VALUES OF LEARNING THROUGH ‘PLACE-MAKING’
IN THE DESIGN STUDIO

Veronica Ng  
School of Architecture, Building and Design, Taylor’s University, Malaysia  
Ng.foongpeng@taylors.edu.my

Abstract  
With emphasis on conceptual design-thinking in studios and the extended attention to abstract architectural theories, design education is veering away from the pragmatic issues of the discipline. This paper discusses an architectural design studio teaching experience, which emphasized the notion of place-making, particularly the contextual analysis and appreciation, as the approach to design. It identifies the gap inherent in the current practice of design studio, and presents a reflection of the facilitation process and teaching strategies implemented within an architectural design studio conducted in the Bachelor of Science (Honors) (Architecture) program at Taylor’s University. The purpose of this paper is to discuss the values of learning based on the emphasis on contextual analysis and appreciation in design. This paper shows that the emphasis on context and its responses in the design work allow students to explore different channels of creativity and address imminent issues that underlie the students’ tendency of literal mimicry, the unconditional abstraction and the lack of sensitivity in contextual considerations in practicing architectural design.

Keywords: Place-making, design studio, pedagogy, context, architectural education

INTRODUCTION

Place-making is one of the significant issues within the discourse on architecture since the 1970s. There were different theoretical attitudes toward the conception of place and its relations to architecture, one of which was the concept of *genius loci* or the ‘spirit of place’—a spirit which gives life to people and places, and determines their character or essence. This notion was described by Norberg-Schulz as ‘local character’ and the phenomenon of everyday life as well as referring to landscapes and urban milieu. Quoting from Suzanne Langer, Norberg-Schulz argued that ‘architecture belongs to poetry, and its purpose is to help man to dwell. But architecture is a difficult art. To make practical towns and buildings is not enough. Architecture comes into being when a ‘total environment is made visible’. (cited in Nesbitt, p. 426) Similar concerns were raised by Karsten Harries who stressed the need to ‘discover the importance of neighborhoods and regions … which will articulate their character…’. (cited in Nesbitt, p. 396) These theories of architecture emphasized the importance of making the environment meaningful through the creation of specific places.

Despite the emphasis on place, it remained a theoretical endeavor. Edward Casey, in his seminal work titled *The Fate of Place* (1998) argued that the manifestation of place within the built environment is limited. In the book *Analyzing Architecture*, Simon Unwin’s (2009) definition of ‘place’ centered on the core of architectural design. He argued that place is to architecture as akin to meaning is to language; through identifying places, and organizing them, we make sense of the world we inhabit. (Unwin, 2009) Unwin defined ‘place’ as a configuration of architectural elements that seems (to the mind informed by its senses) to accommodate, or offer the possibility of accommodation to, an object, a person, an activity, a mood. These standpoints (both theoretical and design based) suggest that one important aspect of architecture is to create ‘place’.

Similar phenomenon can be seen in architectural design studios. The influences of postmodern architecture in the 1960s and deconstructive architecture in the 1980s gave rise to
form-driven design that overshadowed the importance of ‘context’. This scenario is observed typically in lower years design studios (for example in Years 1 & 2). In the book *The Fundamentals of Architecture*, Lorraine Farrelly (2007) described the notion of ‘placing architecture’ as a fundamental and important aspect of architecture. Context, or the place in which architecture is located, is specific and significantly affects how an architectural idea is generated and the critical issue of context has been studied, analyzed and responded to (Farrelly, 2007).

This paper discusses the effectiveness and challenges in emphasizing place-making as the theme for design studio work. The design module for Year 2, Semester 1 students enrolled in the Bachelor of Science (Honors) (Architecture) conducted in a private institute of higher learning in Malaysia is used as a case study. This design studio explores the notion of place-making as the basis for creativity where students were asked to draw inspirations from the site. To what extent students’ learning experience in design studio benefit from this? What are the values of this approach in teaching design studio? These are the questions that this paper addresses. These questions will be tackled based on individual experience and reflection on the way the studio was conducted. Students’ works will also be used as objects for discussion.

