

'Liveness' Beyond Design Studio Pedagogy: Layers of 'Live' Within and Across the Boundaries of Classroom Settings

Ashraf M. Salama

Department of Architecture and Urban Planning, Qatar University, Doha, State of Qatar

Introduction

This paper is a response to some of the predispositions that continue to typify teaching in lecture-based courses in architecture and related disciplines. It aims to interrogate various degrees of 'liveness' in design pedagogy and the way in which they can be introduced in typical lecture formats. 'Liveness' has been recently emphasised as a 'university without walls' approach to teaching in studio settings but has received little or no attention as a mechanism that can be accommodated in classroom settings. Departing from communication modes such as instruction/reaction and showing/telling that rely only on knowledge consumption, the paper introduces mechanisms by which knowledge can be constructed. It presents a number of mechanisms, which were developed by the author and were implemented through a series of exercises in various lecture-based courses in different universities. Two layers of 'live' are conceived; the first is an approach that aims to bring the built environment into the classroom, while the second utilises the built environment as an open textbook. Categorized under these two layers, the exercises place emphasis on critical reflection, interaction with behavioural phenomena, contemplating settings and systematic observations, behavioural mapping and active engagement. Students' feedback and outcomes manifest the uniqueness of these approaches and their potential contribution to effective learning beyond studio settings.

The Crux – A Glimpse of Theoretical Tenets

The search for new forms of design pedagogy in classroom settings can be viewed as a response to the limitations of the prevailing and increasingly rather out-of-date teaching methodology that favours the rote acquisition of norms and principles of design rather than the promotion of new avenues of investigation and

discovery. This old prescriptive approach is essentially a hindrance to introducing a more performative and effective way of teaching. Discontent with this, and increased exposure to the 'education-as-process' and 'education-as-experience' theories, may eventually result in the re-evaluation or even reform of the traditional learning paradigm to reformulate a new one in which there is an inherent understanding that the teaching of creative and resourceful budding professionals can best take place in an environment that is student-centred. The argument here builds on the voices that opine reducing the dominance of the studio¹ while capitalizing on the notion of 'pedagogical events'.²

'Liveness' as a form of inquiry-based learning (IBL)

IBL is an instructional method developed in response to the perceived failure of more traditional forms of instruction, in which students were required simply to memorize and reproduce instructional materials. Active and experiential learning are sub-forms of IBL while at the same time represent approaches to addressing 'liveness,' in which students' progress is assessed by how well they develop experiential and critical thinking skills, rather than how much knowledge they have acquired.³

The value of active learning is evident since the amount of information retained by the students declines substantially after ten minutes.⁴ Comparing lecturing versus discussion techniques indicate that students favour discussion methods over lecturing and the one-way mode of knowledge transfer. Experiential learning, on the other hand, refers to learning in which the learner is directly in touch with the realities being studied.⁵ It is contrasted with learning in which students only read about, hear about, talk about, or write about realities they never experience as part of the learning process. Mistakenly, some educators equate experiential learning only with

off-campus or non-classroom learning. In architectural and pedagogy, however, a class in history or theory might incorporate periods of student practice on theory and critical thinking exercises, rather than consist entirely of lectures about theories of architecture and the work of 'starchitects.' Similarly, a class in human-environment interactions or design principles might involve critical analysis exercises about how people perceive and comprehend a built environment or a portion of it. Both classes might involve field visits to environments where students engage closely with real-life situations, exploring culture, diversity, and people's behaviour while being part of those situations.⁶ These mechanisms involve inquiry-based components and are amenable to effectively integrate 'liveness' both within and across the boundaries of classroom settings.

'Live' – Layer One: Bringing the Built Environment into the Classroom

One of the first core courses for beginning architecture students, delivered in 2010 at Qatar University by the author, was 'Introduction to Architecture and Allied Arts,' addressing the fundamentals of design in architecture. In order to comprehensively integrate 'liveness' as an IBL learning mechanism, a series of experiential exercises was offered to students in a typical lecture format. These exercises were designed to complement different knowledge bases: all tasks were linked to the content previously discussed in the lectures as well as any prior experiences students may already have had. Some tasks involved pair work while others were individual exercises. Each exercise was followed by a moderated group reflection session where students were encouraged to voice their thoughts to the class. Samples of these exercises are selected to delineate this endeavour.⁷

