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Contextual learning strategies in the early stages of architecture education

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Abstract

The main objective of this paper is to present a series of interconnected contextual learning strategies applied in the early stages of architecture education. The study presents the design and implementation process of a term project assigned to first-year architecture students. It applied the contextual learning strategies by combining the autobiographical memory and design problem to explore unique narrative structure. This method allows for aligning multiple contexts-course content, the objective of the course, students profile, the learning environment and the basis of the design disciplines. The process was a performative one that involves storytelling, video making, quasi-research skills and informal discussions with parents and guardians to uncover and present the changing nature of the urban fabric as seen and understood by students. The results show that the students engaged and unearth various material within the contextual paradigm.

Keywords: Narrative reflection, contextual learning, alignment, architectural education.

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1. Introduction

The main objective of this paper is to present a series of interconnected contextual learning strategies applied in the early stages of architecture education. As an introductory course, 'culture of architecture' (CA) introduces first-year architecture students to the field of architecture through multiple perspectives; presenting general issues related to the basic domains of architecture, which might be categorised as design, architectural communication, technology and environment, history and theory, management, practice and law. Considering some of the negative consequences of above-mentioned traditional activities (Sahin, 2013; 2014), such as marginalising students, alienating the material or causing 'students' resistance to learning' to some extent (Magolda, 1992; Tolman & Kremling, 2017), a narrative and contextual approach has been offered for encouraging students to assume an active role in learning and adopt positive modes of reflection in the introductory course in question. The term project, therefore, has been a recurring theme in the course, seeking to expand and personalise the way first-year students' view architecture and urban environment. By 'contextualising' the course content in familiar settings, and bringing students' and other participants' past experiences of the environment into the class, the task aims at avoiding the alienated formal tone of knowledge and terminology, but rather localising knowledge, while serving as an entry point into spatial issues.

Within the scope of the task, students were asked to present their living environment where they had spent some period of their life. Their early memories were combined with the information obtained through the research in order to increase the complexity of the material and align the structure of the task with multilayered nature of architecture and development.

The term project allowed students to remember and share their memories associating with space and spatial transformation, and to explore self-expression and generate their perspective rather than offering literary material. Breaking the possible psychological barriers between students and literature and having an influence in their understanding, this method created a contextual learning environment and a strong interaction among participants, including students, instructor and guest lecturers.

The stories, —reconstructed or fictionalised—produced by students based on their personal experiences and observations, were narrated through different mediums. Students and the material they brought into class have been assumed the major sources in constructing knowledge within the class. Exchange of overlapping stories of instructor and students coming from different geographies and background created diverse and rich material giving an opportunity to talk on basic themes of the field through various examples in an integrative manner. This paper covers representation of the design process of the task to mitigate student resistance to learning, analysis of the narratives, students' feedback about the process and comparative analysis of the texts represented at certain intervals, which contain subtle clues about students' development in use of terminology peculiar to the realm of architecture.

2. The significance of contextual learning in early stages of architecture education

Having been initiated the course in 2012, CA, as one of the major foundation courses, had to be revised repeatedly depending on the changing circumstances, such as number of the participants, students' response to the course materials and class works, students' self-assessment and that of the instructors' (Sahin, 2013). The course had been transformed from *Introduction to Architecture* to CA to stress the importance of understanding not only the process and principles behind architectural products but also the culture they espouse (Sahin, 2013; 2014). Hence, the objective of the course was 'to raise students' awareness of self and environment in spatial context awareness in an inclusive manner…to broaden their perspectives; to make them active learners; to enable them to discover their potentials and realise environmental/cultural values' (Ibid) within certain spatiotemporal dimensions. To achieve this, the tools widely used and acknowledged were very diverse and include:

analysing one's experiences and that of others (vicarious experiences), biographies, projects and buildings, visiting local sites for case studies and organising lectures or seminars, etc. The course in principle 'was designed with the aim of the alignmen[ing] the course's components—content, instructors and students—by means of available practical and educational contexts' (Sahin, 2014).

