, from the character's subjectivity (Aroztegui *et al.*, 2009).

## The experience

I had grown estranged from the studio environment. As a foreigner, I was not familiar with the colloquial language or the cultural commonplaces present in studio reviews and the educational institution. As a professor I was not part of the teaching team since I did not grade the students' performance<sup>2</sup>. Even though I frequently participated in the students' weekly project reviews with my colleagues<sup>3</sup>, most of the time I remained only an observer. Furthermore, I found it particularly challenging to connect with the students who were of a younger generation than myself. The strangeness of the country's culture, the educational institution as a whole, my colleagues, and finally the students definitely influenced these research outcomes. In some cases, this combination of forces influenced the research negatively. I am certain that particular subtleties, not evident to the foreigner's eye, were missed by me; I received only a rough and very preliminary sense of the opportunities glimpsed by this experience. In other cases, however, I perceived that the particular attentiveness

<sup>2</sup> Trying to avoid the issues involved in students' motivations regarding grades, I requested that students should participate in the exercise voluntarily.

<sup>3</sup> The studio was led by Prof. María Isabel López, and Prof. Rodrigo Lagos.

Chileans show to foreigners worked to my advantage. In particular, I sensed this during the evaluations made of the experience, when I interviewed the students. The interviews reminded me of how these conversations could be seen as a narrator's performance to a listener/audience (Dolby-Stahl, 1985). The students were enthusiastic about fully explaining and clarifying common sense issues, as if they were performing for a "foreign correspondent."

The uniqueness of this experience came not only from the class environment. Since our very first conversation about architecture, my Chilean colleagues surprised me with sensitive and poetic expressions for their ideas, far different from what I was used to in my past architectural education. My previous experiences, as both student and teacher, referred to context almost wholly from a functionalist, pre-commissioned approach<sup>4</sup>. When discussing how to approach the context of the building project, they would suggest that a student "listen to the place" (*escuchar al lugar*) or "contemplate place in a wakeful state" (*contemplar el lugar en estado de vigilia*). Far from a functional set of rules, site analysis implied sensing the here-and-now; it implied lingering, and contemplation of one's surroundings. For these instructors, architecture related to pure perception, a sort of wakeful state that brought awareness of one's environment. In such an alert state, the designer empties him/herself of preconceptions in order to observe, record, and discover the otherwise invisible rules of the place. Such rules were not self-evident, but instead emerged from a careful observation. This Chilean poetics of place<sup>5</sup>, very much embedded into the phenomenological tradition, was not only expressed through words, but also prioritized a specific tool: the hand sketch. This tool requires one to stop in order to decide what to register: detainment to register by hand any drawings and annotations of proportions, spatial relationships, human acts, movements, changes in lighting or wind, etc.

Even though such an approach to context represents an enormous contribution to overcome the reductionist functionalism of my previous experience, it has had its limitations. It has led to an understanding of place from an intimate self-referential perspective, and has only allowed the students to record the here and now. Since it has also empowered the students' perception, the approach cannot register how other people signify the spaces, paths and features from their own personal and collective experiences. Furthermore, it does not provide a means for accounting for past events that shape the place. The differences between the students and the locals – in age, gender, class,

and culture – alienated the students from interpreting a sense of place from the *other's* perspective. The approach proposed in the exercise implied a contribution, since it pushed the students to get out of their observational mode and somehow become external to the place, to find a mode that facilitated their getting involved in their subjects' emotions and memories of that place.

Accounting for memory was especially important for this exercise because the place studied was a paradigmatic Chilean city. Lota was a former mining town that has been economically depressed since the closing of the mine 12 years ago. Several Chilean cities share similar stories of communities wiped away after the closing of the primary job-producing establishments. A student approaching Lota should face not only its abandoned industrial heritage, but should also consider the invisible cultural heritage associated with this place, a heritage created during more than 150 years of mining identity.