Exercises for experiencing 'liveness' in the classroom

The first exercise was concerned with relating visual attributes of buildings to culture. It offered students the opportunity to translate their understanding of a building image into considered responses that required them to relate culture to architecture and link the built environment to the community within. Students had been earlier introduced to the dialectic relationship between culture and environment and how culture is manifested in human artefacts as well as buildings and built

environments. Students also learnt that aspects of culture are based on a set of predetermined values and beliefs and thus culture can be represented both in objects and in the built environment as a result of people's interpretation of such an object or environment. To inculcate understanding of these concepts, three different building images that represented different cultures were presented. For the fifteen-minute exercise, students were paired and required to work together on their agreed responses. Each pair had to describe the three images in a maximum of two sentences; they also had to determine the provenance of or decide what culture each image belonged to and state at least three visual/formal attributes that had influenced their answer (Fig. 1).




In-Class Exercise	Relating Visual Attributes of Buildings to Culture	
<p>You have been introduced to the dialectic relationship between culture and environment and how culture is manifested in buildings/built environments. Culture is manifested in objects and in the environment as a result of people's interpretation of a set of values and beliefs.</p> <p>The purpose of this exercise is to give you an opportunity to translate your understanding of a building image into some responses that relate culture to architecture, and that link built environment to people.</p>	<p>There are three different images that represent different cultures. You are required to describe each image in one or two sentences (only). Think of what culture each image belongs to; and state at least two visual/formal attributes that influenced your answer:</p> <p>Image Description: _____</p> <p>Culture: _____ North America _____ Europe _____ Africa _____ Far East _____ Middle East _____ South America</p> <p>Visual/Formal Attributes: A) _____ B) _____ C) _____</p>	
	<p>Image Description: _____</p> <p>Culture: _____ North America _____ Europe _____ Africa _____ Far East _____ Middle East _____ South America</p> <p>Visual/Formal Attributes: A) _____ B) _____ C) _____</p>	
	<p>Image Description: _____</p> <p>Culture: _____ North America _____ Europe _____ Africa _____ Far East _____ Middle East _____ South America</p> <p>Visual/Formal Attributes: A) _____ B) _____ C) _____</p>	
<small>Copyright © Ahmad Samara 2008 ARCT120: Introduction to Architecture and Allied Arts - Department of Architecture and Urban Planning, Qatar University</small>		

Fig. 1. Relating visual attributes of buildings to culture.

The second exercise was designed to promote students' understanding of the built environment by developing their perception abilities on how to recognise different building types. Through a series of lectures, students were introduced to notions that pertain to 'expression,' how buildings have certain qualities that convey messages about their use, functions, and activities that take place inside them, and how they offer clues about who uses them. For this task, students were required to relate twelve building images to their functions and users based on their own understanding of the buildings' visual characteristics and the messages they convey. Students had to select a partner; each pair was given a worksheet with twelve images of various buildings selected from different built environments. Each pair was required to carefully examine and discuss the images and then reach a consensus on identifying the building type, activity as well as building users (Fig. 2). The exercise lasted a total of

45 minutes. Students were able to add to their own personal knowledge a better understanding of the importance of identifying a building type, function and activities and how these relate to the built environment.

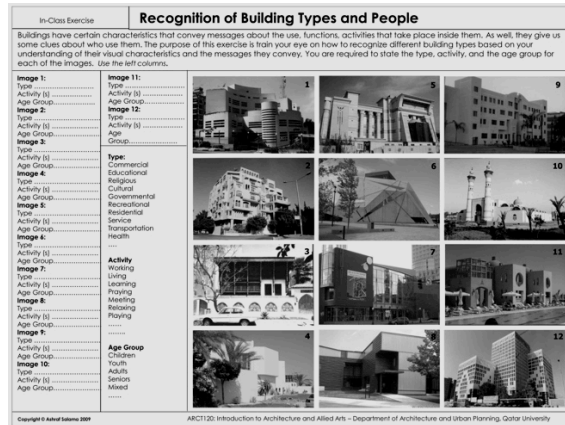


Fig. 2. Relating building images to functions, activities, and users.