**TEACHING DESIGN IN ARCHITECTURE**

Architectural design forms the core module in architectural education. Being an academic who has been teaching design modules for the past 10 years, I realized that one of the issues in design lies in the students’ affinity for literal mimicry and the problem of form. Concept in architecture should be meaningful, the theme or idea should not derive from mimicry of objects nor unconditional abstraction by which selling an architecture idea that was extruded from an existing object and abstraction is problematic.

Anthony Antoniades, in the book *Poetics of Architecture: Theory of Design* (1992) narrated the different ‘channels of creativity’, which were implemented in architectural studio in order to stimulate imagination and create design. He pointed out diverse themes that led design, for example, the use of metaphors, the use of history, the influences of cross-cultural design, the use of nature, and the use of arts and other related disciplines amongst others.

In the Bachelor of Science (Honors) (Architecture) program, emphasis was given to the poetics of the site, particularly in Year 2, in order to develop creativity in design in a meaningful way. In this program, the progression of design across the 6 semesters is charted. This paper only emphasizes the aspect of ‘site’ or ‘context’ as shown in Table 1.

**Table 1. Progression of Design Studies of the Bachelor of Science (Honors) (Architecture)**

(Source: Author, 2008).

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEME</td>
<td>Place-making and the self</td>
<td>Experiencing place and context</td>
<td>The users in the Urban Space</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMPHASIS ON:</td>
<td>Defining space and boundaries</td>
<td>Place-making within the natural environment</td>
<td>Experiencing spaces/places</td>
<td>Sustainable environments</td>
<td>Place-making within the urban street</td>
<td>Architectur e with a social impact</td>
</tr>
</tbody>
</table>

Although the importance of site is emphasized from Year 1 onwards, it was in Year 2 that students explored contextual influences of the site in a meaningful manner. In Year 2, Semester
1, students are introduced to producing comprehensive site documentation and analysis on both the tangible and intangible aspects of place. In addition to the emphasis on the user and his/her space in Year 1, the notions of genius loci and place-making were significant design generators in the design process for Year 2 students. Such importance has been captured by Franck and Lepori (2000, p. 7), who wrote: ‘Inside and outside are complimentary; each exists by virtue of the other…. I tend to think of “architecture inside out” primarily as suggesting the process of growth….within the needs of people and within the site, emerge and be transformed. It also gives importance to what too often is not given importance – to human experience and aspirations. And so architecture comes from the inside, from the needs and desires of people, from the site and context.’

CASE REPORT
One of the key objectives of the studio was to develop awareness of a wider place, a genius loci (town, countryside, coast), and the design response towards a particular place. The design brief called for an architectural response toward characterizing the sense of place of Sungai Lembing by designing a museum which should reflect a strong contextual engagement to the site. Emphasis was given to the tangible and intangible quality of the site which includes the physical, social, cultural and historical constructs of place. All these elements contributed to the meaning of a particular ‘place’, or its ‘genius loci’ which informed the architectural concept and design generator for the project. Several considerations were made in designing this module:

Choice of ‘place’ or site
The set of criteria for site selection was crucial in order for students to immerse themselves in drawing inspirations from the site. One major question to ask is ‘what are the special and interesting characteristic of this site?’ With considerations of the criteria, Sungai Lembing was selected as the context for the exploration of design work. Sungai Lembing is an ex-tin mining town in Pahang located approximately 45 km from Kuantan. It was once the richest mining town in Pahang, and had the second richest tin deposits in the world after Bolivia. What is seen as the mining heritage today was once the largest underground tin mine in the world with multi-tiered tunnels carved into the mountainside, which are said to be the second deepest in South East Asia. This heritage is not accessible to visitor now; the history which evolved around the tin-mining industry is captured in the Sungai Lembing Museum, which is perched on the hill facing Sungai Kenau. What was once known as a jewel is now claimed as a ‘sleepy hollow’ which is now inhabited by elderly townspeople who used to work in the underground mines. The richness of the physical and built landscapes, the social and cultural values and norms and the history and memory of Sungai Lembing contributed strongly to the selection criteria.

