Brandon R. Ro

Utah Valley University | brandon.ro@uvu.edu

KEYWORDS

architecture education; pedagogy; sacred space; architectural design; curriculum design

ABSTRACT

Institutions of higher education have distanced themselves from teaching anything related to the sacred in architectural education. While the education of the architect has remained a critical focus for practitioners since Vitruvius, architecture's historical ties to the sacred have been forgotten and dismissed. Many are beginning to realize the importance of this topic for contemporary architectural education. Architects have an ethical task of defending the authenticity of human experience as well as creating a beautiful world that uplifts the human spirit and nourishes cognitive, behavioral, and emotional health. As the co-founder of a new architecture program, I discuss both the practical and operational experiences of teaching and developing curricula with sacred pedagogy in mind. The paper also reviews "where" and "how" academic programs might attempt to deal with the sacred in curricular development. The success of any pedagogical intent will ultimately take years to manifest itself in the built works of students. Integrating the sacred into architectural education is critical for the profession because it helps future architects cultivate their empathic imagination, increase their compassion for the building user, and nourish their love for humanity.

Italian metadata at the end of the file

The Sacred and Profane: Thoughts on Architectural Education and Pedagogy

INTRODUCTION

Architectural education and professional licensure in the twenty-first century is focused on protecting the public's health, safety, and welfare. This is accomplished primarily through rather banal (or profane) design requirements related to building codes, legal requirements, inspections, planning and zoning ordinances, and land-use regulations. Designing buildings to meet these requirements is only the beginning. Rather, as Alberto Pérez-Gómez argues, the desire and wish of every architect should be to "design a beautiful world" that provides "a better place for society."1 It should be built to last the test of time as well as focused on uplifting and inspiring the human spirit. Any designer whose role goes beyond merely protecting health to one that promotes bodily healing, increases emotional wellbeing, and nurtures the human spirit is much more akin to being sacred than profane. In fact, one might argue that the architect's role is one of existential awareness that defends the authenticity of human experience. To be successful in such a stewardship and transcend the minimum

requirements of the profession, however, the domain of the sacred must be addressed in the education of architects.

As one of the co-founders of a new professional degree program in architecture aimed with such a mission, this article deals with both the practical and operational experiences of teaching and developing curricula with sacred pedagogy in mind. **Fig. 1**

Organized into three overarching thematic sections, the first part of this article seeks to help the reader (re)discover the sacred in architectural education. It does this by briefly exploring definitions of the sacred and profane. Next it outlines several reasons why the sacred has been forgotten in both the profession and higher education. Lastly, it argues why the sacred should return to contemporary architecture education.

Seeking the sacred in a profane curricular world is the focus of the second section of this article. It does this by addressing "where" one might attempt to deal with the topic of the sacred in curricular planning. Since each program's

operational setting, demographics, and history can affect these types of efforts and decisions, the location of "where" the sacred will fit will vary by program. Therefore, I provide a brief overview about the cultural context of Utah's new architecture program to help educators understand some of the nuances that have allowed curricular developments to come forward. This includes a brief overview of several locations across the curriculum "where" the sacred has been incorporated into this new academic program.

The third part of the article turns its attention to the more practical act of restoring the sacred to the classroom. For this section, I draw heavily upon the "morphology of ritual-architectural priorities" outlined in Lindsay Jones' *The Hermeneutics of Sacred Architecture* published by the Harvard Center for the Study of World Religions. I utilize this framework to demonstrate various methodologies and approaches as to "how" the sacred can be incorporated into assignments, exercises, and design projects across the curriculum. From writing, comparing, and interpreting sacred architecture in history and theory courses to teaching students how to both design and evaluate the phenomenological experience of the sacred in a studio setting, each curricular exercise is aimed at keeping the sacred part of the training of contemporary architects.

The article concludes by attempting to answer whether the sacred should be taught in schools of architecture in conjunction with its more profane subjects. It provides a summary of the "where" and "how" the sacred can be incorporated into contemporary architectural education. The article ends with reflections on my own experience as a student grappling with the sacred in both design and research settings as well as how I dealt with the subject as a practitioner before heading into academia.

(RE)DISCOVERING THE SACRED IN ARCHITECTURAL EDUCATION

Definitions of the Sacred and Profane

In order for the architectural discipline to (re)discover the sacred and gain an understanding of its importance for both theory and practice, we must begin by defining the term. When something is sacred it is considered special, set apart, extraordinary, divine, dedicated to a higher purpose, unique, consecrated to a deity, related to ritual, and broadly conceived as religious or spiritual. Likewise, when humans experience an encounter with the sacred it is often beyond words and characterized as immeasurable, unexplainable, numinous, or ineffable. The profane, on the other hand, can be defined as the exact opposite of the sacred. It is mundane, ordinary, homogeneous, nonreligious, ungodly, unhallowed, temporal, sacrilegious, polluted, and secular.

Both the sacred and profane are qualitatively different from one another, and they represent "two modes of being in the world, two existential situations," as explained by historian of religion Mircea Eliade.² This depends largely on a society's existential understanding of the world. The phenomenological model of sacred and profane space follows this mode of thought, but it centers on how it is experienced rather than geometrically constructed. According to Eliade, sacred "space is not homogeneous" and it reveals "absolute reality" for societies with a spiritual understanding of the world. Breaks or interruptions are experienced, and "some parts of space are qualitatively different from others."³ Sacred space found in a religious building, such as a church, mosque, shrine, or temple, is experienced quite differently than the space found in the buildings that surround it. "Within the sacred precincts the profane world is transcended," explains Eliade.⁴ Part of this transcendence involves a transformative "primordial experience" with the spiritual realm.⁵ Each sacred space facilitates these experiences by functioning as "an opening in the upward direction and ensures communication with the world of the gods."6 With this existential perspective in mind, the religious person "always believes that there is an absolute reality, the sacred, which transcends this world but manifests itself in this world, thereby sanctifying it and making it real."7

Profane space, on the other hand, is not sacred or spiritual. It encompasses the "nonreality of the vast surrounding expanse," and its experience is both "homogeneous and neutral."8 History reveals that associations between God, space, and time can eventually become lost. In fact, "modern Europeans started to assume that they actually lived their everyday lives not in places (topoi), but in a homogeneous, isotropic, geometric space," explains Alberto Pérez-Gómez.9 This type of spatial experience emerges from the person "who rejects the sacrality of the world, who accepts only a profane existence, divested of all religious presuppositions," explains Eliade.¹⁰ What remains are "only fragments of a shattered universe, an amorphous mass consisting of an infinite number of more or less neutral places in which man moves, governed and driven by the obligations of an existence incorporated into an industrial society."11 The nonreligious person, writes Eliade, "refuses transcendence, accepts the relativity of 'reality,' and may even come to doubt the meaning of existence."12

From these definitions and arguments, we begin to understand the difference between sacred and profane space. We also start to grasp how we might rediscover "the sacred dimension of existence in the world."¹³ We now focus our attention as to why the sacred has been neglected by architects and educators.

Understanding the Problem: Why has the sacred been forgotten?

In order for the academic world to begin (re)discovering the sacred in architecture education, we must first ask ourselves how we got into this predicament and why the sacred has been forgotten. Eliade argues that there has been a gradual desacralization of the world and its architecture. Perhaps ironically, he calls this the "new 'fall' of man" because we have "forgotten" about our origins and how religion has shaped our present world.¹⁴ Ancient societies once lived in a "sacralized cosmos," he explains, whereas modern societies are "living in a desacralized cosmos."¹⁵ According to Karsten Harries, these changes can be seen in the constructed world around us: "Our built

environment speaks of a culture that has banished the sacred to the periphery of our modern lives."¹⁶ Some have argued that this is because of the triumph of secularism in our modern industrialized culture which is driven by scientific rationalism, nihilism, relativism, and positivism.¹⁷ When was the sacred meaning of architecture banished to the cellar never to again see the light of day? Some scholars, such as Pérez-Gómez, suggest that this began as early as the seventeenth and eighteenth centuries with the "changing world view ushered in by Galilean science and Newton's natural philosophy."18 In his book, Architecture and the Crisis of Modern Science, Pérez-Gómez argues that buildings began to lose their meaning and sacred character when more functional and technological values of scientific thought took over. Any reference to myth, poetry, cosmology, transcendental order, metaphysics, magico-religious dimensions, or symbols once embedded in the architectural proportions, numerical systems, and geometries of the ancient world were replaced with "mathematical certainty in its various forms."19 This was especially true in the "algebraization or 'functionalization' of architectural theory as a whole" or "the reduction of architecture to a rational theory." Pérez-Gómez explains that the "inception of functionalism coincided, not surprisingly, with the rise of positivism in the physical and human sciences."20