During this exercise, the first task for the students was to interview one person in Lota. Before going to Lota, the class discussed in groups their expectations about their interviews, what were they hoping to understand, and whom were they aiming to meet. Later, I proposed that the students think about potential open-ended questions that might lead their interviewees to tell stories instead of respond with direct answers. Some examples included: "Tell me a story about this place!" and later, "Let's talk about this place." I suggested they ask about significant events in the lives of Lotinos<sup>6</sup>, and try to imagine those places where the events occurred. We discussed in class how these interviews were really conversations that could lead to understanding how these people saw their city after the closing of the mine, who they were, what their expectations were, and what dreams they had about the future. The interviews were not aimed at collecting objective information and associated facts; they were not intended to be a series of direct questions such as "How old are you?" or "What do you think this city needs?" On the contrary, the interviews should be conversations where students could listen to the Lotinos' stories and grasp how these people related emotionally to their city.

After the interviews, students brought their experiences back to the classroom. They were moved, confused, and overwhelmed by the generosity of the Lotinos and their willingness to share their stories. There was "data all over the place," including recorded voices, photographs, drawings, objects, stories, and videos. The students were stressed about not knowing what to focus on in the huge

<sup>4</sup> During my undergraduate education in Uruguay 20 years ago, we received straightforward indications from our teachers regarding how to approach sites. Teachers predefined the program as a type of uses related to square meters. They decided on the specific place, and to certain extent they directed us to the building references into which we should look up. Later, in the US, during my specialization, I saw a new twist on such commissioned architecture. Not only would students have a predefined program and site, but they were also not able to visit the place. Architectural studio projects were developed in remote site competitions or commissioned virtual architecture.

<sup>5</sup> Some professors at the Universidad del Bío Bío referred to such an approach as "architectural observation" – *la observación arquitectónica*.

<sup>6</sup> People from Lota.

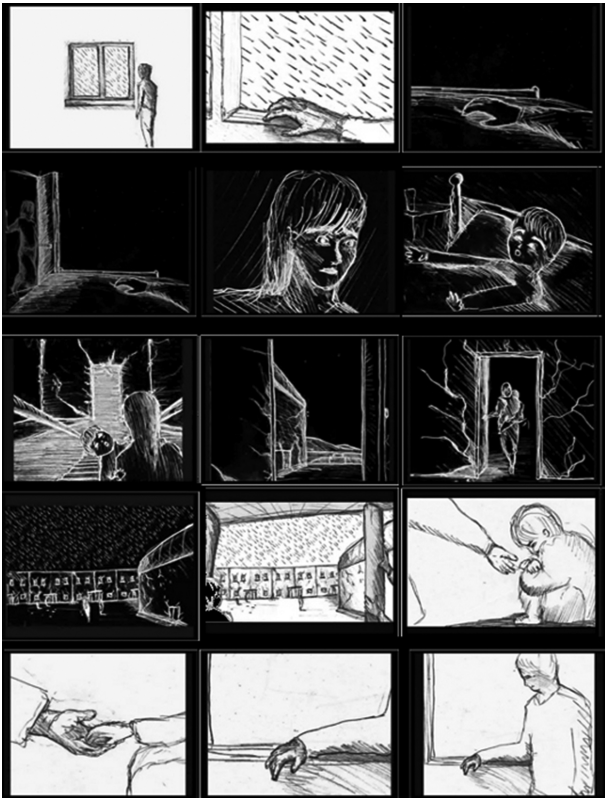
amount of information they collected. The students discussed in groups and later shared with the class what they found to be important and how they might express it in a narrative. From each interview they drew several versions of storyboards. At the end of the two weeks, the students presented their animated stories<sup>7</sup>.

Their animatics resulted in a wide variety of narrative strategies. Some preferred an intimate but yet documentary-style voice that presented the facts and historic imagery of Lota. Others preferred fictional narratives relying on classic storytelling with an emphasis on the story (Figure 1). And yet other groups approached the video emphasizing the perceptual impact of the narrated spaces (Figure 2).