Figure 1 (left): View of Sungai Lembing town (Source: ‘Sixty Years of Tin Mining: A History of The Pahang Consolidated Corporation 1906-1966’, n.d.) Figure 2 (right): View of Sungai Lembing town today (Source: Author, 2010).
The choice of Sungai Lembing was also due to its currency in recent newspaper publications. For example, Sungai Lembing was published in the tourism section of New Straits Times (February 11, 2009) and The Star (April 10, 2010). Also, a workshop on the proposition of the future for Sungai Lembing as a ‘living museum’ was also undertaken by a group of researchers facilitated by Dr. Ir. Yulianto Sumalyo in the 2nd International Field School on Asian Heritage (IFSAH) & International Symposium on Asian Heritage (2003) organized by University Teknologi Malaysia (UTM). Sungai Lembing was also documented in private web-blogs and travelogues which generally narrated Sungai Lembing as an interesting yet ‘forgotten’ or ‘lost’ place.

Facilitation and teaching strategies

This design studio, taken by a total of 62 students, is led by a full-time academic as a studio facilitator whose research background is on the theoretical ideas of place. It is co-tutored by three part timers from the architectural practices. The teaching approach implemented in this studio is designed to provide a ‘contextual’ learning environment where learning tasks are situated in meaningful real world tasks. The learning strategy applied is based on ‘authentic learning’ where learners were presented with design problems that are realistic situations (Smith & Ragan, 1999), as Young (1993) recommended that learning situations should include some of the characteristics of real-life [as opposed to hypothetical] problem solving scenarios. In this way, finding and defining problems as well as solving them formed a generative process of learning. The project was meaningful as Sungai Lembing was a ‘forgotten place’ striving to find herself. The question of ‘what makes it a place?’ thus became a driving question behind the core emphasis of the design studio. Some of the design questions/problems formulated were: What does Sungai Lembing mean to you? What are the essence(s) of Sungai Lembing which inspire you? How does the design reflect the character of Sungai Lembing?

Strategies to immerse students in task of place-making in the design studio included the following:

1. Emphasis on the avoidance of literal mimicry and symbolic references based on superficial imitation of literal shapes and forms.
2. Emphasis on the importance of understanding the context/site in the pre-design phase based on a theoretical standpoint. Students were introduced the notion of place through a short excerpt of Christian Norberg Schulz’s Genius Loci, and Lorraine Farrelly’s chapter on ‘Placing Architecture’ in The Fundamentals in Architecture. Students were also introduced to Edward White’s Site Analysis which provided a very comprehensive way of documenting and responding to the site.
3. Exhaustive research and data collection on site to provide students a holistic perception of the site prior to design. Field work offered opportunity for students to immerse in the learning process set in a real life context.
4. Discussion on human experience as a significant contribution to understanding and knowing a place formed part of the same inquiry. Students were introduced to architects/writers of the phenomenological standpoint in architecture such as Steven Holl and Juhani Pallasmaa. This opened up students’ perception of place and place-making beyond the visual domain of architecture as users of built environment and as designers.
5. Introduction to the paradigm of works by architects that approached design by exploring the integration of built forms to landscape forms e.g. Frank Lloyd Wright’s Falling Water; Adalberto Libera’s Casa Malaparte.
6. Introduction of myriad of works that explored memory and history of place as a design inspiration. It highlighted the importance of history and event within a place as a generator of design e.g Proposals for Twin Towers for the September 11.
7. Emphasis on place-making approaches that emphasized materiality and place e.g. Kengo Kuma’s Stone Museum and Bamboo Wall House; Peter Zumthor’s Thermal Vals.
The following section documents the methods of teaching which introduced the notions of place and place-making.