We witness some of these formations in both the Académie Royale d'Architecture (1671-1793, 1819) and its successor the École des Beaux-Arts in Paris (1819-1968). Its early roots followed the humanist learning tradition from the Renaissance but emphasized reason as an absolute academic doctrine. Equipped with a systematic and rationalist approach to education, the "Academy sought to evolve universal principles of architecture" found in the architectural traditions of the past. Such a Platonic perspective in unchanging universals laid out by François Blondel, the "Academy assumed that formulating these principles was the way to make architecture perfect; for instance, if there could be a rule of proportion, it would result in perfect beauty."21 While the "curriculum of the institution did not remain constant," Blondel's foundation for the school significantly influenced "most modern architectural institutions." This is seen most prevalently when students directly apply theory to design problems before undergoing traditional practice and apprenticeship, argues Pérez-Gómez.²²

Others blame the emergence of the Modern movement espoused by the Bauhaus educational system in the early twentieth century. Architectural principles in Bauhaus "modernism," however, emerged as early as the eighteenth and nineteenth centuries from German philosophy, especially derived from the word *Zeitgeist*, as the spirit of the age. This expression is summarized well by Jürgen Habermas: "Modernity can and will no longer borrow the criteria by which it takes its orientation from the models supplied by another epoch; it has to create its normativity out of itself."²³ In other words, looking to the past to design for the future was no longer essential nor tolerated. "Since there was no longer the desire to build on the achievements of the past, students were expected to originate from within themselves a new language of architecture without reference to history or the past."²⁴ According to the critique of Nir Buras, Modernism is "founded on synthetic images of futures" which are basically "[d]riven by a fear of backwardness... Its almost fundamentalist adherence to styles reflective of 'our time' is based on a deep, quasi-religious belief in the 'spirit of the time,' the *Zeitgeist.*"²⁵

The favor of pragmatism, originality, social critique, and abstraction found in the Bauhaus approach to design resulted in a further loss of symbolic meaning, purpose, and connections to history and the sacred. Under Walter Gropius' leadership, Harvard's Graduate School of Design was transformed into an American Bauhaus overnight. It did not prioritize the study of historical precedents as "possible resources for design development" and there is "no mention anywhere in the catalog of history as part of an architect's education" except as electives. In fact, we are reminded that Gropius had a "legendary ideological opposition to the cultivation of a historical consciousness."²⁶ Other American schools of architecture eventually cast off their Beaux-Arts approach to education and adopted the Bauhaus philosophy.²⁷

Critics of this pedagogical model argue that by neglecting history, tradition, and meaning in architecture, we are also separating ourselves from the sacred. "Modernism alienates humans from God, art from technology, and separates our time from the past. Its limiting vision singles out 'appropriate' responses to our culture and condemns all others," argues the late Thomas Gordon Smith. An architecture that distances itself from history not only "inhibits the continuity of tradition," he continues, but it is naively arrogant. In essence, "it asserts that our period is so unique that we should not imitate our forebears in any tangible way."²⁸ Thus, a *Zeitgeist* approach to architectural design that distances itself from the past in favor of "novelty, ephemeral pleasurability, consumable iconographic individualism, and unmediated industrial production," declares Demetri Porphyrios, leaves humanity "yearning for an authentic culture" rich in myth and symbolism.²⁹ The philosophical driving motives and ideological tenets behind modern architecture, argues Nikos Salingaros, are "purely nihilistic" and not humanistic. "Architecture detached itself from any higher order in human existence, turning away from both nature and from the sacred. It was the first time in human history that humans began to intentionally create unnatural structures that are uncomfortable to inhabit and to experience."30

Perhaps the reason many institutions of higher learning have completely abandoned, shunned, renounced, or disaffiliated from the sacred in architectural education is because of Modernism's worldview that often puts not only history but religion in its crosshairs. In his book *Making Dystopia*, James Stevens Curl explains:

The insistence on the removal of meaning from the built environment left human beings incapable of relating to it. By banishing ornament, by adopting the fundamentalism



of smooth surfaces and simple geometries, the Modern Movement and its authoritarian practitioners affronted many religions by severing the possibilities of individuals to connect with spiritual realms through colour, ornament, calligraphy, and beautiful architecture, thus denying sensory connections.³¹

For Curl, it is the removal of architectural detailing and ornament that disconnects humanity from the sacred spiritual realm and religious meaning.

Bringing Eliade's perspective on the sacred and profane into this discussion, when a person views architecture through a modernist lens it can be problematic because it tends to hinder our spiritual view on the world. He disagreed with Le Corbusier, for instance, that a house was merely a functional "machine to live in." This type of scientific rational thinking is what has brought on the desacralization of the cosmos. Traditional cultures, on the other hand, treat the house as an *imago mundi* – a miniaturized image of the world or replica of the universe – that is constructed for the purpose of creating a direct link between the human and divine worlds.³² "Modern nonreligious man assumes a new existential situation," explains Eliade. This is because "he regards himself solely as the subject and agent of history, and he refuses all appeal to transcendence... The sacred is the prime obstacle to his freedom. He will become himself only when he is totally demysticized. He will not be truly free until he has killed the last god."³³ In Eliade's view, both the sacred and transcendence contradict the goal of modernity's attempt to distance itself from the past.

From this brief analysis, it is not difficult to see why the sacred has been omitted from architectural education. Beyond being an inconvenient subject that is often perceived as politically incorrect, uncomfortable, or even embarrassing, the discussion of the sacred in design pedagogy has continued to garner little attention from schools of architecture. Except for programs housed within institutions possessing religious affiliations, the separation of Church and State doctrine in American schools has forced the sacred to be forbidden, unpopular, or taboo for



1b

most circles. Some might even be tempted to argue that since faith and reason have been divorced, the sacred is lost forever and it will remain a mere distant memory never attainable again.

Understanding the Need: Why should the sacred return?

Just as was seen in the early twentieth century with individuals challenging the Beaux-Arts method and advocating for a Bauhaus approach to architectural education, there is an increasing number of twenty-first century voices that are not only seriously scrutinizing and challenging contemporary architectural education but are advocating for the return of the sacred. "More than ever before," writes Juhani Pallasmaa, "the ethical and humane task of architecture and all art is to defend the authenticity and autonomy of human experience, and to reveal the existence of the transcendental realm, the domain of the sacred."³⁴ This is because significant "architecture makes us experience ourselves as complete embodied and spiritual beings," he maintains.³⁵ Advocating

for maintaining the symbiotic relationship between the sacred and architecture, Karsten Harries offers a simple maxim: "The sacred continues to need architecture if it is not to wither; Architecture needs the sacred if it is not to wither."³⁶ If architecture shapes the sacred and the sacred shapes architecture, how do we bring this thinking back into academia?

One method of rediscovering "the sacred dimension of existence in the world,"³⁷ could reside in the symbols, archetypes, geometries, myths, traditions, and cosmologies of the past. Harries, for instance, has encouraged the profession to "reappropriate the wisdom buried in the traditional understanding of architecture as repetition and image of the cosmos."³⁸ This thinking aligns with Eliade: "Reality is a function of the imitation of a celestial archetype."³⁹ Could (re)awakening a Renaissance cosmology of when "number and geometry were a... link between the human and the divine"⁴⁰ help architectural education? "Symbolization is... the most fundamental operation constituting meaning in human existence,"



A COMPOSITIONAL ANALYSIS OF TWO CATHEDRALS SEPARATED BY TIME, PLACE, & STYLE PROFESSOR BRANDON RO - FALL 2020 TRESSA MESSENGER UTAH VALLEY UNIVERSITY - ARCHITECTURE & ENGINEERING DESIGN

explains Pérez-Gómez. Likewise, it is "the basis for the perpetuation of culture."⁴¹ Pallasmaa agrees with the power of such a cosmology: "The aspiration to fuse the cosmic and the human, divine and mortal, spiritual and material, combined with the use of systems of proportion and measure deriving simultaneously from the cosmic order and human figure, gave architectural geometries their meaning and deep sense of spiritual life."⁴²

Noting that we are nearly a quarter of the way into a new century, perhaps it is at this critical moment that architectural programs should focus on restoring the sacred to its rightful place within the curriculum. "A school cannot abrogate its responsibility by teaching architecture as a set of self-serving beliefs," argues Nikos Salingaros.⁴³ "Architectural education must in the future clearly separate architecture from politics, and also separate architecture from self-referential philosophy."⁴⁴ Instead, the focus of architectural education should center on the many "contemporary philosophers [who] celebrate life and the sacredness of humanity."⁴⁵ For Salingaros, "[h]umanly-adaptive architecture and urbanism arise out of a respect for humanity's higher meaning in an infinite universe."⁴⁶

Other critics, such as James Stevens Curl, concur that the "present system does not work" and that a "Reformation in architectural education is long overdue."⁴⁷

2

To illustrate these points, we turn to someone who spent two decades in search of the sacred in architecture. A.T. Mann wrote his book Sacred Architecture out of frustration with his architectural education at Cornell University in the mid 1960s, since his professors were reluctant to discuss meaning, symbolism, and "the sacred basis of architecture." He laments: "It was necessary to suppress my aspirations of discovering the magic of architecture, because we were required to play formal design games in which the winner was the one who could most effectively imitate Le Corbusier." Perhaps the sacred would be revealed in practice among an elite group of celestials, he thought. But after working in "Rome for the Bauhausoriented firm started by Walter Gropius, The Architects Collaborative," he was again disappointed. "Far from finding men who 'knew' of the sublime and magical foundations of architecture, I discovered that the notable architects I met or heard about were even further away from the core of architecture than I was." Eventually, Mann "had to leave

1alb

One method of incorporating the sacred into curriculum is through design studios focused on religious building types. Interior perspective (left) and elevation/plan diagram (right) of a design proposal for a new Catholic cathedral in Heber, Utah by Taylor Mumford.