Previously, students' direct experience with the core architectural material was through seminar-based activities and tasks covering the introduction of basic terminology, preeminent figures, places, buildings and styles. This abstract way of teaching or delivering the course material was asking 'students to absorb not engage, to listen not act, to theorise [and] not practice' (Johnson, 2002, p. 11). It is observed that this method of conducting classes orient first-year students to engage with the content without necessarily associating it with their spatial context in their ways of seeing and experiences. That is to say; the method used had been devoid of teaching with students' context. It is important to stress Hull's statement that '…learning occurs only when students process new information or knowledge in such a way that it makes sense in their frame of reference' (Hull, 1995, p. 23 in Davtyan, 2014). This is only natural because information important to learning appears to make sense to students when the context remains clear easily. Therefore, the proximity of students' immediate surrounding and knowledge make a great source for teaching material because in making sense of the world 'the brain tries to give new information significance by connecting it with existing knowledge and skills' (Johnson, 2002, p. 4). Moreover, 'by making [such] connections, [students] generate a context for learning and living' (ibid).

This strategy suffices the need for participants to draw a thread between the theoretical aspect of the class to the outside world. As seen and experienced in previous classes, first-year student's ability to make connections more difficult as the complex nature of theory diverges away from their understanding. Contextual teaching methods, therefore, have the potential to not only help with reduce the alienating attitudes but also allows for increased students' interest on the subject matter. Architecture is all around us, and we experience it deeply. This creates a comfort zone in which to start and operate and set the stage for personal context to be formed.

Hence, the course was re-designed encompassing the scope of contextual learning and its main components. The project ran through the entire semester was predicated on students' stories about the surrounding they grew up in. Participants were asked to write a story providing all necessary spatial information about the place, collecting resources from anywhere possible. This project then has been used over the term within increased complexity at different stages to inform the CA class about the dynamic and evolving nature of spaces, character of buildings and their surrounding environment, social implication of architectural solutions on people and communities and the aesthetic/architectural quality of the neighbourhoods to mention a few.

3. Autobiographical memories and spatial narratives

'Memories make us unique. They help form our identities and give structure to our lives' (Radvansky, 2011, p. 219). Why not use memory to help shape our architectural knowledge since autobiographies already contain knowledge about our lived spaces that are considered on some level real? (Conway, 1996). Autobiographical memories (AM) are a part of such memory that can be exploited. They are inherent *of the self* and reside within one's existential realm, i.e., a 'strong and direct relation to the self' (ibid).

Although AM contain multiple types of knowledge that are interpretations rather than *true* records of events (having different levels of accuracies/inaccuracies), this character of AM causes students not only correspond with their memories of actual spaces and spatial information but also fictionalise the missing gaps. The AM create a strong sense of context, attaching themselves and their daily lives to the course content intended to be delivered.

AM within the class was important, allowing the process of '*getting to know*' through the exchange of idiosyncratic stories from one another and excerpts from our AM. The nature of space within this

context is explored through the lens of socio-cultural understandings; environmental context likewise with added layers of historical conditioning of the urban fabric. Students, therefore, constantly exposed to the varied meanings and contexts within which the physical milieu. The lived spaces, as Lefebvre (1991 [1967]) calls it, is the main contact within the education of the young architecture trainees.

Exchanging memories within architecture pedagogies, therefore, can have a cascading impact. One of such is the ability to create a micro-architectural cultural climate for learning in the class through the exchange of stories of places and events. The performative action using gestures and skilled improvisation as a tool for architecture learning has already been established as a way of breaking the knowledge barrier in design courses (Inam, 2010).

The second potential of using AM as a tool in early architecture education is to promote active engagement. Because the participants have intimate knowledge about their environment but lack the requisite skill of representations, existing narration skills which they have already acquired hence, no need to learn new or advanced ones, encourage students to participate actively: talk, think and act-like designerly all through the phases of the task from starting to think and set a story (from conceptual part, design and develop the representation of their stories and presenting them to the participants).