### Evaluating the experience

After the exercise, the studio resumed its normal class activities. Each student had to develop an architectural project in Lota. From the interviews, the students were encouraged to identify paths, views, locations, etc., that had some significance for those they interviewed. My colleagues requested that the students, in successive

models, begin developing their ideas about their projects. The students went to Lota several more times to collect more information, and finally selected the sites for their projects. I continued to participate in the studio in order to better understand how the exercise could influence the development of their projects. After the class had their projects graded, I conducted individual unstructured interviews with seven students. I selected the students according to two criteria. I chose students who were among the top ten in the class and at the same time acknowledged during their reviews that the exercise influenced their projects. Most of the students were positive about the results of the exercise. Only one student referred to the exercise negatively. During the interviews, I tried to fully understand their previous experiences in design and the learning strategies they'd developed over their lifetime



**Figure 1.** Screen capture of animatic “Terremoto” (Earthquake).



**Figure 2.** Screen capture of animatic “Abrigo negro” (Dark Shelter).

<sup>7</sup> A detailed description of the class activities, in Spanish, is found in Aroztegui *et al.* (2009, p. 354-356).

as students. In particular, I wanted to know about other previous instances where they'd dealt with this type of context, in order to evaluate how the exercise affected their understanding of the design of place.

The students' interviews allowed me to understand: (i) the difficulties and opportunities of introducing new tools in the design process; (ii) how the exercise was articulated within the various students' learning strategies; and (iii) how the exercise influenced the subsequent development of their architectural designs.

### **Interviewing, storyboarding and producing the animatics**

Working with new tools in a short, two-week period was a challenge. After briefly introducing the tools, the students had to produce their videos. Almost no time was left for reflecting upon and criticizing the use of those new tools.

Understanding the use of open-ended questions during the unstructured interviews with Lotinos was the first obstacle they had to overcome. Ignacio suggested that interviewing was always performed during place analysis, and added: "I would perform interviews with local population[s] anyway, even without prescription[s]." Students such as Ignacio assumed that the interview was a way of collecting objective information or data that would lead to the subsequent analytical process of design. He did not see interviewing as an opportunity to understand emotionally signified spaces.

For other students, however, interviewing was connected with the expressive potential of reporting through storyboarding and the animatic. These students imagined the interviews as sources for the videos, which led their conversations toward their interviewees' memories. Roberto saw interviewing as a way of reaching other people's feelings "at once" and also a way to access "a different way of knowing and connecting to the place." Previous ways of approaching place, he reflected, made him "see the place from [the] outside, like super objective; [he saw] it from above. [He saw] the shapes." Roberto criticized previous approaches as being formalistic, since "sometimes we don't have to understand the shapes. One has to understand how the place works." He identified that the two methods of achieving a sense of place "are totally different." The traditional is "more superficial," and that which was proposed by the exercise was "more internalized." Not buying completely into the new method, however, Roberto remarked that both methods led to design results and that the difference was that "with the traditional way one *knows* it will get to results," but "when using the other way one has the uncertainty of what will... result."

The use of the storyboard presented three challenges. On the one hand, the storyboard emphasized the sequence more than the mood of the space<sup>8</sup>. The storyboard notation imparted certain limitations when expressing space qualities, since, as in any sketch, it expressed space schematically, with very little emphasis on light, texture and materiality. This expressive limitation was problematic since the studio experience was intended to lead to an architectural project, and expressing mood was a must.

On the other hand, the students faced difficulties in understanding the storyboard notation. Although it presented certain similarities to the sketches drawn in traditional studios, the students' drawings did not incorporate movement notation. Traditional architectural sketches present implicitly a totalizing vision of the space. In other words, what is not shown inside the drawing is assumed to be unimportant, or to be more of the same that is depicted within the drawing. The moving drawing, expressed on the storyboard frame, on the contrary, reveals the presence of other spaces not depicted within the frame. Conceptually, the frame implies the out-of-the-frame space and the space of the audio. The students did not grasp the expressive potential of such a frame.

Ideally, the storyboard is an essential tool for planning the shooting of the scene during a film production. However, the scope of the exercise excluded the issues of production and therefore shooting was not necessary. After collecting images (drawings and photographs), some students found the storyboard to be unnecessary and jumped directly into making the video. The video editing became the place where they developed their narratives. The animatic was more effective when expressing the sensible features of space due to the inclusion of audio, the passage of time, and photographs (images that expressed color and subtle variations in the lighting).