2

Example of a research project addressing the sacred from an architectural theory course. Digital watercolor compositional analysis of two cathedrals separated by time, place, and style by Tressa Messenger.

3

Examples of archetypal geometry drawings by first-year architecture students. Student work by Blake Gneiting, Brittany McGarry, Sydnie Corey, and Jared Bradshaw.

4

Third-year student design proposals for a museum of antiquities, featuring rare books and early Bibles, are presented in the Beaux Arts *analytique rendu* format to convey proportional relationships and attention to ornamental details. Team-based student projects by Steven Hawker, Jayne Lee (left), Cassidy Johnson, Benjamin Varnell (middle), Taylor Cherrington, and Jordan Meyer (right).

the world of architecture to discover the first seeds of meaning." After years of searching he had finally "tapped into the sacred domain of architecture, but [he] had to leave the practice of architecture in order to pursue its mystery." As a result of this experience, Mann goes on to explain that "the sacred tradition exists already within the pearl of architecture, awaiting its acknowledgement." He concludes the introduction to his book with this statement: "I hope to inspire architecture in our time, when it has been diminished or eliminated from our lives."⁴⁸ It is in this light that we turn our attention to where the sacred can be addressed in architectural education.

SEEKING THE SACRED IN A PROFANE CURRICULAR WORLD: WHERE DO WE ADDRESS IT WITHIN ARCHITECTURAL EDUCATION?

Seeking the sacred in a profane curricular world is indeed a difficult but critical task as we have established. In this section of the article, we begin to ask the difficult question of applicability for architectural education in the twenty-first century. "Modernity, being implicitly secular," writes Suha Özkan, "does not encourage in our societies the exploration of the relationship of faith to other phenomena, such as buildings, and architecture."⁴⁹ So where can we address the sacred in our modern, largely secular curriculum? The answer to this question is not easy from a curricular planning standpoint. Each program has a unique set of demographics, history, and operational settings that will affect the location of where the sacred will best fit into curriculum.

As one of the co-founders of a new professional degree program in architecture that has attempted to integrate the sacred into curricular planning, I provide a brief overview of the humble beginnings and cultural context of the program that have allowed this to take place. Likewise, I explore several areas across the curriculum "where" the sacred has been incorporated into this new architecture program ranging from history and theory courses to design studios.

The Cultural Context of Utah's New Architecture Program

Understanding the geographical, socio-economic, cultural, pedagogical, and religio-historical context where Utah

Valley University's (UVU) new academic program in architecture resides is important for a number of reasons. But it is especially important as educators consider their own unique situations and how they will enable the sacred to be a topic of conversation across the curriculum.

Geographically the state of Utah is centrally located in the Intermountain West and Great Basin region of the United States. While it is one of the nation's youngest states, Utah leads as the fastest growing state in America with a population increase of 18.4 percent from 2010 to 2020.50 As a result, Utah is experiencing an exponential increase in residential and commercial construction projects around the state. The need for designers and architects is at an all-time high within the industry. With only one accredited architecture program in the state and considering the industry market demands from the recent socio-economic growth, the creation of a second architecture program at the largest public institution in the state made sense to the Utah Board of Higher Education and UVU's Board of Trustees. Noting that the program began in the fall of 2019, it is one of the newest academic offerings at the university resulting in a terminal professional degree. From its humble beginnings in a single classroom of twenty students and three architecture faculty members, the program has seen incredible growth in a short period of time. The popularity of the program has increased the declared architecture majors to over two hundred students in a few years. Such growth has allowed the program to expand its footprint to five studio classrooms, a wood shop, print and maker space, resource center accommodating a book donation of 5,000 volumes from the architect Allan Greenberg, a summer study abroad offering to Greece and Italy, six fulltime architecture faculty, and a growing body of adjunct instructors.

Second, UVU's pedagogical model is unique from a higher education perspective. The university is "one of a few in the nation offering a dual-mission model that combines the rigor and richness of a first-rate teaching university with the openness and vocational programs of a community college." As an open enrollment university, UVU is making postsecondary educational opportunities more accessible and equitably distributed to a broader student body. It is an inclusive and culturally diverse institution with over 77 countries represented in the student body. A third of the student population is first generation and/or nontraditional students (25+ years old) with another seventeen percent who support at least one child.⁵¹ This unique educational model and cultural setting provides an accessible and affordable learning environment for architecture career preparation.

While UVU's Bachelor of Architecture (B.Arch) is designed as a five-year professional degree, it is not an uncommon degree amongst pragmatic undergraduate programs in the United States. What makes it unique is its approach to architectural pedagogy that follows a Beaux-Arts system rooted in classical and traditional design. The program promotes a built environment that bolsters genuine communities through architecture that is durable, useful, beautiful, and human-scaled. Such a comprehensive vision must seek to balance the art of building with aesthetic sensibilities, historical precedents with contemporary needs, cultural diversity with authentic place making, craftsmanship with digital technologies, and theory with practice-based application. The goal of these efforts is to produce "master builder" practice-ready graduates who create a lasting and beautiful world by transforming chaos into cosmos. Such a focus on inspiring the human spirit by promoting holistic health and well-being allows for nuanced explorations of the sacred.

Lastly and most importantly for our topic, the religio-historical context and demographic makeup of the student body at UVU provides interesting opportunities for discussion of the sacred. Some of Utah's earliest settlers before statehood were American members of The Church of Jesus Christ of Latter-day Saints who literally fled the country in response to religious persecution, intolerance, and marginalization. The great diaspora of this faith tradition into the Great Basin wilderness created a unique historical period of retrenchment and isolation. The settlement patterns of early town planning and architectural development in the area during this time were tied to the ideology that people were establishing a sacred gathering place for the Church's headquarters called Zion. Construction was, therefore, akin to building up the Kingdom of God.⁵² While an "intensely American story," writes historian Peter Williams, the Church's expanding footprint is "intimately associated with the molding of a physical environment."53

This dominant religious ideology continues to affect Utah's architectural discipline in a number of ways but especially in supplying local architects with ecclesiastical design projects. As a case in point, the Church was building more cumulative square footage than Wal-Mart in 2009.⁵⁴ In some regards, the sacred aura associated with Salt Lake City and the state of Utah for Latter-day Saints is akin to the Vatican for Roman Catholics or Mecca for Muslims. Likewise, the official Church sponsored private school, Brigham Young University, is only a couple miles away from UVU's campus.

Although UVU is the largest public institution in the state, it bolsters a significantly large population of Latter-day Saints (72% in 2018).⁵⁵ For local adherents of the dominant religion, discussion of the sacred is often an integral part of daily life and culture. This is in part because many students have ecclesiastical service responsibilities while going to school and/or they rendered humanitarian and proselytizing missionary service for several years prior to commencing college. The remainder of UVU's student population includes either other religious traditions (10%) or no religious affiliation (17%).⁵⁶ Compared to the 2016 American college freshmen survey data from the Cooperative Institutional Research Program (CIRP) at UCLA, 31 percent of college students have no religious affiliation. UVU's student population having no religious affiliation is much closer to the national averages of religious colleges (17%) than to secular universities (36%) and four-year colleges (26%).⁵⁷ This unique cultural context enables more frequent discussions of the sacred in both the architectural discipline and a public university setting than one would expect.

Where Does the Sacred Belong in the Curriculum?

As the program at UVU matures from its modest beginnings, its curriculum will continue to evolve and develop especially in regards to the sacred. With my role as one of the cofounders of the program, I have played an instrumental part in developing new curricula for nearly half of the core coursework. Reflecting on these experiences in curricular development, it is my hope that other educators may gain insights as they contemplate "where" the sacred can fit within architectural education at their institutions.

First and foremost, any discussion of the sacred will typically find a nice home in a course on the global history of architecture. Students gain a greater appreciation for the diverse religio-cultural settings throughout the world found in sacred spaces such as monuments, shrines, temples, mosques, churches, cathedrals, caves, cities, tombs, etc. These types of historical precedents provide opportunities to discuss key terminology related to the sacred, such as myth, ritual, ideals, beliefs, gradations of holiness, symbols, meaning, archetypes, axis mundi, and imago mundi among others. Each student's understanding of the role of the sacred and the richness of history is deepened as they realize that architecture and urban development are the result of complex interrelationships dealing with aesthetic, cultural, contextual, symbolic, religious, social, economic, political, technological, behavioral, and ecological issues.