With the advantages mentioned above, the term project of the course was re-designed very loosely revolving around a subject which has the potential to attract participants' interests, assigning students to create autobiographical narratives (retrieving their memories) of past experiences and events related to a particular place familiar to them—a place once they (have) lived. It was presumed that this would cause them to explore and make connections between the inner and outer world, exposing them to the vast teaching potential of their personal stories and relating them to time and space. The exercise would also create a chance to relate and construct meaning of what physical environment represents to different individuals. It would also allow for participants to test themselves regarding various learning dispositions, including independence and collaboration, resilience, communication, self-reflection and most basically creativity and critical and lateral thinking habits in research, design and representation.

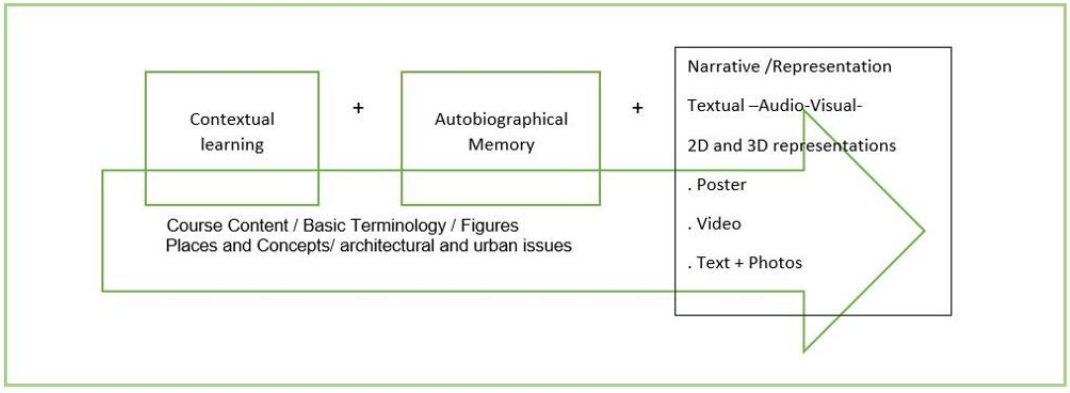

Figure 1. Conceptual model of the task assigned

Hence, students on one side were asked to write a story about an environment where once lived or has lived and, preferably, a place that has left a (remarkable) mark on him them. On the other side, students conducted a quasi-research through literature, old photographs, maps and other interrelated documents, and interview to expand the information/knowledge which was mainly based on personal experiences and intuition. After shaping his/her visual and textual narrative depending on their choice, each student presented it through a different media, mainly by text, oral-visual presentation, poster and video to the class participants, i.e., students, the instructor and guests.

The plot automatically encapsulates spatial components, concepts, terms, similarities and differences which might be associated with a wider web of relations, concepts and terms. After the introduction and discussing the assignment in class, students were asked to present their preliminary research via verbal narration to the class. Due to a large number of participants (*n* = 120), the presentations period lasts 10 weeks (3 hours a week). At the end of the term, the narratives constructed were finalised.

As in much project-based designs and in contextual teaching and learning (Boss & Krauss, 2007; Johnson, 2002) works the course, and the task attached great importance to awareness, integratedness and individuality, self-regulated and context-based learning, complexity, authenticity, creative and critical thinking. Tschumi (undated) states that 'architecture is not simply about space and form but event, action, and what happens in space.' This approach helps us to explain the strong relationship between architecture and event memories, 'which contain many perceptual and contextual details—what things looked and sounded like—as well as details about time and space... internal context information, such as person's emotional reaction and the event or physiological state at the time' (Radvansky, 2011, p. 222). Architecture history is mostly told through visual narratives lacking any experiential or tactile quality, which might be misleading for a first-year student. Plenty stories with emotional or sensual experiences enable students to talk about architecture in a broader perspective while providing an insight into sense of space, a central theme in architecture.