**Pre-trip required readings and lectures:** The key readings which formed the theoretical basis of this studio are as follows: a short excerpt of Christian Norberg Schulz's *Genius Loci*, Lorraine Farrelly's chapter on 'Placing Architecture' in *The Fundamentals in Architecture*; Edward White's *Site Analysis*. In supporting the understanding of the theories that framed the studio, a series of design lectures are delivered to introduced architecture and architects that derived their design based on context/site.

**Field trip:** The major thrust of the teaching strategy was devoted students’ perception of place. Thus, the first step was to set up a site visit. A site visit of 3 days was programmed to document and record site information. It adapted the field trip planning model presented by Myers and Jones (2004) which included the pre-trip, trip and post-trip stages. In this model, Myers and Jones (2004) emphasized the importance of proper administration and instruction during the pre-trip stage, the significance of identifying roles of participant and organizer in the trip stage, and the value of debriefing and culminating activity in the post-trip stage. Prior to the trip, students were made aware of the itinerary, the objective and outcomes of the site visit and required to conduct preliminary research as part of the pre-trip instruction.

During the site visit, students conducted a contextual analysis. 'Contextual analysis' is a pre-design research activity, which focuses on existing, imminent and potential conditions of the site. Its major role in design is that of informing designers about the site prior to beginning design concepts so that the early thinking about the design can incorporate meaningful responses to external conditions (White, 2004). The information collected was classified into the various sections:

- Location, orientation & climate
- History and morphology of town
- Natural and constructed landscapes (include site sections)
- Circulation & movement through the town
- Typologies & patterns (1) Settlement types (township models in the region) and (2) Architecture and Building types
- Ritual and communication (1) Social geometries (2) Social interaction
- Textures and materiality of the site

Groups of 8 students were asked to collect data for one of the 7 themes. Observation, diagrams, photography and model making were used as data collection and recording techniques. In order to find out about the social and cultural norms of the place, students interviewed the inhabitants of Sungai Lembing which majority of them were ex-miners. The purpose was to understand the rituals and the everyday lives of the inhabitants, and the history and their memories of Sungai Lembing.

The breakdown of the 7 areas of documentation gave a more holistic understanding of Sungai Lembing. Besides collecting as much data as possible, the hands-on direct encounter with the site from a personal and sensory point of view offered the opportunity to develop a sense of what is unique, valuable and important to the site (White, 2004). This provided students with myriad of findings on the character of Sungai Lembing, which they may draw, inspirations from for their individual design work.

During the trip, the agenda began with free time for individuals to explore the site on their own which allowed students to get comfortable with their surroundings. Once their curiosity is satisfied, learners were able to focus their attention on the outcomes of the visit (Myers & Jones, 2004). It is followed by the second phase of the trip, which was a guided tour by a tour guide/ex-tin miner who provided first hand experiences on his perception of the town. This provided an opportunity for students to ask questions that may have developed during their exploration time.
The third phase was a small group learning activity, where students participate in a discussion and questions and answer session on their data collection.

The post-trip phase ended with a debriefing session where students’ shared their experiences and discussing data or results of assigned groups. This activity culminated in a student presentation and a site model and preliminary design work to use/apply their findings on the Sungai Lembing, which is presented below.

**Brainstorming workshop, A Model Plug-in session as a form of group discussion:** ‘Making’ is used as a key technique for design explorations which stimulates thinking and more importantly, to visualize ideas in a tangible manner. In previous studios, students are introduced to conceptual models and study models as generative tools for design. In this studio, a contextual model is introduced; this model is a three-dimensional presentation technique which used the composite approach of superimposing all the site information over one referent base model. A significant advantage of using the contextual model is that it may be used as a base model for studying and presenting site concept and building design.

Students are then required to construct conceptual models to visualize their design ideas. Conceptual models are built at initial stages of a project to explore abstract qualities such as materiality, site relationships and interpretive themes. The brainstorming sessions for conceptual development and ideas are conducted as a group discussion using ‘model plug-in’ as a platform for generating and visualizing ideas. Students were to generate ideas based on their perceived *genius loci* of Sungai Lembing. This is conducted as a one day workshop. The guiding design question posed to students was: What is the essence of ‘place’ [Sungai Lembing] that you are capturing in your design? What is the design strategy, concept or idea which will be explored in your design?