A second (possibly less obvious) candidate and place for addressing the sacred in the curriculum is to be found in architectural theory. In one theory course, students survey several key architectural writings from the past two millennia to identify the interrelationship and tension between theory and practice. While we focus on key figures, movements, and texts, we also review tangential concepts relating to the sacred. Critical discussions and readings revolve around the following topics: pedagogy in architectural education; *venustas* – beauty, judgment, proportion, the body; *firmitas* – tectonics, structure, materials, craft; *utilitas* – form, function, use, typology; the art of making – composition, order, imitation, invention, complexity, simplicity; place making – context, environment, newness, tradition; ethics – authenticity, deception; time – memory, *zeitgeist*.

Examples of fruitful debate topics can range from Adolf Loos' moral argument that "ornament is a crime" to John Ruskin's "lamp of truth" against mass-produced machine work. Likewise, discussions of Aristotle and Alberti's definitions of beauty or Juhani Pallasmaa's arguments for an authentic, existential experience of architecture tied to the spiritual realm are all excellent themes that can help introduce students to the sacred. Students also pursue an independent research project that enables them to explore theory in a different capacity. **Fig. 2**

A third (less common) opportunity to address the sacred falls into courses dealing with environmental psychology, behavioral science, neuroaesthetics, sociology, and anthropology. I teach an upper division course titled "Culture and Behavior in Architecture" that focuses on both the effect of the built environment on human beings and how our cultural worldviews affect architecture. My students examine the aesthetic experience of architecture from a cognitive, behavioral, and emotional viewpoint and how that compares to the Eastern philosophical triad of mind, body, spirit. The course surveys interdisciplinary concepts to understand how the built environment can impact human health and promote healing and holistic well-being. An entire module of this course is also dedicated to spirituality in architecture where concepts such as neurotheology, meditation, transcendence, myth, ritual, and phenomenology are explored in some depth.

The fourth and final area in the curriculum where the study of the sacred has been integrated into the program is found in design related courses and studios. In our first-year intro to design course, students begin with lessons on sacred geometry, order, number, and proportion found in nature and the cosmos. Using a ruler and compass, they learn how to construct these geometries and apply them to the analysis of natural and human made forms. **Fig. 3** The culmination of the class ends in a small design problem where they design a small pavilion-like monument dedicated to the family which is in a public park next to a religious building. Many of the students explore symbolism, religious iconography, and archetypal geometry that hearken back to the sacred context.

Although it may appear a less common exercise for an architectural history course, I assign a small design problem that deals with the sacred. Each student is tasked with creating a design solution for the unfinished façade of the Basilica of San Lorenzo in Florence, Italy. Any proposal for the new façade must be designed using the classical canons and under the tutelage of a master architect from the Renaissance period. The design challenge is to solve the contradiction between the new Renaissance revival façade and the older Romanesque basilica structure with its high central nave and low side aisles. Students are encouraged to take note of the Corinthian order and $\sqrt{2}$ proportioning systems used by Filippo Brunelleschi on the basilica's interior. In the end, each proposal must keep intact the location and size of the existing entry doors. This curricular exercise enables the student to not only learn how to apply lessons of Renaissance history directly to a design problem, but it also helps them think critically about some of the nuances and shifting priorities that arise when designing publicly viewed aspects of the sacred, such as church facades.

In third-year design studios, I have tasked students with designing several projects that subtly address the sacred. The first is a visitor center for the Beit Lehi archeological site in Israel. Since the multicultural and interreligious history of the site possesses Idumean, Jewish, Byzantine Christian, and Muslim ruins, students engage with issues surrounding contested religious sites and artifacts. The second project dealing with the sacred is the design of a museum of antiquities in a northwest American city. Students are tasked with creating a place for the display



and interpretation of history that has occurred within the past 600 years. The collection includes rare books, documents, artwork, and artifacts from early American and European history, classics literature, pop culture and movie props, and religious history. As students contemplate curatorial strategies for items, such as early Bibles and religious documents, they must determine how to display the sacred artifacts and antiquities. Does the object take the foreground as part of a narrative sequence? Or does the architecture set the stage with thematic backdrops that enhance the original context of the object? From a pedagogical standpoint, these projects have been successful at testing the design sensibilities of students. Both projects require students to balance the shifting design priorities that arise when considering client-user needs, site planning, architectural programming, religio-cultural ideals, and contextual issues. Fig. 4

Lastly in one of our comprehensive fourth year design studios, my students take on the sacred directly by designing a place of worship for one of the Abrahamic religions (Judaism, Christianity, or Islam). This requires each student to familiarize themselves with not only the unique client-user needs for the faith tradition they select, but they must also come to understand the religion's major tenets, doctrines, rituals, ceremonies, values, beliefs, ideals, building typologies, and architectural history. In the next section, this particular project will be discussed in more depth. I specifically outline some of the strategies employed to assist students in assessing the complexities of ritual, symbolism, and meaning as well as how to design a project aimed at creating opportunities for transformative ritual-architectural events. Suffice it to say that the Abrahamic sacred space project has been one of the more successful design problems to date that directly addresses the sacred. **Fig. 5**

RESTORING THE SACRED: HOW DO WE TEACH IT THROUGHOUT THE CURRICULUM?

After we have contemplated bringing the unavoidable theme of the sacred back into the curriculum and where it should go, we begin to ask the tough question of how to implement it. For this section of the paper, I draw heavily upon the "morphology of ritual-architectural priorities" outlined in *The Hermeneutics of Sacred Architecture* by Lindsay Jones. This framework has a pedagogical intent which assists students to not only track "the inter-relations between built forms, ritual processes, and human experiences," but also provides them with "points of departure for endlessly diversified avenues of interpreting (and making) architecture."⁵⁸ I draw from my own experience as a student using this interpretive framework in both my undergraduate and graduate studies as well as utilizing it as a sort of field manual as an architect during the "ritual-architectural design process" for several



contemporary religious structures. Moving from my own practical application, I explain how this comparative framework has been successfully used in my coursework as an educator to help students engage in hermeneutical calisthenics. Several curricular exercises dealing with the sacred in architectural history and design will be explored in some detail.

4

Interpreting, Comparing, and Writing about Sacred Architecture

Lindsay Jones' morphological framework has been particularly helpful in a global history of architecture course when teaching students how to interpret, compare, and write about sacred architecture. To help my undergraduate students begin to understand the process of hermeneutical questioning and interrogation, I assign two short research papers each utilizing a different form of comparison.⁵⁹

The first paper involves synchronic comparison and analysis between two works of similar size, such as two buildings, two cases of landscape architecture, or two cities. "As a strict rule," following Jones' example, "the two cases should be *specific* buildings or sites, not general types or classes of buildings."⁶⁰ I also ask students to carefully make their selections by verifying that both examples are different from one another in at least two of the following categories: time period; geographic region; religion/culture/political system. Similar to Jones, I recommend that students select case studies that "bear no obvious connection either in terms of outward appearance or cultural orientations of their respective builders."61 The rationale behind such a requirement is to create more "productive juxtapositions between historically unrelated, far-spaced cases."62 Each student is challenged to engage in critical analysis and historical research that compares similarities and differences between the two cases. The analytical focus of the paper can involve any combination of the following categories: structure, construction technology, materials, history, culture, religion, ritual, symbolism, form, and function. Often students have selected religious structures to compare along with analytical categories dealing with the sacred. I have to agree with Jones that "one of the most exciting results is the way in which architectures that bear no obvious resemblances in appearance, geography or religious tradition... emerge as both similar and different at the level of ritual-architectural events." This paper also tends to "convert students to the viability and merits of comparison, including the embattled prospect of nonhistorical cross-cultural comparison."63

The second paper involves diachronic comparison which is defined as cataloging "change over time." Students are presented with two options: they can look at a *singular* place, site, or building and how it changed over time; or they

5

Example of student work from the fourth-year design studio focused on Abrahamic sacred architecture. Exterior perspective of a design proposal for a new Islamic mosque in Heber, Utah by Riley Winter.

6a | b

The study of precedent, context, ritual, and symbols is important for integrating a design into a cultural context. Interior elevation (left) and an *analytique rendu* presentation (right) of a design proposal for a new Synagogue in Midway, Utah by Tressa Messenger.

can analyze change for the collective work of a civilization's classes of buildings, cities, or landscapes. For instance, one student may be interested in studying a particular Egyptian temple complex, such as Luxor, to see how it was expanded or added to over time. Another student may choose to look at how the traditional Chinese city developed and evolved over time. Perhaps a different student wants to look at how the design of Hindu temples evolved over time. This second paper diverges from the first by allowing students to look at architecture and sites more broadly over time. Students are also given the opportunity to continue their research from one of the case studies from the previous paper if so desired.

