Archetypal Principles – Memorable Places: A Study of the Presence of Higher-Order Design Characteristics at Bonfire Memorial

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INTRODUCTION

This study is part of a work-in-progress that speculates on the possibility that there may be a recurring set of higher-order design characteristics embodied within our most special inventory of place - 'sacred' place. According to Brill, these higher-order design characteristics make sacred place unique and distinct from our everyday ordinary/mundane place, thereby revealing it as sacred.1 When embodied in qualitatively significant and meaningful ways, these characteristics have the potential of contributing tremendously to place-making, such that place becomes extraordinary and memorable.2 In a time dominated by the desacralization of place, the re-discovery of such timeless design principles, which have guided and informed placemaking from time immemorial, is often overlooked orworse, forgotten. Eliade contends that the desacralization of place has made it increasingly difficult for modern societies to rediscover existential dimensions of the sacred that were once immediately recognizable and readily accessible to man of the archaic societies in his everyday places.3 The motivation behind this study therefore, initiates from the need to re-connect with specific design principles that contribute to the making of place that is sacred and memorable.

Place-making, by its very nature, implies a superabundance of reality. It is a significant break in the physical and spatial plane of homogenous mundane space whereby, the special and extraordinary become elevated. Brill likens place-making to the triumph of order over chaos and formlessness.⁴ Similarly, Eliade affirms that place-making in its entirety is founded upon the Cosmogony, i.e., the paradigmatic act of the creation of the Universe.⁵ Further, being patterned around the cosmic model or primordial myth of creation, it is suggested that sacred places might possibly share a common origin.⁶ Place-making therefore, remains a consecrative act – one that seeks to manifest the hierophany or irruption of the sacred in the terrestrial world.⁷

Through time, sacred places have remained special and essential to humans, i.e., among other functions, they have the potential to support healing, help us feel energized and bring about a unique transformation of consciousness.⁸ The unique and memorable experience of sacred place can be equated to an awakening and uplifting – one that can be likened to what John Steele classifies as 'double remembering', i.e., the profound and innate ability of sacred places to remind us to remember that we are part of the nature and fabric of the Divine or Godly other.⁹ It is for this reason that sacred places engender emotions that are not only powerful, but also intensely real and human – feelings

of ecstasy, ancient stirrings within the self, feelings of repose, feelings of sensory unification, and sense of dissolution of the self.¹⁰ Archaic humans, therefore, settled and founded their world around sacred space, giving meaning to sacred place as the center of their world.¹¹ By living in close proximity to consecrated space and by merely entering it, man was ensured of transcending the profane world, thereby, sharing in the world of the sacred.¹²

Memorials (being intended and created as sacred place) seek to engender symbolic meanings within the built environment. According to Swan, memorials are a type of sacred place that typically mark ceremonial or historical events in space and time. ¹³ Memorials therefore, are qualitatively different and exclusive from our other inventory of places, i.e., they demarcate a significant break in the homogeneity of mundane/ordinary space. This paper seeks to explore this qualitative break by examining the presence of higher-order design characteristics at Bonfire Memorial in College Station, Texas. That which is 'unseen' at the Memorial is given meaning via the lens of 'Archetypal Principles'.

BACKGROUND

Several authors have discussed and developed fundamental characteristics associated with place-making in their respective works. Earliest known explorations on principles and guides for town planning and architectural design can be attributed to Marcus Vitruvius Pollio (*The Ten Books on Architecture*) in the First Century BC.¹⁴ This was followed by the work of Italian architect, Andrea Palladio (*The Four Books on Architecture*) in 1570.¹⁵

In 1977, Christopher Alexander, Sara Ishikawa and Murray Silverstein with Max Jacobson, Ingrid Fiksdahl-King and Shlomo Angel, authored – *A Pattern Language: Towns, Buildings, Construction*, an exploration on patterns applied to varying scales of the built environment. This literature contains 253 highly structured patterns classified into three general categories, i.e., towns, buildings and construction, and is intended as a practical guide for architectural designers. In the literature, Christopher Alexander and his colleagues discuss certain desirable physical outcomes through the use of specific pattern types. Subsequently, in 2002, Christopher Alexander in his work – *The Nature of Order: The Phenomenon of Life*, identifies 15 fun-

damental properties which when embodied, generate a profound degree of 'life' and 'wholeness' in objects, buildings and places.¹⁷

In 1985, in an address entitled - *Using the Place-Creation Myth to Develop Design Guidelines for Sacred Space*, given at the annual conference of the Council of Educators in Landscape Architecture at the University of Illinois in Urbana, IL, Michael Brill proposed a set of fourteen common and fundamental characteristics, by means of which places reveal themselves as sacred.¹⁸

In 1994, Charles Moore and Donlyn Lyndon compiled a series of personal observations on places that they considered to be memorable. Their work – Chambers of a Memory Palace, addressed specific themes and compositions observed within a few select memorable settings from around the world. Their discussions entail how the specified themes and compositions create and shape the experience of place.

