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The First Home: A Pedagogical Exploration of Architecture's Mythical Origins

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ABSTRACT

This research article proposes the idea of the "First Home" as a pedagogical model for architectural design studios in Thailand. The objective is to foster a more humanistic approach to the foundation of architecture education by integrating histories and theories of architecture, architectural representation, and architectural design studio courses. The "First Home" investigates the mythical origins of architecture—the cave, post-and-lintel structure, and tent—as well as the roles of language and art, framed as the processes of "remembering" and "forgetting." The literature review for this study is based on architectural texts and diagrams focusing on spatial composition, written by architects who are also educators. These were articulated through a project-based teaching and learning process in two architectural design projects: an analytical case study inspired by the mythical origins of architecture and a shared house design. In these projects, students analyzed the spatial organization of case studies and developed their understanding of three-dimensional architectural composition through diagrammatic drawings and model-making. The teaching method reinforced the historical beginnings and core principles of architecture while allowing students to overlook conventional residential typologies (e.g., a standard two-story house with a ground-floor living room, kitchen, and dining area, and first-floor bedrooms, all separated by standard walls and doors). By directing students beyond aesthetic concerns, the pedagogical model encouraged engagement with enduring architectural archetypes and the attainment of spatial qualities informed by fundamental living conditions, thereby cultivating a reflective and imaginative foundation essential for architecture.

Keywords: architectural pedagogy, archetypes, architectural design studio, project-based learning

INTRODUCTION

This research article presents an alternative pedagogical model for architectural design studios in Thailand. This model sought to integrate histories and theories of architecture, architectural representation, and architectural design studios courses. Emphasis was placed on the integration of knowledge, rather than following the conventional approach of acquiring separate skills in artistic disciplines and engineering (Fusinpaiboon et al., 2021). As a concept, the "First Home" aims to cultivate a humanistically oriented foundation in architectural education through the convergence of architectural histories, theories, and architectural representation with architectural design studio courses. The intention here was to foster reflective, imaginative, and critical thinking from the earliest stages of students' education. The selected case studies grounded the idea of architectural spaces and encouraged students to give a design supplement to the individual study.

The model investigated architecture's mythical origins, such as the cave, post-and-lintel structure, and tent, drawing on the works of scholars like R.D. Dripps and Joseph Rykwert, who reframe the primitive hut as a memento of origins. It also incorporated the role of language in architectural teaching, inspired by Adrian Forty's work on the profound connection between language and architectural vocabulary. Finally, it framed the design process as an act of "remembering" and "forgetting," a concept derived from Alain de Botton and John Armstrong's work on the functions of art, which encouraged students to unlearn rigid typologies and invent new forms of living.

The methodology commenced with a literature review to establish the theoretical foundation, which informed the selection of analytical case studies and the development of two architectural design project briefs. The efficacy of these two briefs was then tested and implemented within the student cohorts. These briefs guided the students in analyzing built houses that embody the archetypes of the cave, post-and-lintel, and tents. Then, the students were encouraged to apply their own findings to individual design projects. The uses of diagram and model-making were emphasized throughout the process to assist the students in visualizing and understanding the three-dimensionality of architectural composition.

Theoretical Frameworks of the "First Home"

Mythical Origins of Architecture

The "First Home" is based on three theoretical frameworks: the mythical origins of architecture, the role of language in architectural education, and the functions of art. The "First Home" is read as a myth and a paradigm of architecture. In *The First House: Myth, Paradigm, and the Task of Architecture*, R.D. Dripps points out that what Marcus Vitruvius Pollio described in the Ten Books of Architecture is not "merely of a detached and autonomous artefact but the original of political structure, the formation of language, and finally the birth of architecture" (1999, p. 3). To Dripps, the essence of architecture is "political structure," rather than architectural elements. His attention is directed toward the rituals of its making and, eventually, habitation. He focuses on the discovering the advantage of fire, which provided the coming together of men for deliberative gathering and social intercourse. To cooperate to build the first shelter, men gradually developed words in their daily routines and began to speak in sentences to engage in public life, transcending the contingent demands of the shelter to become architecture. From Dripps' point of view, language is culture—of which architecture is a part.

It is important to read texts of the architectural cannon with an understanding of culture, including language and architecture itself—particularly the works of Marcus Vitruvius Pollio and Marc-Antoine Laugier, and even Joseph Rykwert and Mark Twain, given the openness of their interpretations of the idea of the "primitive hut" and "home". In the architectural cannon, the idea of the "First Home" is often thought of as a myth or a paradigm of architecture. Vitruvius' *Ten Books of Architecture* continues to be relevant to architectural teaching in the present time. To Vitruvius, architecture is informed by both theoretical and practical knowledge. That is, it comes from synthesization of various branches of study as well as the experience of the actual

working process of building something (Pollio & Morgan, 1960, p. 5). Vitruvius, Furthermore, stated that architecture should satisfy the three principles: *firmitas*, *utilitas*, and *venustas* (Andri Yatmo & Atmodiwirjo, 2023), or “firmness,” “utility,” and “beauty.” The ideas and actions underlying the making of architecture, as proposed by Marc-Antone Laugier in *Essay on Architecture*, would be considered in terms of tectonic and basic architectural elements.

The relevance of the myth of architectural origins to contemporary practice is addressed in Joseph Rykwert’s influential *On Adam's House in Paradise: The Idea of the Primitive Hut in Architectural History*. Rykwert traces the concept of the "primitive hut"—which embodies ideals of simplicity, naturalness, and the fundamental human need for shelter—back to Vitruvius, arguing for its continued significance in contemporary discourse. He views works like Le Corbusier's *Towards an Architecture* as a "reconstitution of the primitive house" (1981, p. 22), asserting that the primitive hut "provides a memento of origins" as part of a "well-known ritual procedure" (1981, p. 182) of the "return to origins." This theoretical linkage prompts a deeper inquiry: Where is the true origin to which architecture must return? Mark Twain's *The Diary of Adam and Eve* offers a humanistic answer by chronicling Adam’s gradual acceptance of Eve, culminating in his realization at her grave: “Wheresoever she was, THERE was Eden” (1906, p. 29). This poignant conclusion suggests that the essential concept of “home” transcends built form, constituted instead by non-architectural elements, such as a beloved relationship, a language, or a defined place.

The Role of Language in Architectural Teaching

The second framework posits language as a fundamental part of architectural education. Adrian Forty's *Words and Buildings: A Vocabulary of Modern Architecture* offers a perspective on the profound connection between language and architectural teaching, exploring this relationship through its vocabulary and their etymologies. The book is structured in two parts: Part one delves into the language of modernism as debated in architectural discourse, covering topics such as "The Language of Modernism," and "Language and Drawing." Part two then dissects selected architectural vocabulary and keywords like "space," "transparency," and "design," exploring their meanings within historical and theoretical contexts. Forty argues that "if language is a necessary part of architecture, the difficulty is to describe the relationship in such a way as not to make language simply an accessory—for as well as being a part of architecture, language is unquestionably also a system in its own right" (Forty, 2004, p. 13). This perspective resonates, particularly the idea that language, or more precisely syntax, is an integral component of architecture.

The inherent ambiguity of architectural terms presents a significant pedagogical challenge, particularly when communicating with new architectural students from diverse linguistic backgrounds. This section aims to analyze specific fundamental terms to enhance comprehension among 18-year-old Thai architectural students. Consider, for instance, the distinct yet intertwined concepts of human scale and architectural scale. While the monumental scale of the Forbidden City gate in Beijing contrasts with that of a typical apartment door, both possess profound architectural and symbolic meaning. As Rem Koolhaas observes in *Elements of Architecture*, a door has evolved from a physical, symbolic barrier to a dematerialized, technologically driven function. The door's original dialectic of security versus openness is being resolved not through balance, but by making security absolute while the physical form of the door disappears (Koolhass et al., 2018, p. 545).

Furthermore, the concept of human scale can be classified into two categories: standard and non-standard scales. The standard human scale originates from data-driven guidelines, such as those provided by Ernst Neufert, which standardize dimensions based on Western anthropometrics. In contrast, the non-standard human scale acknowledges and incorporates personal, cultural, and contextual variations. For example, Atelier Bow-Wow's *Pet Architecture Guide Book* illustrates how severe spatial constraints in urban Japan have led to inventive, miniaturized architectural solutions that deviate from conventional standards (2002, p. 11). In the same line of thought, in *Another Scale of*

Architecture, Ishigami (2010) expands the traditional notion of scale. He incorporates diverse elements, time, and natural phenomena—such as clouds, forests, horizons, sky, and rain—thereby pushing beyond the taxonomic framework presented in Koolhaas's *Elements of Architecture*.