The paper must incorporate critical diachronic analysis and historical research that documents changes in architectural developments over time. In other words, this type of comparison can "chart changes in emphasis and priority over the historical life... of an enduring architectural work or configuration" with a special emphasis on the "shifting alignments in (types of) ritual-architectural priorities."⁶⁴ Similar to the previous paper, it may focus the analysis on any combination of the original categories from the first paper. It has been my experience that students tend to select buildings that are religious in nature for both papers. By following these procedures and using Jones' morphological framework for sacred architecture, students are able to quickly establish a "foundation for analyses and architectural historiographies that are both rigorously, particularistically historical and highly critical."⁶⁵

As a pedagogical writing exercise (often tied to the theme of the sacred), the productivity of such efforts "ought to be assessed in relation to their success in spurring and facilitating creative, critical, rigorously empirical, hermeneutical interpretations of historical architectures."⁶⁶ When my students have been polled at the end of the semester via course evaluation surveys, a majority of students report that both papers significantly contributed to their overall learning experience. While students equally enjoy both papers, several students prefer the diachronic paper over the synchronic one. This has been my experience now in both a private religious school as well as a public university.

Studying the Phenomenological Experience of Sacred Architecture

The phenomenological experience of sacred architecture can be a difficult area to address in pedagogy because of its deep ties to the spirit of a place. "Tradition is an astounding sedimentation of images and experiences," explains Juhani Pallasmaa, "and it cannot be invented; it can only be lived." As a result, he continues, tradition "constitutes an endless excavation of layered, internalized



and shared myths, memories, images and experiences. Tradition is the site of the archaeology of emotions."⁶⁷ Firsthand experience of sacred places in-situ is always preferred over the "distanced" study of drawings, photos, and written experiences of others because of the embodied content of architectural meaning and experience. **Fig. 6**

When a visit to the actual site of a precedent is not possible, however, I encourage my students to use Jones' morphology of ritual-architectural priorities to guide them in their analysis and interpretation of the experiential and phenomenological qualities of the place. The pedagogical spirit of such an exercise is to help "inform the way in which various religious built forms are designed, constructed, and, most importantly, experienced."⁶⁸

Students undertake this assignment in the fourth-year design studio in preparation for their design of a religious building. Thus far the exercise has been fruitful as a "catalyst to critical and creative interpretations of specific instances of sacred architecture," as Jones suggests, since "empirical observation is vastly superior to imagination."⁶⁹ Precedent based design also tends to result in stronger spiritual connections to our ancestral past than designing in a vacuum aimed at avoiding historical references. A precedent-based design process "has always been essential for the vitality of architecture," explains Thomas Gordon Smith, since there is a "prospect of making spiritual

bonds between ourselves and historical architects."⁷⁰ According to Pallasmaa, "An artistic image which does not derive from this mental soil [of tradition] is doomed to remain a mere rootless fabrication, a quotation from the encyclopedia of formal inventions, and destined to wither away without being able to refertilise the soil and continuum of a renewed tradition, and thus become itself part of it."⁷¹ As my students have seen the "interrelations between built forms, ritual processes, and human experiences that might otherwise have escaped their attention," they are provided with "points of departure for endlessly diversified avenues of interpreting (and making) architecture."⁷²

In order to help students understand the complex nature of religious building typologies, each student performs an extensive form of precedent analysis for a sacred space within the religious tradition of their choice. The in-depth graphical study of a single religious building is performed to identify its unique signature and morphology of ritualarchitectural priorities. While Jones' framework offers a total of eleven classificatory priorities with thirty-three subpriorities to guide the hermeneutical inquiry,⁷³ I typically have students focus on only the three main categories for ritual contexts: theatre; contemplation; sanctuary. Studying these ritual contexts helps them understand how ritual-architectural events are typically presented. Each type of ritual context has a level of allurement that either



encourages participation or restricts access. The level of meaning and messages for each ritual context can be either indirect as a backdrop or direct as an object of devotion.

In order to guide students through this interpretive process they follow a specific methodology. To avoid repeating the more detailed procedures and rationale behind converting Jones' morphological categories into a quantitative tool, I refer readers to see these arguments in an earlier publication.⁷⁴ What follows is a simplified, brief explanation of the student assignment and how it enables students to address the sacred.

The first step of each student's precedent analysis begins by transforming Jones' ritual context categories into a set of eight questions. They begin by simply asking a "yes or no" question about their building. A couple of example questions aimed at determining the theatrical allurement of a precedent might include: Does the design invite or encourage people to participate in the events? Does the design promote inclusivity? If the answer is "yes," then the student proceeds forward with further interrogation. They must ask: "how and to what extent is that (type of) priority relevant" on the macro and micro scale? As they turn their attention to look more closely, they begin to understand how the allurement of the project on an urban scale differs from say the internal spatial qualities or ornamental details. After the student's second round of interrogation for each macro and micro category, students perform graphical analysis in a diagrammatic fashion to illustrate their findings and interpretation. Once all their diagrams are completed, they assemble the information into a large format graphic matrix on a printed presentation board. **Fig. 7** Similar to Jones, I have students "assign numbers to each of the...priorities as a means of suggesting a relative order from most important to least important."⁷⁵ The students then present their findings to the class. Taking students through this hermeneutical process of questioning has been successful from a sacred pedagogical standpoint by broadening their understanding of how "built forms, ritual processes, and human experiences" are interconnected.⁷⁶

Designing for the Sacred and Ritual-Architectural Events

Can a person somehow choreograph or design for an extraordinary experience in architecture? Some scholars seem to believe that this is a possibility. According to Jones, a "ritual-architectural event" occurs when built forms, ritual occasions, and participants come together in just the right way to produce a transformative human experience.⁷⁷ The change that occurs in human





understanding from architectural encounters can range from "metaphysical, sociopolitical, psychological, religious, or pedagogical."⁷⁸ Those who have experienced these types of "ritual-architectural events" sometimes describe them as numinous, ineffable, and immeasurable. In light of the things involved with a "ritual-architectural event," there are several key players involved. Designers become spatial choreographers, religious specialists serve as ritual choreographers, and participants become actors and audiences. **Fig. 8** Anyone approaching the design of sacred spaces should remember these concepts.

As educators contemplate pedagogical methods of teaching the sacred in a design studio setting, one important element should remain in their minds. Each student and teacher must remember the "always-considerable dissonance between initial design intentions and the diversity of concatenate apprehensions and receptions of those designs."⁷⁹ A design should aim to transcend its own time and culture since the initial design intentions will likely be forgotten and escape future generations who use a sacred space. "Authentic architecture is not the incarnation of the spirit of the age but of the spirit, full stop," explains Léon Krier. "To become mythical, to transmit a perennial message and value," he continues, "our work has to transcend the particularities of its age of creation." For Krier, the quality of the project must go beyond our own age by "using ideas, techniques and materials that will best resist the ravages of time, accidents and changes in taste."⁸⁰ According to Thomas Gordon Smith, we begin this process by turning "our backs on the modernist mentality of alienation...that reduces everything to abstraction." Then, we set "a goal of restoring a sense of spirit to architecture."⁸¹

To be successful in restoring a sense of spirit to architecture that transcends time and reveals the sacred realm, the student must avoid arrogance by developing essential attributes such as humility, compassion, love, and empathy.⁸² These traits contradict the popular pedagogical philosophies of most contemporary schools of architecture. Students are taught to seek certainty and self-assurance by producing an architecture of self-expression instead of surrendering the ego in an act of humility. Since these spiritual traits are typically not taught in our schools of architecture, the education and development of the "whole" architect as a steward of the sacred human spirit is of critical importance.

As my students are deeply engaged in the "ritualarchitectural design process," they consider how to create a sacred environment that is timeless, beautiful, and



transcendent. Based on the findings of their research from analyzing a precedent from a phenomenological experiential perspective, we continue to ask two questions: What "ritual-architectural priorities" are most appropriate for their project?; What type of "ritual-architectural events" are they attempting to create? We follow a process of hermeneutical interrogation throughout the design process by asking several additional questions: Should the student use the theatre priority and directly solicit involvement? Or should their project restrict access as seen in the sanctuary priority to maintain holiness? Should the architecture serve as a direct object of devotion, such as a mandala, in the contemplation priority? Or should it be more of an indirect ambiance or backdrop? These questions are helpful in assisting students with evaluating their design intentions aimed at certain types of "ritualarchitectural events." Fig. 9

Evaluating Design Intentions and Hermeneutical Reflection

After students have experienced the ritual-architectural design process firsthand and completed their design proposals, I have them engage in a synthesis phase of hermeneutical self-reflection and evaluation. In an effort

to evaluate the success of their own project, each student produces an in-depth graphical study to identify its unique morphology of ritual-architectural priorities similar to the precedent analysis performed in the pre-design phase. The format of the final matrix presentation board and the analysis procedures are the same as before with the results being presented to their peers in class. Fig. 10 In order to create a ritual-architectural priority matrix for their own design proposal, however, students will need to attempt to distance themselves from the project for a brief moment. Each student must visualize themselves inside their own projects experiencing it for the first time as a new visitor to the site. This "distancing" will help them critically assess the design priorities for their project. Such a use of the imagination, however, is really an act of love, compassion, and empathy for the building user.