### **Influences on the students' learning**

Memorable experiences are a valuable source of inspiration for design (Downing, 2001). During the interviews, students often referred to their memories of places and past experiences, and how they incorporated them into the development of their projects. The exercise led one student, Pierina, to recall personal memories of the Catholic liturgy. Since her childhood, she took part in her family's religious peregrinations. These trips were joyful moments of family reunion, full of exciting activities like strolling in a park, barbecuing, and playing in a swimming pool. In her studio project she identified the need for a place for transcendental reflection and peregrination. She designed a chapel poised on a tree-shaded and gently sloped plaza. Her interview with a Lotino who

<sup>8</sup> The tool used to express the mood of the scene has been historically the production illustration.

expressed sadness and repentance toward God triggered her memories of her own family's peregrinations. The project demonstrated her personal sensibilities regarding the liturgical event. She carefully planned a promenade of access and places to rest, and designed the fenestration to cast a delicate filtered light on the chapel, and to provide an intimate visual enclosure (Figure 3).

The exercise fit well into an all-embracing learning strategy where novel media and new architectural design perspectives were welcomed. Several students reflected on the different architectural views found in their school. Even though they had had only short university careers, being second year students, they identified the differences in their professors' requirements and preferences, and valued them not as whims but as different ways of designing. Instead of sticking to one design approach for their whole student careers, they consciously switched and tried new studio approaches each year in order to develop their own personal views. The novelty of the didactic approach posed by the exercise matched this all-embracing learning strategy of embracing diversity in order to mature in their own attitudes towards design. Challenging themselves in their approaches and in facing conflicting opinions about design reinforced their own criteria and judgment. Pierina went further, asserting: "you cannot be wrong about an initial idea [in design]" but you have

to have elements to defend it and support it. Roberto not only valued the novelty of the new tools, but also played down the importance of how effective the exercise was, saying repeatedly that "it is always good to experiment [with] new things." He was enthusiastic because of the new media (the video) which made him play more than study and made him question the traditional spatial and conceptual analyses he was used to performing.

All students, however, do not always share this all-embracing learning strategy. Another learning strategy was demonstrated by Ignacio's analytical approach. He was an excellent student, very vocal and acutely aware of the different approaches professors take toward design. From the beginning of the exercise he felt ill at ease because the exercise was exploratory, lacked mandatory directives of what to do, and posed uncertain results. Ignacio found it to be a waste of time, since the exercise did not register the objective conditions of the place he needed to design. Focused on the production of the artifact (the building), his design prioritized the professor's voice over his own. He felt frustrated and was unable to play and explore with designs based on the subjective and emotive dimensions of space. Although I cannot be definitive, due to the uniqueness of Ignacio's interview, I believe that the students who had strong analytical learning skills were not so able to fully take advantage of the exercise. The students who developed their own strategies of learning, independently of their professors' requirements, seemed to feel comfortable with the exercise.



**Figure 3.** Pierina's chapel.

### Influences on the architectural project

After the exercise, the students faced the process of defining not only the site of their project, but also the users and programs (events and activities) of their designs. Such definitions emerged through their interpretations of the needs of the places. I observed how, some in more conceptually refined manners than others, the new tools allowed these students to articulate the *other's* emotive content of space into their designs.

Certainly influenced by the recalled places and stories heard in the interviews, several students proposed memorials. A memorial was a program which was not only aimed at telling a story, but also at provoking emotions in the visitors. Roberto and Anita developed memorials where Lota's recent history could be expressed to visitors and especially the younger population. They designed places for emotive narrations of stories, which were the core of the interviews. Sometimes these memorials were combined with another activity. Juan developed a memorial with a place for people who were training for new jobs. He interviewed a hair stylist, the son of a miner, who resentfully remembered his father's unfulfilled expectation of him becoming a miner. Juan proposed a training center, which was sensitive to the man's frustrations due

to his perception of inadequate recovery actions taken by the government in Lota.