Consequently, language and terminology in architecture are interwoven with political and cultural frameworks, underlining embedded values informed and shaped by a comprehensive understanding of architecture across cultures and times.

Functions of Art: Remembering and Forgetting

At a psychological level, the "First Home" is thought of as an act of remembering as well as forgetting. In *Art as Therapy*, Botton and Armstrong (2015) argue that art has seven practical functions, namely, "remembering," "hope," "sorrow," "rebalancing," "self-understanding," "growth," and "appreciation." What is important in this study is to remember that architecture does not start with Peter Eisenman but, rather, has a long history. In this sense, the "First Home" can mean the manifestos of architects, such as Kazuyo Sejima's House in a Plum Grove (2003), which demonstrates a calculated "act of forgetting" the conventional post-and-lintel skeleton structure, allowing a tectonic strategy rooted in the cave archetype to emerge. This material shift is realized through 16 mm thick, site-welded steel panels used consistently for both load-bearing enclosing walls and interior partitions (Sejima & Nishizawa, 2007). The resulting fenestration strategy facilitates new relational typologies among internal spaces, establishing visual connections and spatial flow without compromising the private character of individual rooms.

The idea of forgetting is as vital as remembering. Design education should encourage students to unlearn rigid typologies of the house and instead explore forms of living shaped by specific users, behaviors, and environments. The "First Home" as a design prompts students to move from imitation to architectural invention. The desired outcome is not a prototypical house, but an individualized design process—one that initiates lifelong learning by questioning, making, and reimagining architecture.

LITERATURE REVIEW

Background of Architectural Education in Thailand

Historically, architectural knowledge in Thailand was traditionally passed down through direct apprenticeship, focusing on practical, hands-on learning rather than formal textbooks, an approach tied to the country's agricultural society and natural environment (Chitranukroh & Buranakarn, 2006, p. 118). The development of Thai architectural education at the turn of the 20th century was influenced by the West, with foreign architects involved in new building projects and young Thai scholars studying architecture abroad. During the 1910s and 1930s, Thai architects experimented with integrating modern Western practices while adapting them to the tropical climate. Architectural education began in 1935 with the establishment of the Department of Architecture at Chulalongkorn University (Fusinpaiboon et al., 2021, p. 6). This marked a major shift from traditional, craftsmanship-based training to a structured, university-level curriculum.

The new curriculum of the 1930s was influenced by the Western pedagogical models of the School of Architecture of Liverpool University and the Ecole des Beaux-Arts (Fusinpaiboon et al., 2021, p. 6). As a result, it prioritized space composition, construction knowledge, and technical competence. This Western-based system aligned with nationalist goals emphasizing technical proficiency and formal design. In recent times, many faculty members at Chulalongkorn University have sought to address the globality in architecture often found in international architectural education. For instance, in the article "Globality in Teaching Art and Architectural History: A Case Study of the Glossary Assignment" Seeumpornroj described an assignment that tasks students with "cross-cultural and comparative investigations of Western and non-Western art and architecture" (Seeumpornroj, 2021, p. 1), suggesting a desire to integrate art and architecture that transcends

time and cultural boundaries. In another example, she compares Ziggurat of Ur in Iraq and Sukuh Temple in Indonesia (2021, p. 10). Such intentions to propose a future of architectural education that cuts across cultures, space and time is inspiring. The “First Home,” however, operates in the scope of architectural design studios.

The “First Home" was introduced as a response to Seeumpornroj's pedagogical balance between globality and local context. The local context in this study was a plot of land in Bangkok next to the Saen Saeb Canal. The brief served a point of departure where students first encountered architectural theories, principles of architectural design, and the culture of the design studio. This approach addressed the students’ experiences, including their preferences on how to use their own personal spaces as well as the conditions on which they share those personal spaces with the others. The students began to create meanings of domestic spaces beyond mere function and form.

Lessons in Architecture

This study is grounded in John Hearn's “Time Line of Treatises” from *Ideas that Shaped Buildings*, which maps architectural thought from Marcus Vitruvius Pollio’s *De Architectura* (30 B.C.E.) to Malcolm McCullough’s *Abstracting Craft* (1966). Hearn selected theorists to synthesize the “literary monuments” of architectural culture, prioritizing those who were “most memorable, most timely, or most lucid” (Hearn, 2003, p. xiv). Building upon this historical structure, this research overlays a curated selection of architectural texts—including Beatriz Colomina’s *Radical Pedagogies* and Herman Hertzberger’s *Lessons for Students in Architecture* (I & II)—to provide both a historical framework and a spectrum of visions that resonate with the aims of integrated architectural education. These literary sources function as pedagogical tools, offering distinct insights into spatial thinking, and forming the foundation for design briefs that bridge mythical origins with contemporary practice.

Radical Pedagogies (Colomina, et al., 2022) documents the globally influential, experimental architectural teaching programs that emerged between 1960 and 1980 as a critical response to conventional, technical education. These radical programs, which prioritized the seamless integration of theory, history, and social critique into the design studio, constituted the era's most significant intellectual production. They achieved this by rejecting rigid typologies and traditional representation, relying instead on tools like diagramming and critical writing to explore fundamental architectural and social problems. The "First Home" pedagogical model aligns with this tradition, as it challenges conventional residential forms, integrates theory and representation, and utilizes the investigation of mythical origins and the act of "forgetting" rigid knowledge to establish a critical, humanistic foundation for architectural thinking.

Herman Hertzberger's influential texts *Lessons for Students in Architecture* and *Space and the Architect Lessons in Architecture 2* explore the intrinsic relationship between architecture and the human condition (Hertzberger, 2005, 2010). Hertzberger (2005) outlines three key architectural issues concerning the interaction between people and habitable space: "Public and Private," "Making Space, Leaving Space," and "Inviting Form."

Hertzberger clarified the ambiguity of the "Public and Private" boundary not through linguistic definitions, but through detailed analysis of his architectural designs, diagrams, and photographs, demonstrating the delicate balance between privacy and exposure. His pedagogical framework underscores the significance of thresholds, transitional zones, and spatial adaptability. These principles reinforce the idea that architectural language should guide students toward a more nuanced perception of "space." Consequently, this approach—which conceptualizes space as responsive rather than prescriptive—directly supports the research objective of moving students beyond the constraints of rigid architectural typologies toward spatial inquiry informed by human experience and cultural context.

Spatial Composition in Architectural Pedagogy

The inherent relationship between diagrams and architecture is not new; however, the last thirty years have witnessed a significant change wherein the diagram has transcended its instrumental function to become the fundamental idea of architectural production (Eisenman, 1999, p. 7). Some highlight diagrams for their use in teaching and learning about architectural composition, while others view them as generators of ideas. The former can be seen in the textbook *Diagramming the Big Idea: Methods for Architecture Composition* by Jeffrey Balmer and Michael T. Swisher and the latter in *Diagram Diaries* by Peter Eisenman.

While both works use diagrams as a medium for thinking about architectural design, they contain crucial differences in approach. *Diagramming the Big Idea: Methods for Architecture Composition* introduces fundamental methods of architectural composition, starting with a detailed explanation of the Gestalt Theory regarding perception and psychology. Here, the authors begin to lay the groundwork, stating, "the whole is other than the sum of its parts." In other words, architecture cannot be taught in the opposite direction, from parts to whole (Balmer & Swisher, 2019). Next, the text frames each brief, step by step, architectural term by architectural term. Students then complete exercises and to begin to understand the point of each brief. This framing of the brief is conducted through the analyses of case studies, to visualize the examples drawn by master architects. The ability of students to know how to read plans and sections is crucial for them to see the whole of architectural systems before they can generate their own design possibilities.

Diagram Diaries, on the other hand, is Peter Eisenman's collection of essays and illustrations demonstrating his diagram-based approach to design philosophy. His design projects are arranged by stages of the design process, from internal and external forces. The earliest projects, such as house design: House I to House X, Aronoff Center, or Vienna Memorial are generated by the internal forces of grids, shapes, and forms called "Diagrams of Interiority" (Eisenman, 1999, p. 93). In addition, his projects are governed by external forces such as sites, texts, and scientific processes, for instance, Cannaregio Town Square, Long Beach Art Museum, or Frankfurt Biocentrum.