Engaging in hermeneutics helps students and educators alike to better understand themselves. Similar to arguments by Heidegger, Gadamer, and Ricoeur, the process of interpretation can affect our ontological way of being because it eventually circles back to the interpreter.⁸³ As a result, the fourth-year design studio project is unique by requiring each student to investigate phenomenological (experiential) qualities of sacred architecture. This includes



the choreography of mystical qualities of light, theatrical presentations of ceremonies, acoustic atmospheres for sacred music and the spoken word, private contemplative rituals, materiality and symbolic iconography, as well as the spatial sequence for myths and religious narratives among other things.

As students turn the light inwards to reflect upon their own experience with the project, a contemporary spiritual practice in architecture suggested by Julio Bermudez,84 they are encouraged to use several questions to guide their own self-reflections. What have you learned about choreographing profound and meaningful ritualarchitectural events and experiences? How did this sacred architecture project affect your own spiritual convictions, faith, beliefs, understanding, worldview, etc.? If you chose a religious tradition other than your own, how has this experience affected your perspective or appreciation of that faith? If you choose your own religious tradition, on the other hand, how has this experience affected your perspective or appreciation of your own faith? What did you learn about yourself this semester? The pedagogical merits of using the framework for both design and research projects have proven effective based on student evaluations and their own hermeneutical self reflections.

CONCLUSION

Should Schools of Architecture teach the Sacred (and Profane)?

The beginning of a new century has revealed the critical need for architectural education to open up the doors for the sacred to be discussed and taught. Any hope for a beautiful world that uplifts the human spirit and nourishes cognitive, behavioral, and emotional health must begin with a (re)orientation on sacred pedagogy. "If one accepts the notion that any teaching of architecture presupposes a certain set of beliefs and that such beliefs more often than not find their manifestation in the works produced by its graduates," writes Klaus Herdeg, "then the way architecture is taught becomes quite important."85 Teaching the sacred ultimately implies a belief in an absolute reality that transcends this world. The transcendental realm is beyond the profane ordinary sphere of existence, since it deals with the eternal, eternity, and the divine. "For many talented agnostic architects, the goal may be an architecture of absence rather than transcendence," explains Duncan Stroik. "This is because the concept of transcendence in architecture implies belief in an invisible reality that is not materially quantifiable."86 Whether schools of architecture teach the sacred may actually depend in large part on what



comprises their collective and individual sets of belief.

Experiencing the Sacred as a Student and Architect

My own experience of the sacred began early in my youth when visiting religious structures of different faith traditions. The depth of my understanding increased exponentially during my architectural education, however, once I encountered Lindsay Jones' important two-volume series The Hermeneutics of Sacred Architecture. I always appreciated the openness of Jones' work, especially his invitation to "students of architecture and religion... to work, construct, and experiment in whatever ways suit their own purposes."87 I took that advice to heart beginning with my undergraduate studies in architecture while designing a conceptual religious building for my senior capstone project. Later during my graduate studies under Julio Bermudez at the Catholic University of America, I continued to experiment and test Jones' work on yet another level. This time it was to better understand "ritual-architectural events" through survey research. In my conversations with Jones during those formative years, he always reassured me that approaching his work from the architect's perspective would eventually have its advantages in practice since my ultimate desire was to design "real" sacred spaces.

Once I entered professional practice, I began yet another

journey with Jones' work as an architect. This time, however, I was engaging in what he termed the "ritual-architectural design process." Just as he promised to me early on, the working knowledge of his framework gained during my education would prove to be very helpful in professional practice. It helped in "reconciling competing priorities of the most omnifarious, often discordant sort," to use his words. Often this would include resolving the conflict between the "need to give ritual-architectural expression to rarified theological doctrines" and the "more prosaic concerns of engineering stresses and loads."⁸⁸ An understanding of Jones' framework also aided in dialing in the initial design intentions of my projects but while keeping in mind that the diversity of apprehensions might eventually facilitate different types of "ritual-architectural events."

Teaching the Sacred to a New Generation

Now that I have entered a new chapter of my life in the realm of academia, I continue to find Jones' work inspiring and beneficial from a pedagogical standpoint. From teaching students how to engage in "hermeneutical questioning" to seeing the "interrelations between built forms, ritual processes, and human experiences,"⁸⁹ Jones' work continues to live on and inspire a new generation of students.

As we conclude this article, both the practical and operational



10

experiences of teaching and developing curricula with sacred pedagogy in mind have been explored. We have reviewed "where" the academy might attempt to deal with the topic of the sacred in curriculum. Likewise, we have explored "how" to integrate the sacred into the training of contemporary architects. While I have relied heavily upon the "morphology of ritual-architectural priorities" of Lindsay Jones, the various curricular exercises have proven successful in assisting students to use hermeneutical questioning and reflection on their own work and the work of others. The process of helping students cultivate their empathic imagination, increase their compassion for the building user, and nourish their love for humanity is both humbling and rewarding.

Based on my experience as the co-founder of a new architecture program, I argue that sacred pedagogy can be an effective tool to test both design sensibilities and critical inquiry. Most importantly, however, it can help the next generation of designers "defend the authenticity and autonomy of human experience, and to reveal the existence of the transcendental realm, the domain of the sacred."90 Restoring existential meaning to architecture via the sacred is a critical and ethical task that can help assure the longevity of the profession. To paraphrase Karsten Harries from earlier, the sacred and architecture both need each other if they do not want to wither.⁹¹

7

Example of a precedent analysis assignment for the predesign phase of a fourth-year studio. Ritual-architectural priority matrix for the Basilica of the National Shrine of the Immaculate Conception by Taylor Mumford

8

Diagram illustrating the key players and components involved in a "ritual-architectural event." Image by author.

9

Appreciation for interreligious dialogue and diversity can be seen in the student design proposals for a Latter-day Saint temple (left), Islamic mosque (middle), Catholic abbey (topright),

and a Jewish synagogue (bottom-right). Fourth-year design studio work by Hunter Huffman (left), Derek Stevens (middle), ZachHaws (top-right), and Ian Hargrave(bottom-right).

10

Hermeneutical self-reflection and each design project's unique

experience is illustrated in ritual-architectural priority matrices. Student work by Tressa Messenger.

¹ Alberto Pérez-Gómez, *Built Upon Love: Architectural Longing after Ethics and Aesthetics* (Boston: MIT Press, 2006), 4.

 $^{\rm 2}$ Mircea Eliade, The Sacred and the Profane; the Nature of Religion (New York: Harcourt, 1987), 14.

³ Eliade, The Sacred and the Profane, 20–1.

⁴ Eliade, The Sacred and the Profane, 25–6.

⁵ Eliade, The Sacred and the Profane, 20.

⁶Eliade, The Sacred and the Profane, 26.

⁷ Eliade, The Sacred and the Profane, 202.

⁸ Eliade, *The Sacred and the Profane*, 21–2.

⁹ Alberto Pérez-Gómez, Attunement: Architectural Meaning after the Crisis of Modern Science (Cambridge: MIT Press, 2016), 119.

¹⁰ Eliade, The Sacred and the Profane, 23.

¹¹ Eliade, *The Sacred and the Profane*, 24.

¹² Eliade, The Sacred and the Profane, 202–03.

¹³ Eliade, The Sacred and the Profane, 51.

¹⁴ Eliade, "The Yearning for Paradise in Primitive Tradition," *Daedalus* 88, no. 2 (1959): 212–13; Eliade, *The Sacred and the Profane*, 213.

¹⁵ Eliade, The Sacred and the Profane, 17.

¹⁶ Karsten Harries, "On the Need for Sacred Architecture: 12 Observations," Design Philosophy Papers 8, no. 1 (2010): 7.

¹⁷ Alberto Pérez-Gómez, Architecture and the Crisis of Modern Science (Cambridge: MIT Press, 1983), 10–2.

¹⁸ Pérez-Gómez, Architecture and the Crisis of Modern Science, 4.

¹⁹ Pérez-Gómez, Architecture and the Crisis of Modern Science, 3.

²⁰ Pérez-Gómez, Architecture and the Crisis of Modern Science, 4.

²¹ Richard Chafee, "The Teaching of Architecture at the Ecole Des Beaux-Arts," in *The Architecture of the Ecole Des Beaux-Arts*, edited by Arthur Drexler (New York: Museum of Modern Art, 1977), 61–3; Pérez-Gómez, *Architecture and the Crisis of Modern Science*, 197.

²² Pérez-Gómez, Architecture and the Crisis of Modern Science, 198–99.

²³ Jürgen Habermas, The Philosophical Discourse of Modernity (Cambridge: Polity Press, 1990), 6–7.

²⁴ John F. Harbeson, The Study of Architectural Design: With Special Reference to the Program of the Beaux-Arts Institute of Design (New York: W.W. Norton, 2008), xvi.