The aim of the third exercise was to elicit evaluative comments from students about their understanding of different environments. Students were encouraged to verbally express their concerns about different environmental settings and learnt how collaborative dialogue help designers and clients work toward improving existing environments or designing new environments. Additionally, the task helped students to differentiate and recognise the terminology used by the public and that used by professional architects and designers (Fig. 3).

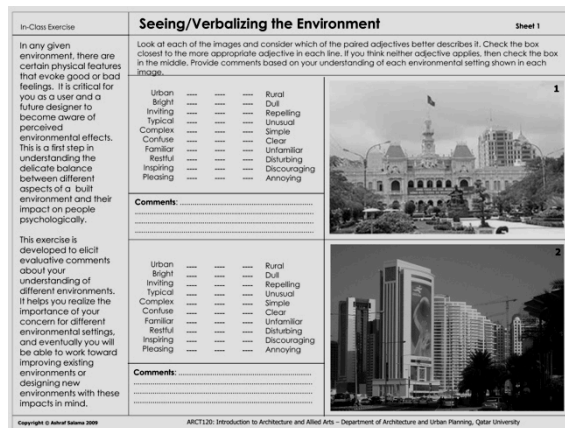


Fig. 3. Seeing and verbalizing the environment.

Through lectures, students were introduced to the way in which buildings and building issues relate to, and can

affect, the psychology of users and how there are, in any given environment, certain physical features can evoke positive or negative feelings or responses in users. An awareness and understanding of perceived and real environmental effects is critical for students both as users and as future architects. This apprehension is the first step in understanding the delicate balance between the various aspects of a built environment and their psychological and even physiological impact on people. Each student was given six images of buildings with lozenges or boxes of adjective pairs. They were required to look carefully at each of the images and consider which of the adjective pairs best described the image and then tick the box or lozenge with the most appropriate adjectives. If they felt that neither adjective pair was applicable, they were to tick the box in the middle. They were also required to write comments based on their understanding of the environmental setting shown in each image. The exercise was conducted individually; students were given 30 minutes to complete the task and were advised to spend no more than five minutes on each image.

Students' feedback and learning outcomes

As a follow-up to these exercises, students were asked to provide feedback by describing the benefits and gains of the assigned tasks; additionally they were asked to reflect on their learning experience. The feedback findings show hoe mechanisms for addressing 'liveness' enabled most students to make more informed judgments about the built environment and provided them with an opportunity to give reasons for their views. However, a few students were unable to recognise similarities and differences between the building images, or to fully comprehend the crux of each exercise. Despite these glitches, these students felt that the checklists and discussion tools for relating the content of the course to the exercises about real-life situations helped them identify what they needed to look for in the building images. Students stated that they enjoyed doing the exercises; in addition, the majority felt analysing the buildings in a structured manner and discussing the tasks in pairs helped improve their understanding of many of the concepts more typically delivered in a standard lecture format. As well, students felt that discussion and dialogue on architectural issues at this introductory stage was important and they recognised their need to further

develop their communication skills. The discussions that followed each exercise underscore the value of introducing in-class 'liveness' mechanisms at an early stage as they create a positive and amenable learning environment conducive to responsive reflection and critical thinking.

**'Live' – Layer Two:
The Built Environment as an Open Textbook**

The examples presented here were utilised in a 'Socio-behavioural Factors and Design' elective course offered at Queen's University Belfast (2008-2009), and in an 'Environment-Behaviour Studies' course offered at Qatar University (2013-2014). Two major tasks were assigned; the first was 'Contemplating Settings' by a multimodal exploratory approach and the second was 'Procedural Evaluation' by a structured walking tour procedure. The exercises adopted the premise of the built environment both as an open textbook and as a teaching tool. Students were prepped on key issues related to research ethics through assigned readings of various documents adopted by the 'Research Ethics Committee.' They were given selected settings to photograph, document and analyse. Most importantly, they were to behave unobtrusively, both when taking photographs and when doing their walkthrough, in a respectful inconspicuous manner that did not interfere with people's activities, personalities or identities in the public spaces they observed.