Peter Eisenman has always been on the side opposed to phenomenology. Unlike Peter Zumthor, Eisenman is not worried about construction details—the grains of wood, the color on the surface. Rather, he perceives architecture as a conceptual, cultural, and intellectual enterprise that exists only in the drawings. He is also interested in syntax and grammar, the analogical relationships between language and architecture, using terms such as "floating signifiers" to talk about columns and walls in his house drawings (Ansari, 2020). "House" in his sense gives him sufficient room to experiment with non-functionalities and architectural organizations. Though fascinating, this approach present difficulties in that, while architectural organization is an important tool for architectural students, it is not an adequate point from which they can begin study of the complexities of architecture (Prasertsuk & Ardrugsa, 2023). This research addresses this by presenting written briefs that synthesize architectural theory with the relationship between humans and architecture. The process is elucidated through the strategic use of diagrams, which provide a structured approach to understanding these complex interactions.

METHODOLOGY

The research utilized a design-based approach, a systematic methodology used to develop and refine educational interventions through analysis, iterative cycles of design, and implementation. This approach was suited for evaluating the proposed pedagogical model, which integrated histories, theories, and archetypal concepts (the cave, post-and-lintel, and tent) into the architectural design studio curriculum. The aim of the study was to assess how the concept of mythical origins can be applied as a pedagogical framework in architectural design education.

The pedagogical model used here was implemented within the Interior Architecture Design Studio I course held during the 2024-2025 academic year at Chulalongkorn University. The participant group comprised the entire cohort

of 28 students, overseen by four instructors who maintain active architectural design practices. This cohort served as a convenience sample, ensuring the findings reflect a typical student experience within the curriculum. The 8-week teaching and learning process was structured, incorporating two tutorials per week and centering around the development of two project briefs, both intended to synthesize the core theoretical frameworks and deepen students' understanding of architectural concepts. Each brief was introduced following a preparatory lecture: The first brief succeeded the lecture "Mythical Origins of Architecture," and the second followed the lecture "Scale and Elements of Architecture."

The first brief, a group project titled "Case Studies in Mythical Origins of Architecture," challenged students to analyze contemporary domestic architecture and explore its inspiration from the mythical origins of the discipline, utilizing diagrams as tools for visualization and interpretation. The second, an individual project titled "Shared Home Inspired by Species of Spaces," built upon these ideas by requiring students to design a house for a family selected from Georges Perec's book. For this project, students had to analyze both their own living conditions and those of the chosen family, with diagrams serving as an analytical tool throughout the design process (see Figure 1).

Data collection employed a mixed-methods approach. Primary data consisted of the final submissions from all 28 students, such as architectural drawings, physical models, and accompanying design statements for both projects. Secondary data included instructor field notes documenting observations during critiques and desk crits. These notes were used to gather qualitative insights into the students' perceived integration of the theoretical frameworks into their design processes and decision-making.

Analysis of student performance and learning was conducted through Qualitative Content Analysis applied to the documented discourse from studio critiques. This methodology shifted the focus from assessing only the final design product to evaluating the process of conceptual integration throughout the 8-week course. The analysis utilized detailed instructor field notes and critique documentation, which were systematically coded to identify recurring patterns, challenges, and breakthroughs related to the core tenets of the pedagogical model. The three primary analytical categories coded across the student cohort were: Conceptual Depth (assessing verbal engagement with archetypal concepts), Spatial Composition (analyzing discourse concerning the public/private boundary), and Representation (examining discussion about the effectiveness of architectural media). The research employed a comparative table to organize the qualitative findings, allowing for systematic comparison of how the pedagogical model influenced design thinking and evolution across the entire cohort.

DISCUSSION

Brief I: Case Studies in Mythical Origins of Architecture

Case studies formed a critical component of this learning process, particularly given that students typically enter architectural education without prior exposure to architectural thinking. The selected case studies served as pedagogical tools to introduce students to architectural analysis by exposing them to works that have been internationally recognized as exemplary architecture. At this early stage, students may not yet possess the conceptual framework to distinguish between “architecture” and “building” nor the ability to identify suitable precedents. To address this, the case studies were curated based on three criteria: (1) the projects are examples of domestic architecture, specifically houses; (2) they embody spatial concepts that correspond to the mythical origins of architecture—namely the cave, the post-and-lintel structure, and the tent; and (3) they were designed by architects who have also contributed to architectural education. These precedents were intended to broaden students’ perspectives by presenting diverse approaches to spatial composition, programming, contextual integration, structural logic, and representational tools such as plans, sections, diagrams, and models. In doing so, the case studies supported students in developing analytical skills and conceptual strategies that they can apply to their own design processes.

Figure 1

The Pedagogical Process of the Design Studio

Note. This figure demonstrates the research methodology, which maps the pedagogical process of the design studio. Copyright 2025 by Witinan Watanasap.

Table 1

Case Studies

Archetype	Project Name	Architect(s)	Architect-Educator Credentials	Key Conceptual Link to Archetype
Cave	House in a Plum Grove	Kazuyo Sejima	Professor, Princeton University, Polytechnique de Lausanne, Tama Art University, Keio University.	A carved-out cube; the cave as a series of minimal, interconnected interior voids
	House in Ajuda	Aires Mateus	Professors, Universidade Autónoma de Lisboa and other institutions	A vertical cave defined by a central void that carves through the mass of the house
Post-and-Lintel	House VI	Peter Eisenman	Professor, Yale, Princeton, Harvard, Cambridge, Cooper Union	The frame as a purely conceptual and syntactic system, divorced from function
	House NA	Sou Fujimoto	Professor, University of Tokyo, Kyoto University, Keio University	The frame as a habitable, tree-like scaffolding; a three-dimensional grid for living
Tent	House in White	Kazuo Shinohara	Professor, Tokyo Institute of Technology	The tent as a symbolic enclosure; a primal shelter defined by a singular roof and central pillar
	Latapie House	Lacaton & Vassal	Professors, ETH Zurich, TU Berlin, and other institution	A climatic tent using a greenhouse to create an adaptable, low-cost shelter

Note. This table demonstrates a conceptual map for the selected case studies. It establishes the logic behind the selection of each case study and its direct relevance to the overarching theoretical framework. By presenting architects' dual roles as both practitioners and educators alongside the project's conceptual link to a specific archetype, the table validates the pedagogical premise of the research from the outset.

The Cave

The fundamental purpose of architecture is shelter, a concept traceable from Vitruvius and notably articulated in Marc-Antoine Laugier's "Primitive Hut," which highlights the basic human need for protection (Bandeirinha & Lebre, 2020, p. 57). As a symbol of primordial shelter, the cave represents the enduring human desire for refuge and inward contemplation (Genov, 2017, p. 2859). This study investigated the "Cave" archetype as an architectural concept embodying primordial shelter and a profound focus on interiority. Contemporary case studies illustrated this concept through the strategic carving of voids from a solid mass, the manipulation of light and shadow, and the creation of protective, inward-looking sanctuaries within dense urban settings. By engaging with this primal need, this archetype served as a teaching tool, leading students to utilize figure and ground principles to think three-dimensionally in the architectural design process.

House in a Plum Grove, designed by Kazuyo Sejima, served as a lesson in deconstructing domestic conventions by challenging the standard model of a house. In its use of thin steel walls to atomize the home into a collection of small, interconnected functional fragments, this case study invited students to question the definition of a "room" (Sejima & Nishizawa, 2007, p. 16). This approach reinterpreted the cave archetype as a complex interior landscape of voids carved from a white cube. The project offered a sophisticated model for creating fluid, adaptable living environments where strategic openings foster a new language of privacy and demonstrate how architecture can prioritize users' perception and growth over rigid domestic hierarchy.

Aires Mateus's House in Ajuda centers on the architecture of subtraction, organizing the vertical dwelling around a full-height void that serves as the home's organizational core. This central volume of light and air unifies all common spaces in a sequential manner, reinterpreting the cave archetype as a vertical excavation carved from the building's solid mass. The project demonstrates that a void can function as the primary ordering device, holding more significance than the solid form itself. The design highlights the principle that the central void to create a sequential domestic journey where functions and activities are shaped by the resulting spatial quality and the play of light and shadow.