²⁵ Nir Haim Buras, The Art of Classic Planning: Building Beautiful and Enduring Communities (Cambridge: Harvard University Press, 2020), 8.

²⁶ Klaus Herdeg, The Decorated Diagram: Harvard Architecture and the Failure of the Bauhaus Legacy (Cambridge, MA: MIT Press, 1983), 84.

²⁷ See, for instance, the historical pedagogical transitions that occurred at other East coast schools of architecture in response to Harvard's adoption of the Bauhaus educational model in Robert A. M. Stern and Jimmy Stamp, *Pedagogy and Place: 100 Years of Architecture Education at Yale* (New Haven: Yale University Press, 2016); Richard Oliver, ed., *The Making of an Architect, 1881-1981: Columbia University in the City of New York* (New York: Rizzoli,1981).

²⁸ Thomas Gordon Smith, *Classical Architecture: Rule and Invention* (Layton, UT: Gibbs M. Smith, 1988), 1.

²⁹ Demetri Porphyrios, "Classicism Is Not a Style," Architectural Design 52, no. 5/6 (1982).

³⁰ Nikos A. Salingaros, Unified Architectural Theory: Form, Language, Complexity (Portland: Sustasis Foundation, 2013), 80.

³¹ James Stevens Curl, *Making Dystopia: The Strange Rise and Survival of Architectural Barbarism* (New York: Oxford University Press, 2018), 361–62.

³² Eliade, The Sacred and the Profane, 50–3.

³³ Eliade, The Sacred and the Profane, 203.

³⁴ Juhani Pallasmaa, "Light, Silence, and Spirituality in Architecture and Art," in *Transcending Architecture: Contemporary Views on Sacred Space*, edited by Julio Bermudez (Washington, DC: Catholic University of America Press, 2015), 32.

³⁵ Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (Hoboken, NJ: John Wiley & Sons, 2005), 13.

³⁶ Harries, "On the Need for Sacred Architecture," 7.

³⁷ Eliade, The Sacred and the Profane, 51.

³⁸ Karsten Harries, "Transcending Aesthetics," in *Transcending Architecture: Contemporary Views of Sacred Space*, edited by Julio Bermudez (Washington, DC: Catholic University of America Press, 2015), 222.

³⁹ Eliade, The Sacred and the Profane, 5.

⁴⁰ Pérez-Gómez, Architecture and the Crisis of Modern Science, 10–2.

⁴¹ Pérez-Gómez, Architecture and the Crisis of Modern Science, 328–29, see note no. 16.

⁴² Juhani Pallasmaa, The Embodied Image: Imagination and Imagery in Architecture

(Chichester, United Kingdom: John Wiley & Sons, 2011), 23.

- ⁴³ Salingaros, Unified Architectural Theory, 80.
- 44 Salingaros, Unified Architectural Theory, 79.
- ⁴⁵ Salingaros, Unified Architectural Theory, 80.
- ⁴⁶ Salingaros, Unified Architectural Theory, 79.
- ⁴⁷ Curl, Making Dystopia, 373.

⁴⁸ A. T. Mann, Sacred Architecture, The Sacred Arts (Shaftesbury, Dorset, England: Element, 1993), 7.

⁴⁹ "Faith, Culture and Architecture," in *Faith and the Built Environment: Architecture and Behaviour in Islamic Cultures*, edited by Suha Özkan, vol. 11, Architecture and Comportement / Architecture and Behaviour (Switzerland: Comportement, 1996), 6.

⁵⁰ Matt Canham and Tony Semerad, "New Census Numbers Are Staggering. We Know Utah Is Growing. See by How Much and Where," *The Salt Lake Tribune*, 12 August 2021, https://www.sltrib.com/news/2021/08/12/new-census-numbers-are/.

⁵¹ "About Utah Valley University," Utah Valley University, Accessed 12 April 2022, https://www.uvu.edu/about/.

⁵² Brandon R. Ro, "Temples as Text: The Swinging Pendulum of Ritual-Architectural Priorities" (paper presented at the 2019 Mormon History Association Conference – Isolation and Integration, Salt Lake City, UT, June 6–9, 2019).

⁵³ Peter W. Williams, Houses of God: Region, Religion, and Architecture in the United States, Public Expressions of Religion in America (Urbana: University of Illinois Press, 1997), 216.

⁵⁴ H. David Burton, "These Are the Times" (Provo: Brigham Young University Devotional, December 1, 2009).

⁵⁵ "Student Demographics – Fall 2018," Utah Valley University – Institutional Research (2018), Accessed 11 April 2022, https://www.uvu.edu/ir/docs/executive_ briefings/annual_updates/2018_fall_student_demographics.pdf

⁵⁶ This is a combined average that is broken down as follows: no religious affiliation (8%), agnostic (5%), and atheist (4%). "Student Demographics – Fall 2018."

⁵⁷ Allen Downey, "College Freshmen Are Less Religious Than Ever," *Scientific American*, 25 May 2017, https://blogs.scientificamerican.com/observations/ college-freshmen-are-less-religious-than-ever/#.

⁵⁸ Lindsay Jones, The Hermeneutics of Sacred Architecture: Experience, Interpretation, Comparison, 2 vols., Religions of the World (Cambridge, MA: Harvard University Press, 2000), 2:295.

⁵⁹ In a similar manner, Jones would often have students in his course on religious architecture and ritual complete one of two research paper options. The first was more diachronic and involved comparing the ritual uses and apprehensions of one specific site over time. The second was synchronic in nature by comparing the ritual usages of two works of architecture. See more in Lindsay Jones, "Eventfulness of Architecture: Teaching About Sacred Architecture *Is* Teaching About Ritual," in *Teaching Ritual*, edited by Catherine Bell (New York: Oxford University Press, 2007), 252–55.

- ⁶⁰ Jones, "Eventfulness of Architecture," 255.
- ⁶¹ Jones, The Hermeneutics of Sacred Architecture, 2:17.
- ⁶² Jones, The Hermeneutics of Sacred Architecture, 2:18.
- 63 Jones, "Eventfulness of Architecture," 268.
- ⁶⁴ Jones, The Hermeneutics of Sacred Architecture, 2:21.
- ⁶⁵ Jones, The Hermeneutics of Sacred Architecture, 2:22.
- ⁶⁶ Jones, The Hermeneutics of Sacred Architecture, 2:7.
- ⁶⁷ Pallasmaa, The Embodied Image, 138.
- ⁶⁸ Jones, The Hermeneutics of Sacred Architecture, 2:5.
- ⁶⁹ Jones, The Hermeneutics of Sacred Architecture, 2:XXIII.
- ⁷⁰ Smith, Classical Architecture, 1.
- ⁷¹ Pallasmaa, *The Embodied Image*, 138.
- ⁷² Jones, The Hermeneutics of Sacred Architecture, 2:295.
- ⁷³ Jones, The Hermeneutics of Sacred Architecture, 2:2–3, 295–332.

⁷⁴ Brandon R. Ro, "Blending the Subjective and Objective Realms of Sacred Architecture at the Pantheon: Creating a Comparative Framework for Evaluating Transformative Experiences in Ritual Contexts," *Religions* 13, no. 1 (2022): 8–12, 14–7.

75 Jones, "Eventfulness of Architecture," 269.

- ⁷⁶ Jones, The Hermeneutics of Sacred Architecture, 2:295.
- ⁷⁷ Jones, The Hermeneutics of Sacred Architecture, 2:295; 1:93–99.
- ⁷⁸ Jones, The Hermeneutics of Sacred Architecture, 1:99.
- ⁷⁹ Jones, The Hermeneutics of Sacred Architecture, 2:11.
- ⁸⁰ Léon Krier, Architecture: Choice or Fate (Windsor, Berks, England: Andreas Papadakis, 1998), 71.
- ⁸¹ Smith, Classical Architecture, 1.

⁸² See several arguments for these qualities in Juhani Pallasmaa, *The Thinking Hand: Existential and Embodied Wisdom in Architecture*, Ad Primers (Chichester, U.K.: Wiley, 2009); Pérez-Gómez, Built Upon Love.

⁸³ Jones, The Hermeneutics of Sacred Architecture, 1:101–02.

⁸⁴ Julio Bermudez, "Turning the Light Inward: Applying the 'Know Thyself' Injunction in Architectural School," in *Collected Abstracts of the Eleventh Architecture, Culture, and Spirituality Symposium* (Taliesin West, AZ: ACS Forum, 2019).

⁸⁵ Herdeg, The Decorated Diagram, 98.

⁸⁶ Duncan Stroik, "Transcendence, Where Hast Thou Gone?," in *Transcending Architecture: Contemporary Views of Sacred Space*, edited by Julio Bermudez (Washington, DC: Catholic University of America Press, 2015), 246.

- ⁸⁷ Jones, The Hermeneutics of Sacred Architecture, 2:XV.
- ⁸⁸ Jones, The Hermeneutics of Sacred Architecture, 2:11.
- ⁸⁹ Jones, The Hermeneutics of Sacred Architecture, 2:295.
- 90 Pallasmaa, "Light," 32.