**Site response diagramming:** Emphasis is given to site response as an important aspect of design. While the contextual model is used to brainstorm creative ideas of the context in relation to design, the site response diagrams further reinforces the emphasis on site as a generator for design. In this aspect, diagramming was an important aspect of design language which produces design solutions. As reinforced by White (2004), mastery of diagramming is fundamental to attaining competence in design: ‘Diagramming is a way to get close to the problem, to engage it, to absorb it, to reinstate it in our own terms and to render it second nature so that we can attend to the selection and integration of potential solutions. … Investigating in diagramming often leads us to the discovery of design ideas that otherwise wouldn’t have occurred to us. Diagramming assists us in bridging between the problems as expressed in verbal terms and the solutions as expressed in physical/architectural terms’ (White, 2004, p. 3). This studio took the analysis of sites as one aspect of architectural diagramming which initiate the design process.

Students are asked to examine how their design is developed through both tangible and intangible site forces for example:

- Orientation and climate
- Topography and natural landscapes
- Neighborhood context: Adjacent objects and buildings
- Circulation (pedestrian and vehicular including roads, tracks, trails, paths)
- Views
- Sensory (Sound, Smell)
- Site uses

The methods implemented in the design studio which introduced the notions of place and place-making impacted on student learning in different ways. The following section discusses its values towards student learning.
VALUES AND EMERGING EVIDENCE OF LEARNING
The different teaching approaches (site visit and documentation; model plug-in and diagramming/site analysis) revealed values and emerging evidence of students' learning:

Students progressed from 'space-making' to 'place-making'
Students progressed from the previous design studio (Architectural Design Studio 2) which focused on internal constraints of architecture; whilst Architectural Design Studio 2 emphasized the user and the spatial planning process and specificity, this studio focused on the site as a significant force that shape and manipulate architectural outcomes. The emphasis on 'place' as a design generator completed the understanding of basic design, i.e. the fundamental design knowledge for students to progress into Architectural Design Studio 4.

The emphasis on the context and its meaning was a challenging task as students have a preconceived perception of site as a separate aspect of design to be resolved rather than an integrated design problem i.e. challenges to the inclusive design approach. Initially, students began developing their ideas into design through space planning. They were largely ignorant on the influence of the 'outside' to their architecture. Based on students’ interim presentation, it was found that site response was scarce and limited. Students found it difficult to develop their work in relation to the site forces, as many failed to carry through design skills acquired from previous design studios. This problem is resolved by emphasizing the integration between the site, the program and the form/space informed the pre-design phase (See Figure 3). It reinforced the importance of the notion of place and place-making (context) in relation to form and function in the development of design, i.e. the site being the source of a basic organizing idea for the design.

Figure 3: Sources of design solutions through three variables: Need, Context and Form
(Source: Adapted from Laseau, 2001, p. 107).

Defining and solving design issues rather than abstract making of architectural forms
Extending from the Year 1 design studios, students are exposed to more realistic design problems. As Bryan Lawson (2005, p. 42) stressed: 'For me creativity is, you know, finding solutions for all these things that are contrary, and the wrong type of creativity is that you forget about the fact that sometimes it rains, you forget that sometimes there are many people and you just make a beautiful stairs from the one idea you have in your head. This is not creativity, it is fake creativity'. In this studio, students explored what is the challenge/weakness of the site as an immediate response to their design. Diagramming the site responses was a tool for the visual
thinking process. Students’ approach to design using model making (which is three-dimensional) is interwoven with the diagrammatic exploration of site (two-dimensional) to facilitate the design process (Figure 4). The site model plug-in session was beneficial for students to relate their initial ideas to the context.

Figure 4: Diagrams illustrating the conceptual development of Chua’s design in response to the site context (Source: Chua, 2010).