The House in a Plum Grove is architecturally complex in terms of its circulation, interior voids, and volume. Students utilized isometric drawings to analyze and explain the varying levels of privacy achieved through its spatial sequencing. Furthermore, the House in Ajuda uses color to visualize the concept of privacy via light quality and wall treatment. Students also employed an unfold diagram to demonstrate the user's spatial experience (see Figure 2). Both case studies were essential resources for students, offering complex spatial ideas they can implement in their own design projects.

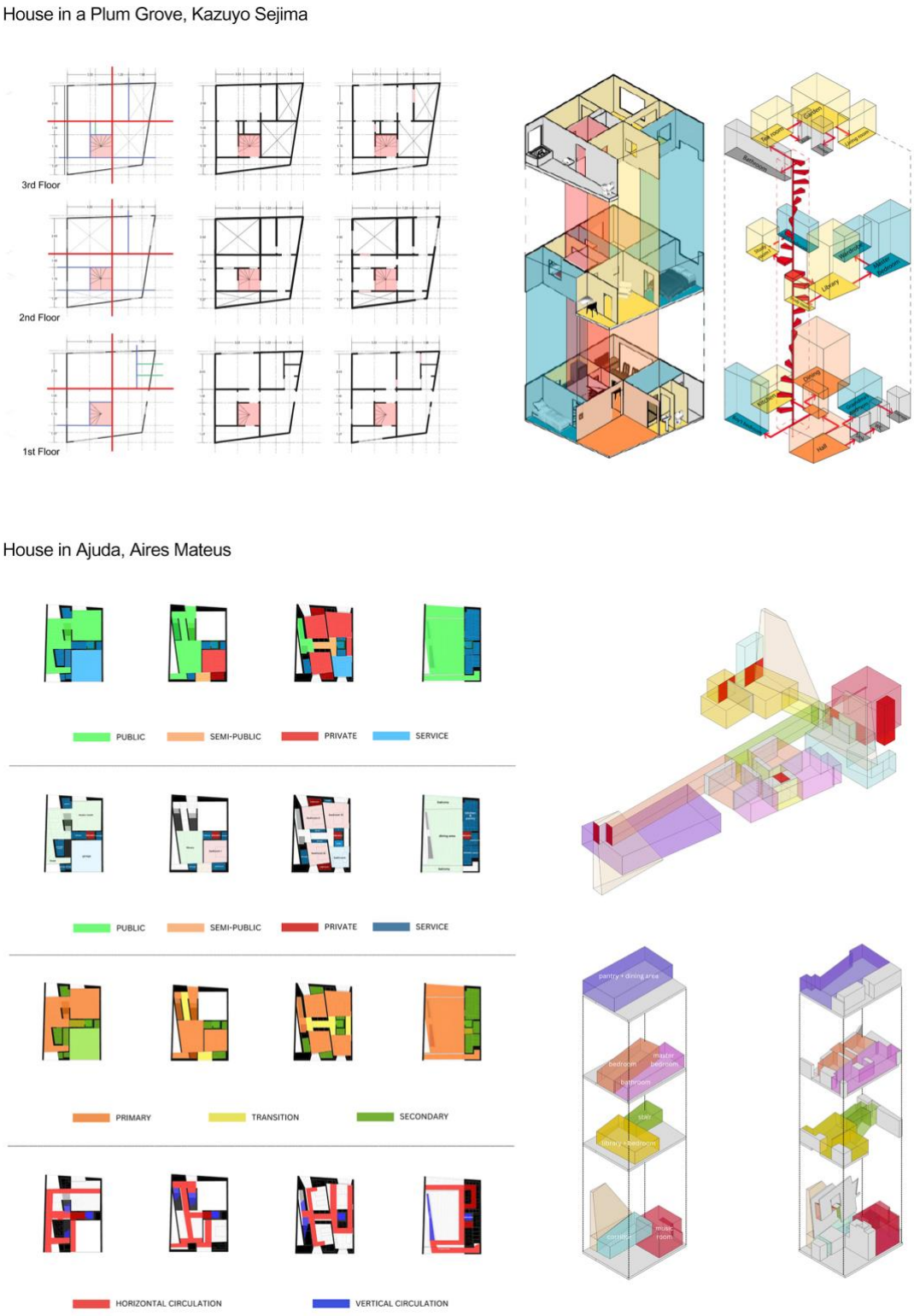
The Post-and-Lintel Structure

The "Primitive Hut" by Laugier (2009) illustrates this elemental act of building a simple hut by using a post-and-lintel arrangement. Le Corbusier asserted that the primary purpose of architecture is to serve human needs, stating, "A house is a machine for living in," emphasizing that shelter is a primordial human requirement (Corbusier, 1986, p. 108). The post-and-lintel system as an unadorned expression of structural function aligns with this functionalist philosophy, prioritizing utility and human comfort. The selected case studies demonstrate a conceptual exploration: from the tectonics of a grid system and frame structure that merges industrial standardization with traditional craft to a syntactic frame that creates architecture as an autonomous, conceptual language.

Architect, theorist, and educator Peter Eisenman views architecture as an exploration of language rather than a functional shelter. Influenced by linguistic theory, his House VI (1975) was designed through formal, syntactic transformations of a conceptual grid. The resulting frame structure serves as a physical record of its own design process. The house is famous for its deliberately non-functional elements—such as a column landing on a kitchen table and an upside-down staircase—which act as clues to the abstract operations that generated the form. By pushing the post-and-lintel archetype to its conceptual limit and stripping it of its traditional function, Eisenman

Figure 2

Cave: Analytical Diagrams



Note. This figure demonstrates the analytical diagrams of House in a Plum Grove (above) and House in Ajuda (below). Graphic layout by Witinan Watanasap. From Design Studio in Interior Architecture I by Chulalongkorn University, 2025. Copyright 2025 by Witinan Watanasap.

creates a syntactic system meant to be read as a text about its own making (Eisenman, 2006, p. 111).

In House NA, a Japanese architect-educator Fujimoto (2014) materializes his "primitive future" philosophy by reinterpreting the post-and-lintel archetype as a habitable, tree-like scaffolding. The transparent steel frame contains twenty-one individual floor plates at varying heights, dissolving conventional rooms into a fluid, three-dimensional landscape where platforms function as furniture, circulation, and spaces for living. This approach teaches an architectural language of layering and ambiguity, where the structure itself becomes the primary experience of dwelling.

Both House VI and House NA served as crucial case studies, though they challenged students in distinct ways: House VI fostered a profound self-understanding of architecture's own nature by challenging the fundamental relationship between form, function, and meaning, while House NA demonstrated how the rational post-and-lintel frame can be merged with environmental freedom to create a non-prescriptive framework that encourages a dynamic and spontaneous mode of living. Both houses possess clear architectural logic, with the spatial volume being defined by the structure, making them accessible for students to understand, enabling the visualization of their findings through the exploration of isometric diagrams and the mapping of the user's spatial journey (see Figure 3).

The Tent

The tent, as a primal form of shelter, inherently blurs the distinction between interior and exterior spaces, offering a sense of connection to the environment while providing a basic level of protection. This tension between vulnerability and security is a central aspect of its architectural significance. In a similar vein, Corbusier (1986) argues that regulating lines are a fundamental means of achieving a universal and timeless architecture. By imposing order and clarity, these geometric frameworks elevate a structure from a functional object to a work of art, appealing to both intellect and the senses. The concept of the tent represents a fundamental shift in architectural thought by moving away from architecture as a static, permanent object and toward a more adaptive and responsive space (Paramita et al., 2025).

Kazuo Shinohara, a philosopher of architecture, declared the house to be a work of art. House in White culminates his first stylistic period by abstracting traditional Japanese elements to create a modern and symbolic space. The simple design features a perfect square plan topped by a high, pyramidal roof, all rendered in a stark, brilliant white, creating a single, vast, high-ceilinged interior of open plan (Nishimaki, 2014, p. 30). This space is defined by a large wooden pillar that stands off-center, not merely as structure but as a pure, sculptural object referencing the symbolic central post of traditional Japanese shrines. This composition embodies the tent archetype at its primal and symbolic level, the essence of shelter as a single roof held up by a central core providing adaptable activities.