In 2006, Phillip Tabb in his work - First Principles: Architecture of the Unseen, discusses the presence of specific patterns in the making of architecture and place.20 A series of fifteen patterns are specified and discussed in the literature. The fifteen patterns are arranged methodologically under five distinct categories. The review of relevant literature indicates that, of all aforementioned authors, only two (i.e., Michael Brill and Phillip Tabb) specifically theorize the presence of specific place-making patterns at sacred places in their respective work. The place-making patterns ascribed by both, Michael Brill and Phillip Tabb, seem to have been inspired and developed from the groundbreaking work - The Sacred and the Profane: The Nature of Religion, published in 1959 by the famed historian of religion, Mircea Eliade.21 The archetypal principles addressed in this paper are a synthesis of the aforementioned pattern templates and is an attempt to acknowledge and build upon the evolving work in the theory of place-making.

ARCHETYPAL PRINCIPLES

There is a correspondence between the internal structure of our being, in Jungian terms, a "collective unconscious" which resonates with certain external set of higherorder design characteristics (i.e., archetypes) that are expressed in space and the physical environment. In this paper, that which underlies ma-

terialization and remains unseen at Bonfire Memorial is unraveled through the lens of certain higher-order design characteristics - 'archetypal principles'.

Early Greek philosophy teaches of a hierarchical (i.e., multi-layered) model or system known as the Tectractys (Figure 1), through which the higher-order design characteristics at sacred place may be apprehended.

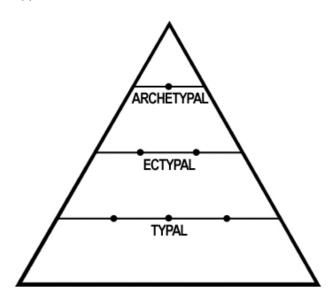


Figure 1. Hierarchical levels of the Tectractys.

In addition to expressing mathematical and geometrical concepts, the Tetractys embodies the canon of hierarchy. The three horizontal divisions relate to the realms of Archetypes, Ectypes and Types. Robert Lawlor provides the following description of how these three levels can operate:

Let us take an example of a tangible thing, such as the bridle of a horse. This bridle can have a number of forms, materials, sizes, colours, uses, all of which are bridles. The bridle considered in this way, is typal; it is existing, diverse and variable. But on another level there is the idea or form of the bridle, the guiding model of all bridles. This is an unmanifest, pure, formal idea and its level is ectypal. But yet above this there is the archetypal level which is that of the *principle* or *power-activity* that is a *process* which the ectypal form and typal example of the bridle only represent.²²

Within the context of this paper, the lowermost level or typal level is likened to that which is physical, sensual and sensible (i.e., specific physical characteristics of Bonfire Memorial). The typal level

therefore, exemplifies "the seen" - that which can be felt, measured and directly experienced at the Memorial. Similarly, at the intermediate level, the ectypes represent the unmanifest, pure and formal guiding model of the physical characteristics which exists at the typal level. The ectypal level can therefore be equated to plans, sections, elevations, etc., - architectural drawings that seek to guide material physicality at the typal level. Finally, at the highest level, the archetypes seek to exemplify the perfect idea, the underlying principle, power activity and process, which the typal and ectypal level only seek to represent. The archetypal level occupies both transcendent and ideal orders. It exemplifies the energy and power and is concerned with universal processes or dynamic patterns that have no material carrier. The realms of the archetype, ectype and type, in this manner, exist at differing hierarchical levels – qualities that move from the unseen and ideal to the physical and tangible in place-making. The Tectractys when viewed through the three hierarchical levels therefore, becomes a valuable tool for extracting the deeper phenomenological meanings that underlie the processes and sensitivities of sacred placemaking.

DESCRIPTIVE OVERVIEW OF MEMORIAL



Figure 2. View of Tradition Plaza.

The Bonfire Memorial is a unique monument, dedicated to the remembrance of 12 Aggies who lost their lives, including 27 Aggies who sustained injuries when the Bonfire tragically collapsed on November 18, 1999. Located at the actual site of the trag-

edy, on the northeast side of Texas A&M University campus in College Station, the Bonfire Memorial is an elegant work of architectural composition that is made up of three distinct spatial zones – Tradition Plaza, History Walk and Spirit Ring.