Multimodal approach to explore 'liveness:' Photography, mapping, and contemplation of environmental settings

In the first five weeks, students were introduced to a number of socio-cultural and behavioural phenomena such as privacy, personal space, territoriality, wayfinding, crowding and density. Students were shown examples to illustrate what each phenomenon encompassed (Fig. 4). In order to complement the knowledge they had acquired in lectures, students were also exposed to real-life conditions. They were required to examine the abstract concepts underlying each phenomenon and, through their description and interpretation of the situations observed, turn them into concrete expressions.

Students had to record and document cultural and behavioural phenomena by photographing and mapping selected settings (Fig.5). Two photographs were required

to illustrate each phenomenon; the photographs had to depict a real-life situation - represent indoor or outdoor settings. Students were also required to write a brief statement describing the setting in physical, cultural and behavioural terms. Each statement had to include information and responses to simple questions such as who is doing what, where, how, for how long, and with whom. Students were given the evaluation criteria prior to the task; additionally the selection of the setting was an important assessment criterion. They were assessed as to how accurately their text and photographs reflected the meaning of the phenomena discussed in the lectures and on whether their interpretations showed a scholarly understanding of the term. The overall quality of photographs and graphic layout of their submissions were also important criteria to evaluate their work and whether they had fulfilled the overall learning outcomes.



Fig. 4. Sample of environmental settings discussed with the students: Top: domination of the setting, and claiming full control over a space designated for sharing. Bottom: sharing a space, but claiming a smaller unit.

One important finding was the fact that while all students were able to observe, document, and interpret the

information, most were unable to phrase concise statements to describe the phenomena represented in each setting. However, later in a group reflection session, they were able to recognise how people behave in specific environmental situations. This was identified by analysing body gestures, degrees of socialization, how people attempt to control their environment, and how they shape and transform the physical aspects of the setting to support their activities, enhance their position in space, and create views, or block distractions.



Fig. 5. Photographing and mapping environmental settings.

Procedural evaluation and assessing spatial/sustainable design characteristics

A survey tool devised to conduct the procedural evaluation mechanism helped students to ultimately become more spatially aware and take control of their own learning. This was done by establishing links between spatial and sustainable design parameters of a building or a group of buildings. The exercise involved self-guided tours: students were provided with checklists to identify certain features; the list provided for an impressionistic yet structured and focused walkthrough in and around the selected building. By having students focus on specific aspects and features of the building and its users, the evaluation strategy helped increase their awareness of the built environment. For the assigned task, students were divided into four groups; the groups were instructed to use the multiple category building appraisal tool when conducting the exercise. Four well-known buildings in Belfast were selected: the Student Union and the Professional Education Centre (both on the Queen's University campus), the University of Ulster College of Arts in Belfast, and The Grove Health and Well Being Centre. Using a designated tick or checklist, students were required to identify a number of key factors listed

under four categories: (1) planning and zoning, (2) landscaping, (3) designing, and (4) energy and waste.

The checklist contained specific, generically arranged, questions for each category. Students were informed that the list of questions for each category was not exclusive; rather the questions were designed to help structure and guide their walkabout tours of each building. The task also required students to use notes, sketches, and diagrams to record information that they would later use in verbal descriptions of these places. Numerical scores based on a point scale method were assigned to the questions to determine the degree of appropriateness underlying each factor. These scores were then tallied and averaged and an overall score for the building was computed. The final submission asked students to provide the following:

- A detailed description of the building supported by photographs and illustrations;
- A generic appraisal of the building using the checklist scores assigned to each question;
- An analysis of numerical ratings: the average score for each category and the overall score;
- A written commentary based on students' impressions and understanding of the building.

The findings clearly show that by the end of the task most students were not only able to make sound judgments about the built environment but also to give reasons for these. However, one major shortcoming was the inability of some students to provide appropriate follow-up commentary: several students could not express their concerns verbally while others were unable to write an organised well-thought out reporting statement. Also, a smaller number of students were unable to discern the similarities and differences of some of the questions; these, however, reported that checklists and survey tools for investigating the built environment helped them to know what to look for in the building and to understand relationships between different factors. The checklists also helped them to determine the impact of one factor as opposed to others.