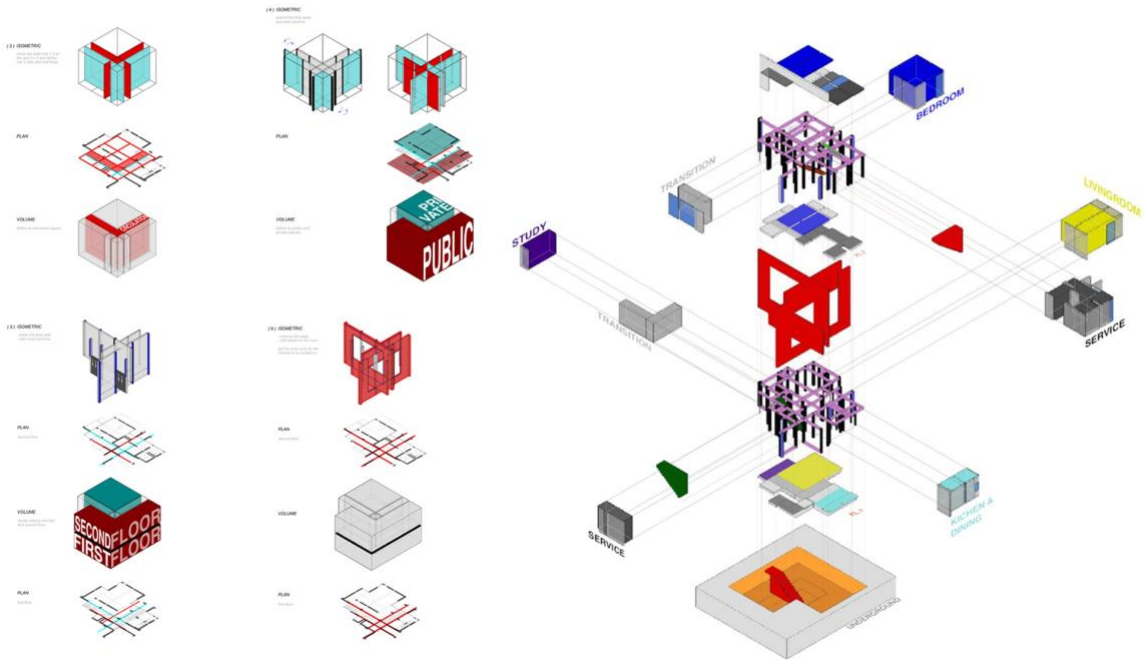
Anne Lacaton and Jean-Philippe Vassal's Latapie House exemplify a design philosophy focused on economy, generosity, and transformation within a strict budget. The house features a simple metal frame, reminiscent of an agricultural shed, divided into two distinct zones. The "winter house" is a compact core containing essential living areas, including the kitchen, bedrooms, and bathrooms, fulfilling basic human needs. Adjacent to this, a large, double-height volume enclosed by inexpensive polycarbonate sheeting acts as an innovative conservatory. This space doubles the inhabitable area, allowing the living environment to expand and contract with the seasons and serving multiple functions for the owners during warmer months. The project reinterprets the tent archetype through its principles of lightweight construction, a central core, and adaptability.

Both House in White and Latapie House offered an abstraction of primal shelter, providing a lesson for 21st-century architects concerning adaptability, user experience, and the idea of core space. However, since both case studies feature minimal architectural elements, they could be challenging for students to understand. Consequently, reference lines were essential to help students analyze and explain the abstract planning ideas inherent in these projects (see Figure 4).

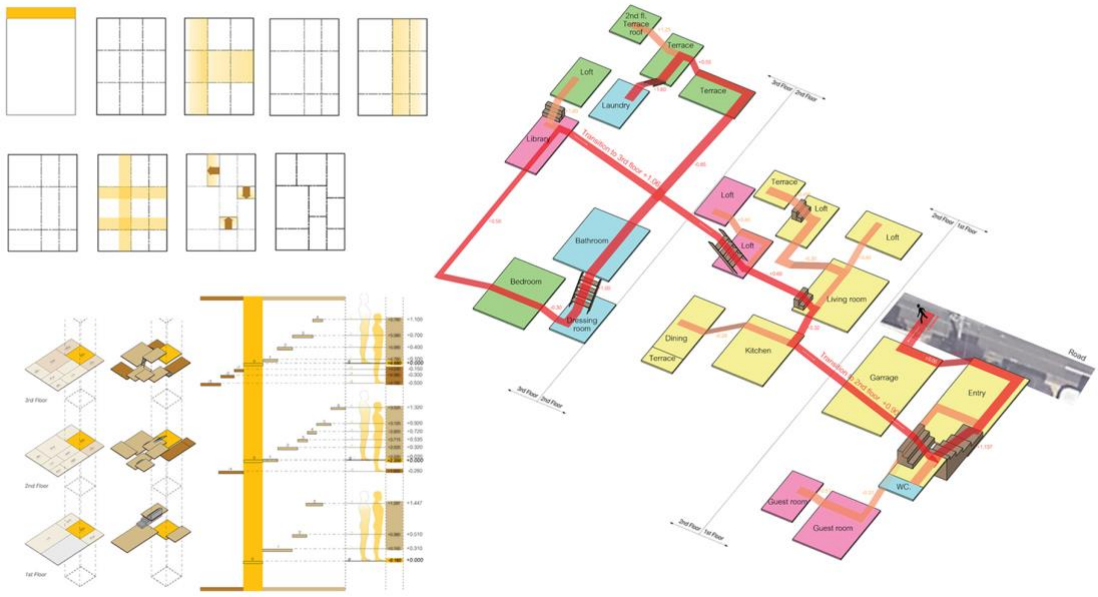
Figure 3

Post-and-Lintel Structure: Analytical Diagrams

House VI, Peter Eisenman



House NA, Sou Fujimoto

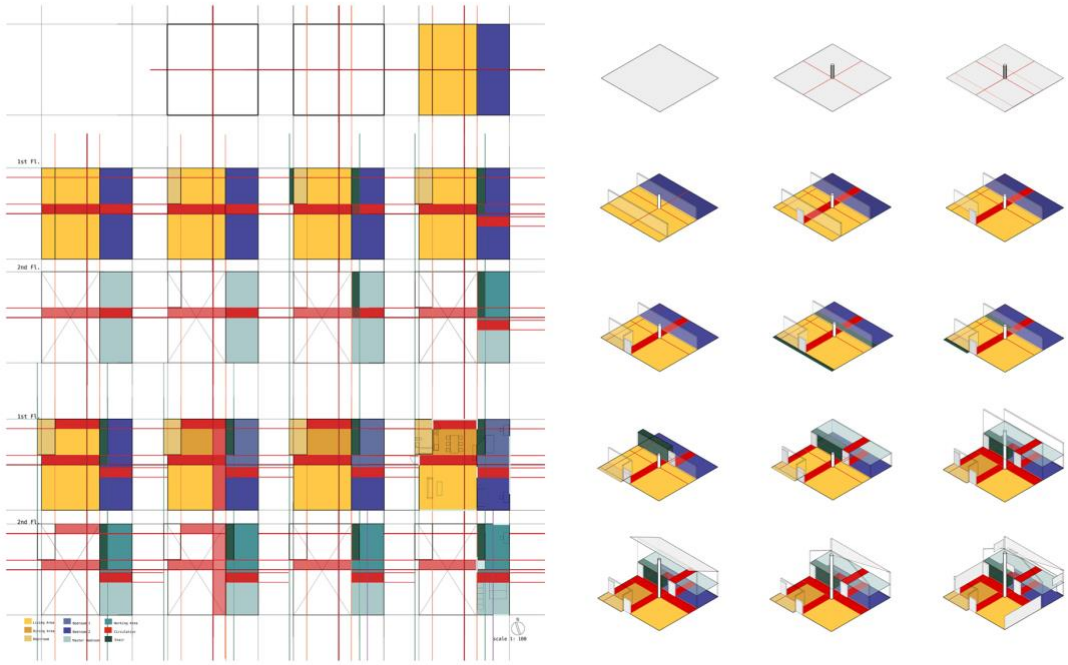


Note. This figure demonstrates the analytical diagrams of House VI (above) and House NA (below). Graphic layout by Witinan Watanasap. From Design Studio in Interior Architecture I by Chulalongkorn University, 2025. Copyright 2025 by Witinan Watanasap.