Tradition Plaza (Figure 2), functions as the initial point of contact with the Memorial. It demarcates a distinct place of entry for the larger Memorial. On initial approach from the parking lot, a quote from Spirit of Aggieland on a vertical granite slab (known as Spirit Wall), greets visitors. The quote reads, "There's a Spirit can ne'er be told...." Past Spirit Wall, visitors encounter the Last Corps Trip Wall, on which is engraved a poem titled The Last Corps Trip by Philo H. DuVal, Jr. (class of 1951). The poem reads:

It was Judgment Day in Aggieland And tenseness filled the air; All knew there was a trip at hand, But not a soul knew where.

Assembled on the drill field, Was the world-renowned Twelfth Man, The entire fighting Aggie Team And the famous Aggie Band.

And out in front with Royal Guard The reviewing party stood; St. Peter and his angel staff Were choosing bad from good.

First he surveyed the Aggie Team And in terms of an angel swore, "By Jove, I do believe I've seen This gallant group before.

I've seen them play since way back when And they've always had the grit; I've seen 'em lose and I've seen 'em win But I've never seen 'em quit.

No need for us to tarry here Deciding upon their fates; "Tis plain as the halo on my head That they've opened Heaven's gates."

And when the Twelfth Man heard this They let out a mighty yell, That echoed clear to Heaven And shook the gates of Hell.

"And what group is this upon the side,"
St. Peter asked his aide,
"That swelled as if to burst with pride
When we our judgment made?"

"Why sir, that's the Cadet Corps, That's known both far and wide, For backing up their fighting team Whether they won or lost or tied."

"Well then," said St. Peter, Its very plain to me That within the realms of Heaven They should spend eternity.

And have the Texas Aggie Band At once commence to play For their fates too, we must decide Upon this crucial day."

And the drum major so hearing Slowly raised his hand And said, "Boys lets play 'The Spirit' For the last time in Aggieland.

And the band poured forth the Anthem In notes both bright and clear And ten thousand Aggie voices Sung the song they hold so dear.

And when the band had finished , St. Peter wiped his eyes And said, "Its not so hard to see They're meant for Paradise."

And the colonel of the Cadet Corps said As he stiffly took his stand "Its just another Corps Trip, boys. We'll march in behind the band."

Traditionally, the poem was read prior to the lighting of the Bonfire each year. Spirit Wall and Last Corps Trip Wall collectively make up Tradition Plaza. Toward the end of Tradition Plaza begins History Walk.



Figure 3. View of History Walk.

History Walk (Figure 3), a linear pathway flanked by eighty-nine granite stones, extends due north and connects Tradition Plaza with Spirit Ring. It is flanked by a linear mound (covered with grass) on the west. History Walk is indicative of the time-line of the Bonfire Ceremony i.e., it symbolizes ninety years of the Bonfire Ceremony, preceding the 1999 tragedy. The time-line begins with the year 1909, i.e., the first year that the Bonfire was built on campus. Three previous Bonfirerelated deaths are remembered on the time line, in the years that they occurred. The three prior incidents are expressed by means of slits in the granite stones. The three slits contain a metal plate on which is engraved the deceased person's name. An amber light embedded in the slits within each of the granite stones, illuminates the walkway at night. A gap in the time line acknowledges the year 1963, i.e., the year that John F. Kennedy was assassinated. It is the only year that the Bonfire Ceremony was not celebrated. Towards the end of History Walk is Spirit Ring.



Figure 4. View of Spirit Ring.

Spirit Ring (Figure 4) surrounds the site, where the 1999 Bonfire tragedy occurred. The ring's twelve gateways face the hometowns of those who lost their lives in the collapse. Twentyseven curved granite stones (in a circular formation) with bronze inlays are symbolic of the students who were injured in the collapse, but survived. These stones connect the gateways, thus forming a complete circle. The diameter of Spirit Ring is the same as the 170' base-perimeter of the traditional Bonfire. Amber lights, placed on the underside of the curved

granite stones, illuminate the ring at night. Spirit Ring is surrounded by a circular grassy mound on all sides. Bronze portals within each of the granite gateways were designed in collaboration with each of the twelve families, to reflect the events, emotions, life and spirit of the lost family member. A circular shaped, black granite stone at the center of Spirit Ring marks the exact location of the 1999 center pole. This marker is inscribed with the date and time of the actual occurrence of the tragedy. The marker also serves as the center point to orient visitors to the hometowns of the twelve deceased students. The materiality of the Memorial is primarily restricted to bronze, granite, concrete and gravel.