One challenge faced by students is the lack of maturity to integrate the perceptual character of the site, the site response, the program in developing their conceptual stance of the project. The conceptual development phase was still driven by a rather abstract stand-alone idea within laying all design issues involved in the pre-design phase. The conceptual development is seen as solely an artistic endeavor separate from problem solving. This meant that students were able to analyze different issues related to design, however they lacked the ability to synthesize the issues into a design scheme.

**Defining ‘meaning’ in architecture through the site**
Outcomes of students’ works demonstrated evidence of learning from various perspectives of design. In the plug-in model session, students’ explored varied ways to appreciate the context or site. The inspirations, which guided students’ works, demonstrate the avoidance of literal mimicry and approached. Although imitation or metaphors are used, the approach toward design was from the perceptual and sensual perspectives, rather than literality.

One of the channels of creativity is based on developing design ideas through metaphors, i.e. transferring references from one subject to another. For example, Lee Car Rol generated her design based on the ‘intangible metaphor’ (Antoniades, 1992, p. 30) of clouds. The ‘sea of clouds’, a natural environment which was unique to Sungai Lembing, is translated into architectural planes which hover to create the overall form and space of the museum. These planes functioned as leveled floors and ceilings. Translating the ambiance of the changing and non-static appearance of clouds, one of the main features of this museum is the designed sliding panels that hold the exhibits. These panels stretched from floor to ceiling height, and are made of
translucent materials to impose a blurry visual experience. It is also functionally used for sun shading. To achieve the lightness of clouds, the museum is composed of minimal load bearing walls and is structurally supported with slender columns. The overlapping planes and intentional voids at every level have a multi layering effect from an interior perspective (either looking upwards or downwards); like layers of clouds floating above one another (Figure 5).

Figure 5: The cloud-like spaces which offered the perception of floating amidst the clouds in Lee’s design (Source: Lee, 2010).

Figure 6: A narrow entrance into Tiong’s museum for Sungai Lembing Figure 7: The use and emphasis on materiality in the main gallery space of the museum (Source: Tiong, 2010).
Besides the use of metaphors to derive architectural design, students grappled with portraying the perceptual character of the site of Sungai Lembing through an intangible sense of time. For example, Daniel Tiong chose cor-ten steel, or Cortensteel, also known as weathering steel, which is a steel alloy with a rusty appearance, to reflect the sense of time and decay of the ‘forgotten’ town. By developing design through the emphasis on texture and materiality, Tiong created spaces which provided users’ with a tactile and haptic experience as suggested by Holl and Pallasmaa (Figures 6 & 7).

Students also reacted to the character of Sungai Lembing intangibly based on the memories of past event and memory of place. Majority of the students generated their design works based on the experiences of the underground tunnels. For example, Chua Kwee How drew inspirations from the underground tunnels by emphasizing on the sensual qualities of space, following closely the perceptual condition of space as proposed by texts of Holl and Pallasmaa. Excerpting the elements of history, materiality and nature as the Sungai Lembing experience, Chua borrowed the existing ruined mills and the character of the natural landscapes to anchor his architecture. He used a choreographed spatial arrangement to restore the original view of the tin-mining workshop and mills (Figure 8).

![Figure 8: Museum of Sungai Lembing designed by Chua. Front elevation (left) and section (right) (Source: Chua, 2010).](image)

Besides the intangible qualities of place, students were also drawn to portraying the physical condition of the context. For example, Tan Ik Chia generated her ideas based on the existing ruins of the mining site. Tan expressed the verticality of the ruins and captured tower-like spaces in her work (Figure 9).

![Figure 9: Tan’s design depicting references taken from the existing site (Source: Tan, 2010).](image)

Another student Alex Lee also drew metaphors from the tunnels of Sungai Lembing, reflecting the scale of the mines and the ruins. The vastness of the mines is reflected through the overlapping tunnel (galleries). The façade formed a continuation of the mill, keeping to the language of massiveness and steps through the use of ramps. The ramps are related to the mountain biking
sport, which is popular with the youth there. To reflect the sense of vastness, Lee explored the scale and proportion of the design by drawing from architectural precedence of the Babylonian Ziggurat and Le Corbusier’s Ronchamp (Figure 10).