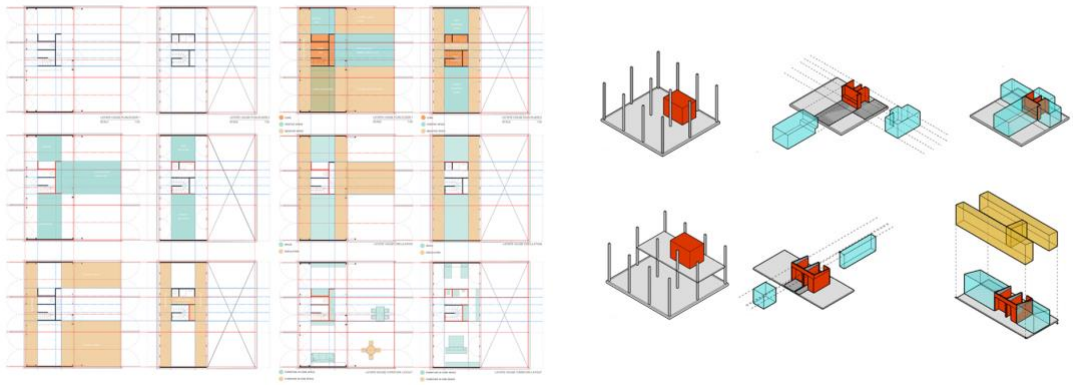
Figure 4

Tent: Analytical Diagrams

House in White, Kazuo Shinohara



Latapie House, Anne Lacaton and Jean-Philippe Vassal



Note. This figure demonstrates the analytical diagrams of House in White (above) and Latapie House (below). Graphic layout by Witinan Watanasap. From Design Studio in Interior Architecture I by Chulalongkorn University, 2025. Copyright 2025 by Witinan Watanasap.

Brief II: Shared Home Inspired by *Species of Spaces*

The second brief was a five-week individual design project in which students built a shared home upon principles identified in preceding case studies from Brief I. The project prioritized "spatial sequence," constructed from the arrangement of proportion, scale, light, and flow over conventional functional or room types.

The project's inhabitants consisted of a student cohabiting with a selected family, as detailed in pages 28-30 of Georges Perec's Species of Spaces and Other Pieces. Students were required to analyze both their own needs and lifestyle, translating these into spatial living conditions conducive to learning, referencing the "self-understanding" aspect of art functions. Concurrently, an analysis of the "Apartment" chapter in Perec's text, which outlines family daily life activities, informed the design of spaces that articulate relationships through considerations of proximity, accessibility, and the balance between shared and private zones.

The designated site, a 12 x 20-meter rectangular plot, is located along the Saen Saep Canal, opposite Jim Thompson's House, in the central business area of Bangkok. The Saen Saep Canal is smelly. One may consider this a nuisance, or one may consider it a pleasant view. The site can be accessed through waterways and public roads. The surrounding neighborhood contains a density of vernacular houses. Site analysis provided an opportunity for students to understand the local conditions and decide if the hierarchy of design should be given to the orientation of the house, the ventilation, the view, or the adjacent neighbor, or rather, whether to steer the interior perception altogether away from the public space for the protection of privacy. How can one negotiate between personal preference and existing site conditions through architectural design?

The tutorial process used a process called "curartistry," or curating everyday artistry in Bangkok, which involves researching and recording specific moments of urban life through the practice of drawing and photography (Chitrabongs, 2022, p. 2). Besides photography, this process also integrated architectural drawings (plans and sections) and model-making (see Figure 5) to ensure precise scale and proportion for both exterior and interior spaces. Diagrams served as essential tools for translating abstract concepts into tangible design processes. Furthermore, renderings qwre critical for visualizing the three-dimensional qualities of the designed space, particularly in terms of volume and light.

The student projects in response to the "First Home" brief demonstrated a direct application of the theoretical archetypes—Cave, Post-and-Lintel, and Tent—as generative concepts for design. The examples below showcase how students moved from understanding abstract architectural formations to personalizing their design concepts through visualizing diagram techniques. Furthermore, the detailed formation of each case study aided students in grasping the underlying construction logic.

The Cave in Student Projects

Drawing inspiration from the cave archetype, this example student project (see Figure 6) begins by establishing a solid, monolithic mass—defined by setback lines and a human-scale grid—that provides privacy while shielding the family from urban noise and pollution. The design process proceeded through a subtractive methodology, where the interior space of the house is excavated from this solid form. The student employed diagrams as a tool to extract and develop their ideas, experimentally carving voids and openings from the roof plane and walls. The student implied the idea of Figure and Ground with a series of negative spaces that draw natural light into the home's core. This process was tested through physical models and renderings to achieve various spatial qualities for different activities. The selected carving strategy generates three distinct "lighting clusters," differentiated by their volume and the nature of the light they receive. The final architectural organization is articulated with precision through plan and section to refine function and scale. The ground floor is conceived as a central cavern with a double-volume shared space for living, dining, and cooking that serves as the communal heart of the home, illuminated by light filtering from above. Zoning of the house is divided by volume and lighting quality to define specific activities and privacy levels.

Figure 5

Architectural Model-Making Process

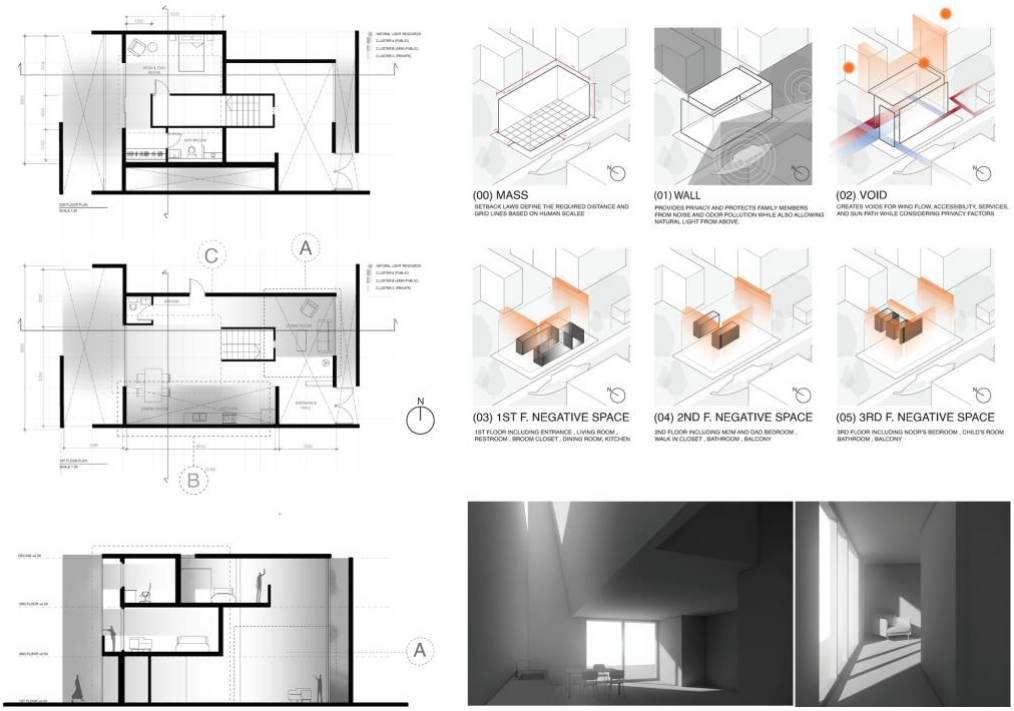
Note. This figure demonstrates a series of experimental models developed by students for their house designs. Photographed by Witinan Watanasap. From Design Studio in Interior Architecture I by Chulalongkorn University, 2025. Copyright 2025 by Witinan Watanasap.

The Post-and-Lintel in Student Projects

This student project (Figure 7) was inspired by the post-and-lintel archetype, using its principles of frame and order to compose the spatial organization. The student utilized diagrams as a methodological tool to manipulate walls and columns, beginning with a rational nine-square grid. Two main tectonic walls were inserted and strategically shifted to create a spatial hierarchy, enlarging the central area for communal space. These walls orchestrate circulation for privacy while carved apertures unify shared areas. The resulting spaces are defined by the varying volumes dedicated to different activities, which are refined by plan and section to finalize the architecture's scale and proportion. This project demonstrates the student's ability to apply compositional ideas from cases like House VI, adapting them to the specific living conditions of the brief while composing a unique architectural space.