SPATIAL PRESENCE OF ARCHETYPAL PRINCIPLES AT THE MEMORIAL

Created around, at what first appears to be intriguing Stonehenge-like design features, the Bonfire Memorial in fact, embodies at its heart and within its precinct, specific higher-order design characteristics. These characteristics at Bonfire Memorial can be likened to that which are real, typal, sensible and tangible, but yet remain driven by what is ideal and archetypal. What follows is an attempt at exploring the presence and quality of specific higher-order design characteristics at Bonfire Memorial, with a speculation of the possible underlying archetypal principle.

Distinct Threshold:



Figure 5. View of Tradition Plaza looking east.

Tradition Plaza forms a distinct threshold at the Bonfire Memorial. The Plaza (Figure 5), seeks to recount and remind visitors of specific aspects of the tradition of Texas A&M University. The quote on Spirit Wall, poem on Last Corps Trip Wall and the very space bounded by these and other elements of the Plaza provide a unique and distinct space for visitors entering the Memorial. It provides an actual point of entry into the Memorial. The Plaza serves a two-fold purpose, first; it functions as an initial introductory space for visitors preparing to enter the Memorial, and second; it serves as a final departing space for visitors preparing to exit, i.e., it provides a place of final respite prior to exit from the Memorial. The Plaza therefore functions as a distinct neutral space of continuity between two different realms - mundane and sacred.

Archetype: Initiate, Separate, Mediate

Path-Passage:



Figure 6. View of History Walk extending due north.

Three distinct features contribute to pathpassage at the Bonfire Memorial – History Walk, Spirit Ring inner walkway and Spirit Ring outer walkway. These walkways allow for physical movement within the Memorial. While History Walk (Figure 6) remains linear, the inner and outer walkways of Spirit Ring allow for meandering movement within the circular formation. The path-passage at Bonfire Memorial embodies a distinct directional quality, i.e., it forms a continuous loop that leads visitors upon initial entry into Tradition Plaza, onto History Walk, into

Spirit Ring, and then back from Spirit Ring onto History Walk, and finally into Tradition plaza prior to exit. Each path-passage at Bonfire Memorial also embodies distinct qualities of interaction. History Walk provides visitors with a glimpse of the timeline of the Bonfire Ceremony, while the inner and outer walkways of Spirit Ring enable visitors to interact with the bronze portals dedicated to those that lost their lives in the tragedy.

Archetype: Move, Traverse, Connect

Numerical Significance:



Figure 7. View of granite stones along History Walk.

Significant numerical identity associated with the history of Bonfire Ceremony, including the actual tragedy itself is expressed at the Memorial. This significance is expressed along History Walk and Spirit Ring. History Walk (Figure 7), expresses numerical identity by demarcating the historical time-line of the Bonfire Ceremony i.e., each of the eighty-nine granite stones along History Walk serves as a numerical marker for a single year that previous Bonfire Ceremonies were held preceding the 1999 tragedy. In addition, the three Bonfire-related deaths that occurred prior to the tragedy, including the assassination of John F. Kennedy are identified and physically demarcated at specific points along the historical time-line. The aforementioned features (signifying three Bonfire-related deaths and assassination of John F. Kennedy) further strengthen the numerical significance of History Walk. The eightynine granite stones therefore, collectively engender a specific numerical identity to the Memorial. Similarly, the twelve gateways/portals of Spirit Ring form a numerical tribute to the twelve students who died in the tragedy, while the twenty-seven curved granite stones that form the remainder of Spirit Ring serve as a numerical identity for the twenty-seven students who were injured in the collapse, but survived. Numerical significance at the Memorial is therefore, predominantly expressed through the numerical quantities of – 89, 12 and 27.

Archetype: Quantity, Enumerate, Signify

Visual Markers:



Figure 8. View of outer gateway and inner portal.

A perfectly linear line-of-sight from the center of Spirit Ring through each of the twelve gateways/ portals (Figure 8), serves to orient visitors with the hometowns of the deceased. In this manner, a direct visual connection between the Memorial and that which is significant, but lies beyond is established. Such specially positioned markers are

embodied to encourage direct visual interaction between places that remain distinct, yet meaningful and significant to each other. Further, a raised mound flanks History Walk to the West with a second raised mound surrounding most of Spirit Ring. These features serve to restrict views from within the confines of the Memorial to the outer mundane realm (i.e., parking lot to the west of the Memorial). Limiting views, in this manner, serves to contain the memorable experience of the Memorial by restricting a direct visual interaction with that which remains mundane/profane.