Memorials were criticized by Ignacio and Jorge, since they thought they were examples of “an easy program” that did not necessarily involve any novel spatial qualities and were made to show off to visitors and not for the local population. Jorge developed a building centered on a “Club de tejo”<sup>9</sup>, ostensibly to be used by local older generations. The program was very popular and idiosyncratic for Lota; it required Jorge to research the practice of “tejo” by direct observation. He jokingly remarked that a “Club de tejo” was something “you [could] not find on the Internet” (Jorge).

Yet another approach to programming inspired by the interviews was the attending to the emotional aspect. Alberto interviewed a Lotino who remembered the daily arrival of his father coming home from the mine, through a corridor in his home. The father was exhausted from work and paid little attention to his child. The boy was eager to welcome his father since it was the only moment of attention he received. The corridor, otherwise understood as an architectural type articulating public versus domestic space, was signified by the memory of this event. The interview incorporated a traditional architectural feature of Lota, the corridors of the popular housing pavilions. Alberto reformulated Lota’s corridor, its morphology and emotive content, in the context of a day care center. His day care center was not a place of abandonment but of family reunion, a place of mingling of parents and children.

## Conclusions

*Recuerdo a mi padre, su caminar pausado, su mirada fría, su imponente cuerpo recorriendo los pabellones.  
I remember my father, his paced walk, his cold gaze, his imposing body walking through the pavilions (voiceover from an animatic).*

The students were deeply moved by their interviews with the Lotinos, which shook their traditional ways of approaching context analysis. Initially confused and overwhelmed, they managed to produce visualizations of their experience. Not constrained by building functional requirements, the students freed their designs from measurable and objective preoccupations. Their animatics brought to life the fictional voices of imagined places. Events and individual characters’ lives became the matter of which the space was made.

The storyboard showed a conceptual shift from standard architectural drawings. Instead of seeing space within a totalizing objective view, the notation of the moving frame incorporated what was outside the frame. The sequences of drawings, registering moments in space,

allowed the inclusion of narration and event scripting into the spatial representations. However misunderstood and limited, the graphic notations of the storyboards encouraged the sequential explorations of architectural spaces, and the identification of significant elements and points of view for articulating that space and those events. Traditionally, architects produce animations and videos by shooting a continuous path, simulating the continuous and natural perceptions of a person traveling in that space. However, such a form ignores how film allows for the exploration of the perceptions created by memories, where a space is not necessarily continuously shown. The students developed videos that demonstrated their awareness of the fragmentary expressions of space in film; the inclusion of time did not necessarily involve the generation of a continuous spatial path, but revealed how space is configured through film montage.

Overall, the exercise led to greater focus on event storytelling, more than on the qualities of space contained in these stories. Such an emphasis should be reviewed since the mood of the scene restated the qualities of that space. Storytelling, if used, should foster the exploration of spatial sensations. The animatic, on the other hand, produced notoriously potent and expressive figments of these lived spaces.

Not surprisingly, the students integrated their past learning experiences into their projects. Their memories of places, events, and learning strategies provided fertile ground that allowed them to translate their experiences into significant learning moments. However, the difficulties in such a translation, expressed by one of the students interviewed, indicated that the didactics was not appropriate for all, equally. This implies the necessity of contemplating modifications to the exercise’s didactic approach, which would accommodate those students with strong analytical skills.

This studio experience was about how students could get inspired by using new tools that could allow them to express subjective dimensions of space. This article reflects upon the difficulties in articulating such methods and the tools borrowed from other fields: specifically, the social sciences and film. The means of representation, an essential feature of the design field, provided the focus of this research project. Much of the potential for such an articulation remains unmapped, since after the two-week period the students went back to their traditional studio practices. Even though the experience fostered a better understanding of place in these students, choosing specific sites for their designs was achieved through recurring to the traditional approach of observation. This experience points out the need for *complementation* of traditional means and methods in architecture, and not

<sup>9</sup> In Chile, *tejo* or *rayuela* stands for a game similar to bowling but played with round metal plates instead of bowls and on a clay court.

their exclusion. Pointing in this direction, there is a need for further research into such an introduction of new tools and methods at later stages of the design process, as well as a need for an evaluation of their contributions to a new design tradition.

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