Most basic target of the task was to create a learning environment where the participants have a chance to 'learn with and from each other' (Boss & Krauss, 2007, p. 65), to share and observe one another's' life experiences and their living environments in various scales (i.e., during the implementation some focused more on their street life some interior living experiences and rooms); to compare and develop their knowledge, vocabulary, daily lives, to test their own presentational skills and to follow their peers' presentational skills, in conclusion to create a common 'architecture culture' as mentioned before.

4. The process and intended/unintended consequences of the task

Students' personal stories, which are mostly narrated through informal or simple terminology accompanied with old and new photographs, maps, create a rich learning environment the allow the participants to observe various cities/towns, neighbourhoods, inner and outer spaces, personal spatial experiences and positive or negative changes within the urban fabric over time. As an instructor, I assumed a role as a mediator, intermittently inserting the professional terminology in between words and lines, and talking about them very briefly during student presentations to familiarise students with architecture jargons. Besides, as one of the class participants, the instructors also contributed to the class presenting his story. Exchange of stories created around the same theme also helped to create a common identity in class and increased attention to the course material. Students tried different mediums, ranging from oral presentation, writing, poster and to video, to narrate their lived experiences about the place where they have lived or still living.

During the shaping of stories and research, some students needed to talk to their parents and some older family members to re-evaluate their findings and fill in the gaps on their past experiences and events and to reconstruct their memories and construct their stories in a coherent sense. This method of contacting the elderly in reconstructing the past is among the key factors for students to reinterpret personal experiences in new lights, gauging them against their already assumed positions (Conway & Gathercole, 1990; Gathercole & Conway, 1988). Then, discerning those stories in a way that gives more credibility to their narratives. Similarly, talking to their parents plus my story, covering more than half a century period of time, a live depiction of the change in urban space and daily life in the city, a presentation of 'here and then' was an opportunity to revise their stories and to cope with representational difficulties and link their stories to a wider context.

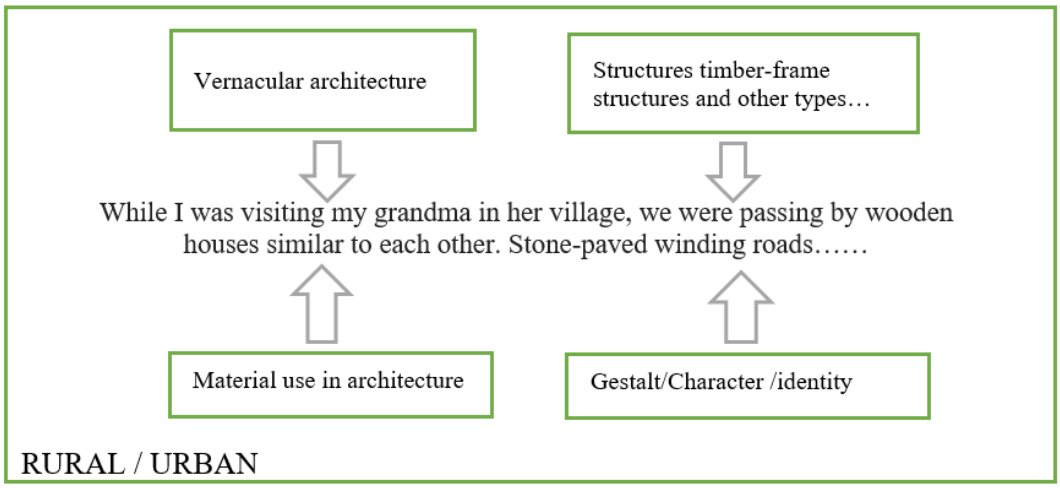

Figure 2. An example of the interwoven patterns of knowledge/information

In the final submission, some narratives were rich in both, personal observations and spatial experiences and research about the case material and they were narrated in an integrating manner, reflecting rich material about the case, which display personal—and general views of spaces, covering various sensual-tactile-spatial experience. (5) Honesty towards the case was visible.