Figure 6

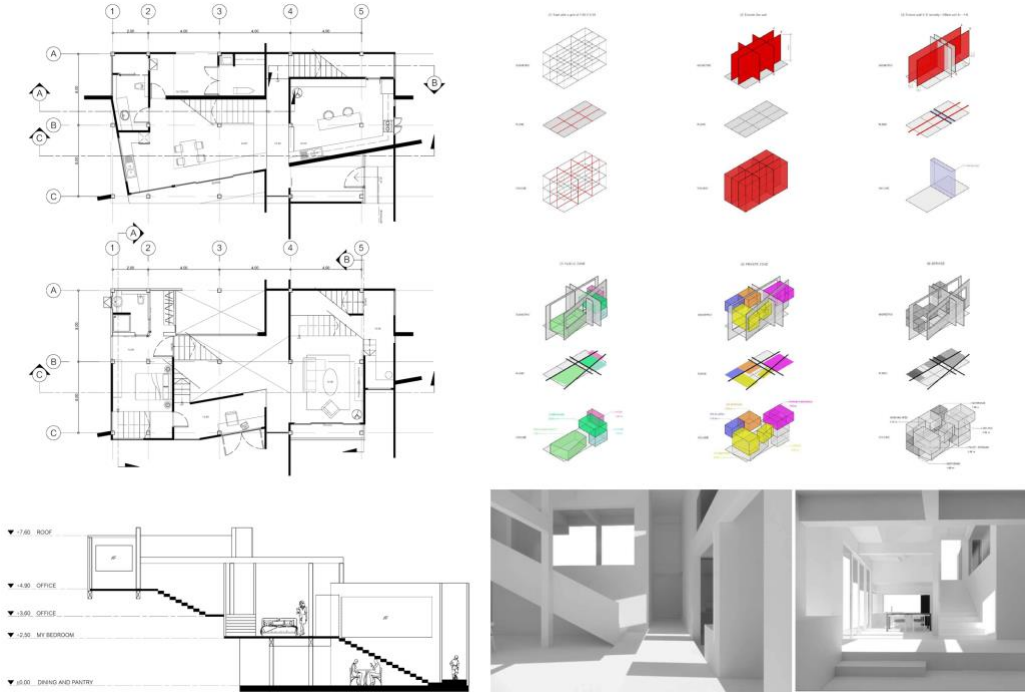
Cave: Student Design Project



Note. This figure demonstrates the student design project developed from the idea of the cave. Drawings and renderings by Nurtfittary Sompakdee. From Design Studio in Interior Architecture I by Chulalongkorn University, 2025. Copyright 2025 by Witinan Watanasap.

Figure 7

Post-and-Lintel Structure: Student Design Project



Note. This figure demonstrates the student design project developed from the idea of the post-and-lintel. Drawings and renderings by Rangsitkarn Kajonratanawanich. From Design Studio in Interior Architecture I by Chulalongkorn University, 2025. Copyright 2025 by Witinan Watanasap.

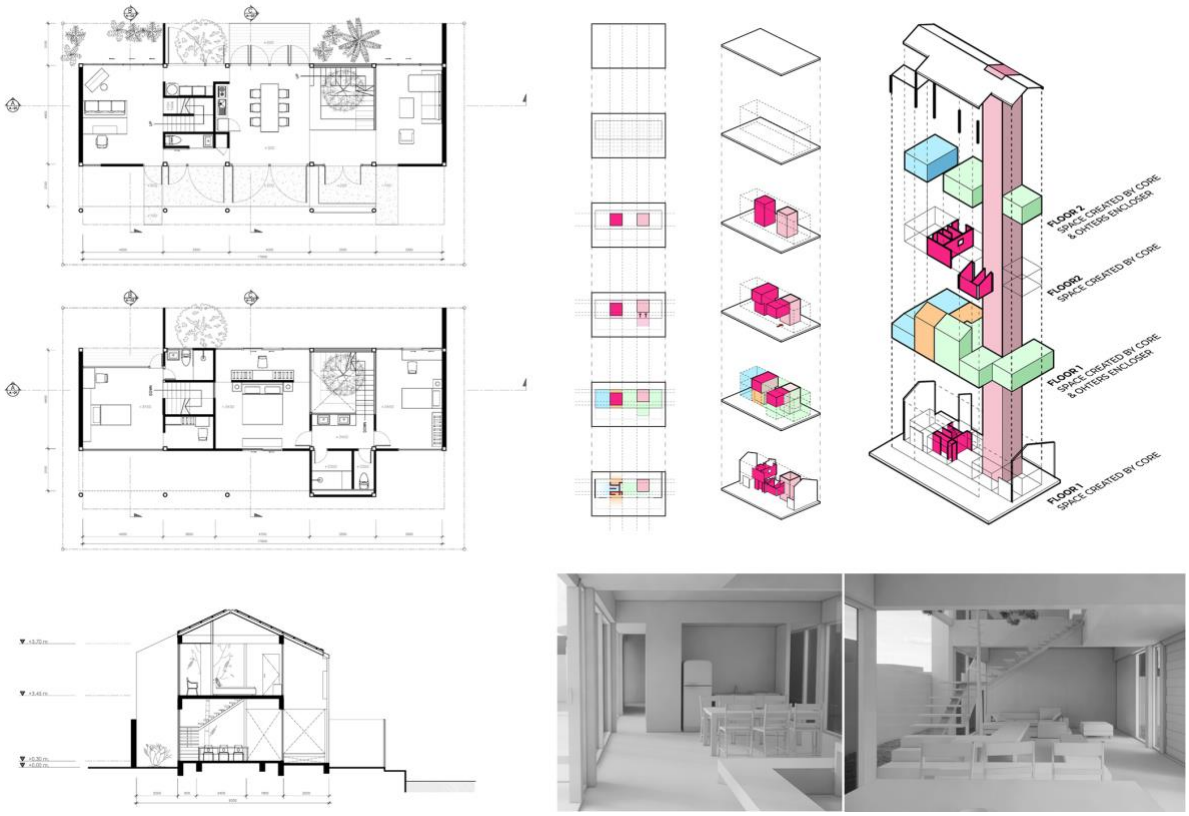
The Tent in Student Projects

The final student example project (see Figure 8) extracted its conceptual framework from the tent archetype, focusing on its principles of spatial flexibility and adaptability with core elements. The design process began by using diagrams to project reference lines, overlapping functions and circulation to establish a foundational order. From this, the student developed a central core that combines the house's major service functions, drawing inspiration from the core organization of Latapie House for elements like the bathroom and staircase. His concept was further evolved into a dual-core system: a solid "function core" containing the shared restroom and kitchen divides the house into distinct student and family zones, while a transparent "interconnection core" for living and dining creates a visual and physical link between them. The area between these two cores becomes a flexible space, allowing activities to adapt and change over time. The resulting spatial quality is that of a single, unified volume where subspaces are defined by variations in height and the strategic introduction of natural light, rather than by rigid partitions, embodying the tent's essence as an adaptable system for living.

The student outcomes, as documented in Table 2, were distributed across three architectural archetypes: the Cave, the Post-and-Lintel Structure, and the Tent. The Cave archetype engaged ten students in total, with the majority (six students) achieving an "average" performance rating. The assessment for this average group noted effective conceptual development linking the case study to the project context, though instructors indicated that the spatial composition required further refinement.

Figure 8

Tent: Student Design Project



Note. This figure demonstrates the student design project developed from the idea of the tent. Drawings and renderings by Natthapat Duangkeaw. From Design Studio in Interior Architecture I by Chulalongkorn University, 2025. Copyright 2025 by Witinan Watanasap.

The Post-and-Lintel Structure archetype, which included eleven participants, yielded the highest success rate in the “strong” performance category (six students). Feedback for this group highlighted the strong development of conceptual depth derived from the case study, alongside a unique spatial composition. This success may be attributable to the inherent clarity of the Post-and-Lintel system, where spatial definition is tangibly structured by columns, beams, and planar elements, making the architectural principles more understandable and applicable for students.

Conversely, the Tent archetype exhibited lower performance, with only one project rated strong among seven submissions. A significant portion of this group (five students) was rated average, receiving critiques that acknowledged competent conceptual development but noted a resultant design lacking architectural innovation and often reverting to a typical residential prototype. This outcome suggests the Tent archetype, being more abstract and requiring interpretive effort from students, presented a more significant pedagogical challenge compared to the more structurally Post-and-Lintel system.