Conclusion: Toward a Better Integration of 'Liveness'

While architectural educators strive to divulge the knowledge requisite for professional practice, the approach to this is often divergent and may depend on the priorities and ideals of the educator and the school. Nevertheless, despite the amount of knowledge that may

be imparted, it is the way in which such knowledge is transmitted that has actually significant professional and social implications. Concomitantly, there is an urgent need to confront issues that pertain to the nature of reality (liveness-what) and the way in which knowledge about that reality is conveyed (liveness-how). Traditional teaching practices reveal that gaps frequently exist between 'what' and 'how.' Traditional practices often represent passive learning environments and do not usually generate debates in the classroom unless there is a Q&A session afterwards. While there are attempts to utilise site visits to observe different phenomena, these visits are often not framed to support any form of inquiry to seriously experience 'liveness' in a structured manner. One should note that the pedagogical cases presented are not exclusive. However, their positive outcomes clearly highlight the value of introducing 'liveness' in the form of controlled interactive learning mechanisms and of using the built environment as an educational medium in lecture-based courses. The two widely held conceptions of the built environment, the conceptual/subjective and the physical/objective, are firmly embedded in the 'liveness' learning techniques employed.

The built environment is diverse, complex, organic, and fluid. Its structures, spaces, and the people within need to be re-defined as objects for learning. In order for an object to be taught and learnt, its components must be adapted to specific pedagogic and cognitive orientation to introduce issues about specific bodies of knowledge relevant to 'liveness.' However, brining the built environment into the classroom or utilising it as an open textbook does not provide the panacea to remedy all the ills that characterise traditional teaching, nor does it have the capacity to address all the complexities of the physical environment. Nevertheless, incorporating 'liveness' into the curriculum helps students focus on specific aspects of the built environment; particularly those that pertain to human-environment interactions, in addition to filling in the gaps between 'what' and 'how' types of knowledge. Integrating 'liveness' into the classroom for discussion, reflection and critical inquiry enables students to shift from being knowledge consumers to knowledge producers. One would conclude by emphasising the need to develop experiential pedagogical approaches that effectively help students to shift from being passive listeners to being active learners and cogent thinkers. A considerable portion of students' education is based on

'experience,' 'making' and 'active engagement.' Students are encouraged to study the existing built environment and attempt to explain it through theories or typologies, by always looking at and even referring to outstanding examples. However, underlying these approaches are hidden assumptions about the built environment and the people associated with it. It is in this grey area, in this vague and often inchoate relationship wherein lies the 'lesson' to be learnt.

Notes

¹ ANDERSON, J. (2013). Undercurrent: Swimming away from the design studio. Proceedings of the first international conference of the Association of Architectural Educators-AAE: (un)common currency. Nottingham Trent University, UK. Available: <http://architecturaleducators.wordpress.com/conference-2013/conference-2013-papers/> (accessed: 21 July 2014)

² MORROW, R. (2007). Creative transformations: The extent and potential of a pedagogical event. In A. M. SALAMA and N. WILKINSON (eds.), *Design studio pedagogy: Horizons for the future* (269-284). Gateshead, UK: The Urban International Press.

³ See KOCH, A., SCHWENNSEN, K., DUTTON, T. and SMITH, D. (2002). *The redesign of studio culture*. Studio culture task force. Washington, DC: The American Institute of Architecture Students-AIAS and SALAMA, A. M. (2012-a). Knowledge and design: People-environment research for responsive pedagogy and practice. *Procedia-Social and Behavioral Sciences*, 49 (2012): 8-27.

⁴ BONWELL, C. (1996). Building a supportive climate for active listening. *The National Teaching and Learning Forum*, 6 (1): 4-7.

⁵ See KEETON, M. and TATE, P. (eds.) (1978). *Learning by experience*. San Francisco, CA: Jossey Bass Publishers and KOLB, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.

⁶ SALAMA, A. M. (2006). Learning from the environment: Evaluation research and experience based architectural pedagogy. *CEBE Transactions*, 3 (1): 64-83.

⁷ The three examples presented are selected from a wide spectrum of exercises utilised as in-class active learning mechanisms. See SALAMA, A. M. (2012-b). Evaluation research and inquiry based learning (IBL) in architecture and urbanism: Consumption versus production of knowledge. In S. MALLORY-HILL, W. PREISER and C. WATSON (eds.), *Enhancing building performance* (277-284). New York, NY: John Wiley and Sons and SALAMA, A. M. (2013). Seeking new forms of pedagogy in architectural education. *Field Journal*, 5 (1): 9-30.