The final assessment of the project could be grouped into five different categories, namely, as follows:

- High-quality narratives reflecting rich material about the case, which display personal and general views of spaces, covering various sensual-tactile- spatial experience.
- Narratives reflecting more research rather than the personal articulation of space and time.
- Narratives, which are mostly based on personal stories without combining spatial information and research, far from an insight about the objectives of the task.
- Narratives that reveal personal stories and information about the space but not to a high standard that will largely impact once knowledge of the place.
- Moreover, last narratives that make no association with space but only duelled on an event.

The amalgamation of knowledge and information in different styles was diverse presenting students with the varying levels of ideas of space and knowledge. The intended learning objectives were met although not all, but there was increased curiosity and awareness among students.

5. Epilogue

The study allows for the opportunity to save a significant amount of personal/spatial data and unique documents to be collected and saved. Even when students are narrating about the same space, as did happen with five of them, their diverging experiences proved that many possibilities of representations and multiple views on the same project are possible. This allows for different qualitative conclusions about such spaces. Such occurrences were suitable for introducing the lateral way of thinking in architecture discipline.

When considering the outcomes and the quasi-scientific nature of students' approach, the task illuminate is on how *late teenagers see their environments* and the level of *critical thinking and creativity in first-year students*. Each story was individual and unique, so do the architectural associations students made and examples brought to class. Each student benefited from the process differently. For example: at the beginning, a student did not know that she was living a very important example of a house-type. Once she learned from the feedback during her first presentation, she set

out deeper research and reached previous images and floor plans of the house. In the beginning, the student's drawings of the existing floor plan of the house at a schematic level omitted multiple details due to lack of representational skills. In the end, after in-depth quasi-research of the house, the student got very rich material and had a chance to observe how dramatically the house she has lived had changed in years. This particular case led to the discussions on preservations and archival data collection methods within the class that would have otherwise taken a different course to learn. It also led to the debates on archetypal houses in Istanbul and their current states.

The method applied proved to be proper to the students' context; numbers, age, level, the cultural-intellectual background of the students, to the course context, to the context of architecture profession and discipline. It was highly effective for acculturation of students, helping to extend their self (self-continuity), recalling, revising or reconstructing their memories and what they know about their environment and how they see it; aligning them with their present self and the profession they newly initiated.

Intense self-reflection employing storytelling and interaction with others helped participants gain perspective on themselves and begin to increase their awareness of their values and identities. This reality is tested comparing their presentations at the end of the 4th and 14th week at the end of the term. The terminology students' used at the beginning to define spaces and events are observed to be replaced by more proper terminology and frequency of the use of professional terminology like space, structure, vernacular, urban-rural, some hints on insights about critical thinking and certain major topics, such as historic preservation, destructive consequences of urban decisions and building industry.

The project also maps the changes in the students' neighbourhood using childhood images and family pictures. This visual narrative exercise introduces the students to paradigms of historical research as well as interpretations and analysis of visual documents. Adoption of phenomenology as a methodology in first-year classes stresses the importance of personal experience as a source of knowledge.

Keeping track of the change in personal experience ushers in the candid exploration of one knowledge limits. While investigating the neighbourhood, students were confronted with questions that unsettled the basic assumptions of their immediate environment. Quickly the superiority of systematic observations as related to the 'casual observation' of the flaneur is established. Hence, the project seeks to inculcate the knowledge of systematic observation and codification of the physical environments while introducing the basic concepts in architecture.

A short video that summarises the students' experience of the neighbourhood was also produced. This video represents the physical attributes of the spaces, events and surroundings. Students' subjective knowledge also forms a crucial part of the video explaining their ideas and interpretation of the material and additional value of music.

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