CONCLUSION

The “First Home" presents an alternative pedagogical model for architectural education in Thailand, integrally converging architectural history, theory, and representation with practical design studio courses. The primary objective is to foster reflective, imaginative, and critical thinking from the earliest stages of a student's education, a goal achieved through a theoretical framework anchored in the mythical origins of architecture: the Cave, the Post-and-Lintel Structure, and the Tent.

The model lies in its ability to translate abstract theoretical archetypes into concrete, generative design concepts. By analyzing contemporary domestic architecture as case studies (e.g., Kazuyo Sejima's House in a Plum Grove, Peter Eisenman's House VI, and Kazuo Shinohara's House in White), students developed analytical skills and a foundational approach to spatial quality and composition that moved beyond mere functional considerations.

Analysis of student performance across the archetypes revealed differential pedagogical efficacy. The Post-and-Lintel Structure yielded the highest rate of Strong performance (6 out of 11 students). Its inherent clarity, structural logic, and tangible framework rendered the underlying architectural principles accessible, facilitating the development of strong conceptual depth and unique spatial compositions. Conversely, the Tent proved the most challenging, resulting in only one strong submission out of seven students. The archetype's conceptual complexity—focused on flexibility, adaptability, and a central core—often led to a reversion to conventional prototypes, underscoring the difficulty in translating abstract concepts into innovative spatial design. The Cave (10 students) served as a middle ground, successfully bridging the case study to the project context while highlighting the necessity of further spatial refinement.

This research advocates for the sustained integration of complex case studies, theory, and history within the architectural design studio to maximize student engagement with core ideas and design possibilities. Finally, the "First Home" is conceived not merely as a domestic design project, but as a pedagogical model whose approach will be tested and applied to other, larger and more complex architectural project types in future studio contexts.

Table 2

Performance Breakdown by Archetype

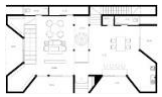
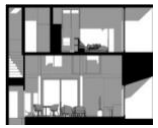
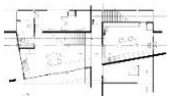
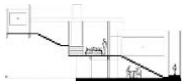
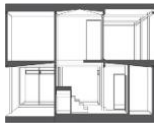
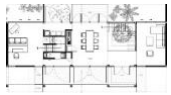
Archetype	Performance levels	Number of students	Plan	Section	Rendering	Instructors' Feedback
Cave	Strong	3				The conceptual depth achieved is comparable to that of the case study. The spatial composition is well-executed.
	Average	6				The conceptual development effectively links the case study to the context. The spatial composition requires further refinement to achieve a fully realized design.
	Weak	1				The design is conventional; both the conceptual depth and the spatial composition fail to move beyond a typical residential prototype.
Post-and-Lintel Structure	Strong	6				The conceptual depth is strongly developed from the case study and there is a unique spatial composition.
	Average	4				The project's conceptual development is strong, demonstrating a clear application. The resulting spatial composition is only partially successful.
	Weak	1				Both the conceptual depth and the resultant spatial composition are currently underdeveloped.

Table 2 (Continued)

Archetype	Performance levels	Number of students	Plan	Section	Rendering	Instructors' Feedback
Tent	Strong	1				The conceptual depth is strongly developed from the case study. The spatial composition is well-executed.
	Average	5				The conceptual development is competent, applying principles derived from the case study. However, the final design lacks architectural innovation, remaining like a typical residential prototype.
	Weak	1				The project exhibits an underdeveloped conceptual depth and lacks sophistication in its spatial composition.

Note. This table demonstrates student work based on one of three architectural archetypes (Cave, Post-and-Lintel Structure, and Tent) and their performance levels (strong, average, weak), along with the number of students in each category and the instructors' feedback.

REFERENCES

Andri Yatmo, Y., & Atmodiwirjo, P. (2023). Revisiting Vitruvius' town planning method in architectural education. *Nakhara: Journal of Environmental Design and Planning, 22*(3), Article 321. https://doi.org/10.54028/NJ202322321

Ansari, I. (2020, July 20). *Interview: Peter Eisenman*. Architectural Review. https://www.architectural-review.com/essays/interview-peter-eisenman

Atelier Bow-Wow. (2002). *Pet architecture guide book vol 2*. World Photo Press.

Balmer, J., & Swisher, M. T. (2019). *Diagramming the big idea: Methods for architectural composition*. Routledge.

Bandeirinha, J. A., & Lebre, R. A. (2020). The need for shelter Laugier, Ledoux, and enlightenment's shadows. *Sophia, 5*(1), 54–71. https://doi.org/10.24840/2183-8976_2019-0005_0001_05

Botton, A., & Armstrong, J. (2015). *Art as therapy*. Phaidon Press.

Chitrabongs, C. (2022). Curartistry: Curating everyday artistry in Bangkok. *Nakhara: Journal of Environmental Design and Planning, 21*(1), Article 208. https://doi.org/10.54028/NJ202221208

Chitranukroh, J., & Buranakarn, V. (2006). Sentiment in traditional Thai achitecture. *Nakhara: Journal of Environmental Design and Planning, 1*(1), Article 8. https://digital.car.chula.ac.th/nakhara/vol1/iss1/8

Colomina, B., Galán, I. G., Kotsioris, E., & Meister, A. (2022). *Radical pedagogies*. MIT Press.

Corbusier, L. (1986). *Towards a new architecture*. Courier Corporation.

Dripps, R. D. (1999). *The first house: Myth, paradigm, and the task of architecture*. MIT Press.

Eisenman, P. (1999). *Diagram diaries*. Thames and Hudson.

Eisenman, P. (2006). *The formal basis of modern architecture*. Lars Müller Publishers.

Forty, A. (2004). *Words and buildings: A vocabulary of modern architecture*. Thames & Hudson.

Fujimoto, S. (2014). *Primitive future*. Inax.

Fusinpaiboon, C., Coomans, T., & Povatong, P. (2021). Nationalism and the modernisation of Thai architectural education at Chulalongkorn University in the 1920s and 1930s. *Nakhara: Journal of Environmental Design and Planning, 20*(2), Article 112. https://doi.org/10.54028/NJ202120112

Genov, A. (2017). The symbolism of caves as a border between worlds in the conceptions of ancient societies. *Knowledge International Journal, 20*(6), 2859–2864. https://ojs.ikm.mk/index.php/kij/article/view/3979/3978

Hearn, M. F. (2003). *Ideas that shaped buildings*. MIT Press.

Hertzberger, H. (2005). *Lessons for students in architecture*. 010 Publishers.

Hertzberger, H. (2010). *Space and the Architect Lessons in architecture 2*. 010 Publishers.

Ishigami, J. (2010). *Another scale of architecture*. Seigensha.

Koolhaas, R., Avermaete, T., Inaba, J., Clouette, B., Easterling, K., Feng, J., Maak, N., Marot, S., McLeod, K., Zaera-Polo, A., Zhenning, F., Davis, B., Lenz, B., MacWillie, E., Potts, N., Reisz, T., Wang, A., & Williams, E. (2018). *Elements of architecture*. Taschen.

Laugier, M. (2009). *An essay on architecture*. Hennessey & Ingalls, Inc.

Nishimaki, A. (2014). *JA spring, 2014: Kazuo Shinohara*. Nobuyuki Yoshida.

Paramita, K., Indraprastha, A., Hariyadi, A., Yatmo, Y. A., Atmodiwirjo, P., & Suryantini, R. (2025). Tradition and modernity: The adaptation of outdoor spaces in traditional Balinese dwelling. *Nakhara: Journal of Environmental Design and Planning, 24*(2), Article 514. https://doi.org/10.54028/NJ202524514

Pollio, V., & Morgan, M. H. (1960). *Vitruvius: The ten books on architecture*. Dover Publications.

Prasertsuk, S., & Ardrugsa, W. (2023). Postmodern architecture in Thailand 1982–1997: Key concepts and case studies. *Nakhara: Journal of Environmental Design and Planning, 22*(2), Article 314. https://doi.org/10.54028/NJ202322314

Rykwert, J. (1981). *On Adam's house in paradise: The idea of the primitive hut in architectural history*. The MIT Press.

Seeumpornroj, P. (2021). Globality in teaching art and architectural history: A case study of the glossary assignment. *Nakhara: Journal of Environmental Design and Planning, 20*(2), Article 109. https://doi.org/10.54028/NJ202120109

Sejima, K., & Nishizawa, R. (2007). *Architectural topology*. El Croquis Editorial.

Twain, M. (1906). *Diaries of Adam and Eve*. Alma Classics.