The examples of students’ works illustrated and described above demonstrate that the emphasis on place and place-making in design inspired different channels of creativity. They reflected references on history and memory, physical landscapes, place experience, and materiality and textures of place. These approaches are based on different means and starting point, and they demonstrated an avoidance towards literal mimicry, suggesting a strong relationship between the precedents used in the facilitation of the studio and the outcomes produced by students.

The field trips provided an opportunity of experiential learning and an attachment to place

In this studio, the field trip provided unique opportunity for learning that is not available within the four walls of the classroom (Myers & Jones, 2004). Students showed interest in Sungai Lembing, as it exerted a strong character in contrast to urbanity. The sense and character of place were felt by the students because of the rich historical, social and cultural construct of place. The site selection is critical to the design outcomes produced by the student. It suggests that the complexity, scale and size of the town as the context for the design project has to be carefully selected. One importance point which emerged is the ‘place’ has to be experienced as a pedestrian and it has to be lived-in in order for meaningful understanding of the context. Experience and attachment of place does not occur solely from the interaction between students and the built and natural environment of the context, but also to the community who resides and work there.

Although Sungai Lembing fulfilled such criteria, the challenge faced by the students was the difficulty in sourcing literature and information pertaining to Sungai Lembing. Data was collected from first hand experiences and walking through the town, and transcribing them into diagrams, and annotations. The immersion of students in the slow paced lifestyle of the society allowed them to experience the intangible qualities of Sungai Lembing. The data collected were collated as a publication and contributed back to the Sungai Lembing community, which encouraged and enhanced the students’ sense of attachment and contribution to the place.

Theory-design link providing opportunities for meaningful and deep design outcomes

The experiential learning and the design process is informed by theoretical readings such as writings of Holl and Pallasmaa. Students are given readings to facilitate their learning, which guided through class discussions. The studio sessions revealed that students had little interest in reading. Rigor in discussion on the suggested texts and the use of lectures which were image-driven to complement the understanding of the theories is vital to facilitate students’ learning.
Although the theoretical texts still remained a challenge, the design outcomes were more meaningful and deep for those who applied the theoretical knowledge of place (See design works of Chua and Lee).

**CONCLUSION**

This paper began based on the premise of the following questions: To what extent student learning experience in design studio benefit from the emphasis on place? What are the values of this approach in teaching design studio? Drawing from reflections of students’ design works and experiences, the varied facilitation and learning strategies in the design studio provided a platform for learning to take place. It offered a platform which links theory and design, and puts emphasis on the importance of experiential and authentic learning, thus providing a basis to motivate learning and hence making it effective.

The strategy to facilitate learning began with the introduction of the theoretical framework for the studio through design lectures and readings, followed by field work that emphasized experience and engagement with place, and subsequently studio based work that offers myriad of opportunities for exploration and discovery (Figure 11).

Learning is evidenced through students’ discovery of architectural ideas based on different channels of creativity: students have approached design exploration and thinking through diagrammatic approaches, making references to intangible metaphors and physical contexts of place, as well as inspirations drawn from personal experiences, engagements and memories of place. The emphasis on ‘genius loci’ as a design generator informed the students’ design work in a rather meaningful and poetic way. It reduced the problem of form-driven architecture which emphasized on the role of sight in architecture.

The values of learning extended beyond the intended learning outcomes prescribed in the formal documents of the syllabus. The emphasis on the site/place/context produced deeper and meaningful work that demonstrates sensitivity and sensibleness in design that forges modest intention to responsible designers of architecture and the built environment.
REFERENCES


Acknowledgements
The author would like to thank her students Lee Car Rol, Alex, Lee, Daniel Tiong, Tan Ik Chia and Chua Kwee How for contributing their work as part of the content for this paper.

Author:

Veronica Ng, Ph.D.
Senior Lecturer
Taylor’s University, School of Architecture, Building and Design
ng.foongpeng@taylors.edu.my