⁹¹ Harries, "On the Need for Sacred Architecture," 7.

BIBLIOGRAFIA

"About Utah Valley University." Utah Valley University. Accessed 12 April 2022. https://www.uvu.edu/about/.

BERMUDEZ, JULIO. "Turning the Light Inward: Applying the 'Know Thyself' Injunction in Architectural School." In *Collected Abstracts of the Eleventh Architecture, Culture, and Spirituality Symposium*, 1–7. Taliesin West, AZ: ACS Forum, 2019.

BURAS, NIR HAIM. *The Art of Classic Planning: Building Beautiful and Enduring Communities*. Cambridge: Harvard University Press, 2020.

BURTON, H. DAVID. "These Are the Times." Provo: Brigham Young University Devotional, December 1, 2009.

CANHAM, MATT, and TONY SEMERAD. "New Census Numbers Are Staggering. We Know Utah Is Growing. See by How Much and Where." *The Salt Lake Tribune*, 12 August 2021. https://www.sltrib.com/news/2021/08/12/new-census-numbers-are/.

CHAFEE, RICHARD. "The Teaching of Architecture at the Ecole Des Beaux-Arts." In *The Architecture of the Ecole Des Beaux-Arts*, edited by Arthur Drexler, 61–109. New York: Museum of Modern Art, 1977.

CURL, JAMES STEVENS. *Making Dystopia: The Strange Rise and Survival of Architectural Barbarism*. New York: Oxford University Press, 2018.

DOWNEY, ALLEN. "College Freshmen Are Less Religious Than Ever." *Scientific American*, 25 May 2017. https://blogs. scientificamerican.com/observations/college-freshmen-are-lessreligious-than-ever/#.

ELIADE, MIRCEA. The Sacred and the Profane; the Nature of Religion. New York: Harcourt, 1987.

ÖZKAN, SUHA, ed. Faith and the Built Environment: Architecture and Behaviour in Islamic Cultures. Vol. 11, Architecture and Comportement / Architecture and Behaviour. Switzerland: Comportement, 1996.

HABERMAS, JÜRGEN. *The Philosophical Discourse of Modernity*. Cambridge: Polity Press, 1990.

HARBESON, JOHN F. The Study of Architectural Design: With Special Reference to the Program of the Beaux-Arts Institute of Design. New York: W.W. Norton, 2008.

HARRIES, KARSTEN. "On the Need for Sacred Architecture: 12 Observations." *Design Philosophy Papers* 8, no. 1 (2010): 7–10.

HARRIES, KARSTEN. "Transcending Aesthetics." In *Transcending Architecture: Contemporary Views of Sacred Space*, edited by Julio Bermudez, 208–22. Washington, DC: Catholic University of America Press, 2015.

HERDEG, KLAUS. The Decorated Diagram: Harvard Architecture and the Failure of the Bauhaus Legacy. Cambridge, MA: MIT Press, 1983.

JONES, LINDSAY. "Eventfulness of Architecture: Teaching About Sacred Architecture *Is* Teaching About Ritual." In *Teaching Ritual*, edited by Catherine Bell, 251–72. New York: Oxford University Press, 2007.

JONES, LINDSAY. The Hermeneutics of Sacred Architecture: Experience, Interpretation, Comparison. 2 vols, Religions of the World. Cambridge, MA: Harvard University Press, 2000.

KRIER, LÉON. Architecture: Choice or Fate. Windsor, Berks, England: Andreas Papadakis, 1998.

MANN, A. T. Sacred Architecture, The Sacred Arts. Shaftesbury, Dorset, England: Element, 1993.

OLIVER, RICHARD, ed. *The Making of an Architect, 1881-1981: Columbia University in the City of New York.* New York: Rizzoli, 1981.

PALLASMAA, JUHANI. The Embodied Image: Imagination and Imagery in Architecture. Chichester, United Kingdom: John Wiley & Sons, 2011.

PALLASMAA, JUHANI. *The Eyes of the Skin: Architecture and the Senses*. Hoboken, NJ: John Wiley & Sons, 2005.

PALLASMAA, JUHANI. "Light, Silence, and Spirituality in Architecture and Art." In *Transcending Architecture: Contemporary Views on Sacred Space*, edited by Julio Bermudez, 19–32. Washington, DC: Catholic University of America Press, 2015.

PALLASMAA, JUHANI. *The Thinking Hand: Existential and Embodied Wisdom in Architecture*, Ad Primers. Chichester, U.K.: Wiley, 2009.

PÉREZ-GÓMEZ, ALBERTO. Architecture and the Crisis of Modern Science. Cambridge: MIT Press, 1983.

PALLASMAA, JUHANI. Attunement: Architectural Meaning after the Crisis of Modern Science. Cambridge: MIT Press, 2016.

PALLASMAA, JUHANI. Built Upon Love: Architectural Longing after Ethics and Aesthetics. Boston: MIT Press, 2006.

PORPHYRIOS, DEMETRI. "Classicism Is Not a Style." Architectural Design 52, no. 5/6 (1982): 52–6.

Ro, BRANDON R. "Blending the Subjective and Objective Realms of Sacred Architecture at the Pantheon: Creating a Comparative Framework for Evaluating Transformative Experiences in Ritual Contexts." *Religions* 13, no. 1 (2022): 75.

Ro, BRANDON R. "Temples as Text: The Swinging Pendulum of Ritual-Architectural Priorities." Paper presented at the 2019 Mormon History Association Conference – Isolation and Integration, Salt Lake City, UT, June 6-9, 2019.

SALINGAROS, NIKOS A.. Unified Architectural Theory: Form, Language, Complexity. Portland: Sustasis Foundation, 2013.

SMITH, THOMAS GORDON. Classical Architecture: Rule and Invention. Layton, UT: Gibbs M. Smith, 1988.

STERN, ROBERT A. M., and JIMMY STAMP. *Pedagogy and Place:* 100 Years of Architecture Education at Yale. New Haven: Yale University Press, 2016.

STROIK, DUNCAN. "Transcendence, Where Hast Thou Gone?." In *Transcending Architecture: Contemporary Views of Sacred Space*, edited by Julio Bermudez, 239–46. Washington, DC: Catholic University of America Press, 2015.

"Student Demographics – Fall 2018." Utah Valley University – Institutional Research. Accessed 11 April 2022, https://www.uvu. edu/ir/docs/executive_briefings/annual_updates/2018_fall_ student_demographics.pdf

WILLIAMS, PETER W.. Houses of God: Region, Religion, and Architecture in the United States, Public Expressions of Religion in America. Urbana: University of Illinois Press, 1997.

Il sacro e il profano: pensieri per un'educazione e una pedagogia dell'architettura

Brandon R. Ro

KEYWORDS

formazione architettonica; pedagogia; spazio sacro; progettazione architettonica; corsi di progettazione

ABSTRACT

Gli istituti di istruzione superiore hanno preso le distanze dall'insegnamento di tutto ciò che riguarda il sacro nella formazione architettonica. Mentre la formazione del progettista è stata a lungo un punto cruciale per i professionisti fin da Vitruvio, i legami storici dell'architettura con il sacro sono stati dimenticati e ignorati. Tuttavia, molti cominciano a rendersi conto dell'importanza di questo tema per la formazione architettonica contemporanea. Gli architetti hanno il compito etico di difendere l'autenticità dell'esperienza umana e di creare un mondo bello che possa elevare lo spirito umano e nutrire la salute cognitiva, comportamentale ed emotiva. In qualità di cofondatore di un nuovo programma di architettura, l'autore di questo saggio discute le esperienze pratiche e operative dell'insegnamento e dello sviluppo di programmi di studio che tengano conto della pedagogia sacra. L'articolo esamina inoltre "dove" e "come" i curriculum accademici potrebbero tentare di affrontare il tema del sacro nello sviluppo dei programmi di studio. Il successo di gualsiasi intento pedagogico richiederà anni per manifestarsi nelle opere costruite dagli studenti. L'integrazione del sacro nella formazione architettonica è fondamentale per la professione, perché aiuta le future generazioni di progettisti a coltivare la loro immaginazione empatica, ad aumentare la loro compassione per gli utenti degli edifici e a nutrire il loro amore per l'umanità.

Brandon R. Ro

Utah Valley University brandon.ro@uvu.edu

Brandon Ro è ricercatore e co-fondatore di un nuovo corso di laurea professionale in architettura presso la Utah Valley University, dove insegna progettazione architettonica, storia e teoria. Il suo lavoro di architetto e studioso è stato riconosciuto con premi, onorificenze, pubblicazioni, presentazioni e mostre a livello nazionale e internazionale.

Assistant Professor Brandon Ro, AIA, NCARB is co-founder of a new professional degree program in architecture at Utah Valley University, where he teaches architectural design, history, and theory. His work as an architect and scholar has been recognized with awards, honors, publications, presentations, and exhibitions nationally and abroad.