Archetype: Mark, Acknowledge, Reinforce

Significant Orientation:



Figure 9. View of dominant north-south axis.

At the Memorial, significant orientation is established by means of the primary axis of History Walk (northsouth), including the secondary axis of Tradition Plaza (east-west). Upon entry, visitors are directed in the eastwest direction, as they walk through Tradition Plaza. Thereafter, a pronounced north-south axial alignment of the Memorial is experienced, beginning with the origin of History Walk (Figure 9), and terminating with the circular formation of Spirit Ring. The primary northsouth axis articulates visual symmetry and balance to the overall organization of the Memorial. This process of cutting-in-half defines visual wholeness to the Memorial. The alignment of the Memorial with the cardinal directions therefore, provides two distinct linear axes, while engendering spatial hierarchy and order to the place, i.e., a

gradual transition between the three distinct spatial zones of the Memorial (i.e., Tradition Plaza, History Walk and Spirit Ring) is established by means of the primary and secondary axis.

Archetype: Orient, Align, Delineate

Ordered Landscape:



Figure 10. View of landscape within Tradition Plaza.

The landscape of the Memorial can be classified into two types - hard and soft. Trimmed groundcover makes up the soft (i.e., neutral frame) landscape, while gravel makes up most of the hard landscape. The landscape of Tradition Plaza (Figure 10) is mainly composed of gravel with a single tree towards the east corner. Similarly, History Walk and the inner and outer walkways of Spirit Ring are composed of gravel. The mound that flanks History Walk and Spirit Ring is blanketed with trimmed groundcover. In addition, trimmed groundcover covers most of the inside of Spirit Ring. These landscape features are bordered and controlled, i.e., they are continually maintained. The wild qualities of nature are thereby tamed at the Memorial. The gravel at the Memorial, engenders a unique quality of sound apropos to the movement of visitors, i.e., the sound emanating from the footsteps of visitors walking through Tradition Plaza, across History Walk, and around Spirit Ring is heightened. In addition, the gravel also tends to slow the movement of visitors traversing the Memorial.

Archetype: Naturalize, Nourish, Vitalize

Ascent-Descent:



Figure 11. View of gateway extending upwards.

The twelve gateways of Spirit Ring engender ascent to the Memorial. These vertically prominent features (Figure 11), allow for visual connection in the upward direction. The upward gesture and connection with the sky delineate hierarchy to the spatial composition of the Memorial, i.e., the granite gateways (and bronze portals) and therefore Spirit Ring becomes the most important feature of the Memorial. Conversely, the black granite stone at the center of Spirit Ring engenders descent to the Memorial. It establishes a downward connection with the Earth. In this manner, the gateways (and therefore the lives of the deceased) are eulogized by ascent, while the black granite stone at the center (reflecting details of the tragedy) is subdued by descent.

Archetype: Uplift, Ground, Mediate

Substantial Void:



Figure 12. View of inside of Spirit Ring.

Emptiness bounded by the circular confines of Spirit Ring engenders substantial void to the Memorial. The emptiness at the center (Figure 12), seeks to diffuse the materiality and delirious detail at the boundary (granite gateways, bronze portals, and circular granite stones). The void within Spirit Ring therefore provides contrast with the materiality of the surroundings. In doing so, the void heightens the ceremonial center of the place by providing stillness, silence, simplicity and calm to the Memorial. The void embodied within the bronze portals also engenders a unique quality to the Memorial. Upon entry into the portals, visitors are able to fill the spatial void with human presence thereby bringing to memory, personal aspects of the lives of the deceased.

Archetype: Empty, Diffuse, Dematerialize

Exquisite Materiality:

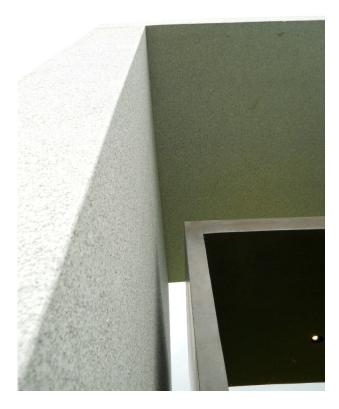


Figure 13. View of granite gateway/bronze portal.

Construction materials (Figure 13), at the Memorial are mainly restricted to bronze, granite, concrete, and gravel. While bronze, granite and concrete are utilized to generate the physical built-form of the Memorial gravel is used mainly to serve as surface material for pathways. Large semi-monolith bronze portals and granite gateways utilized at the Memorial are reflective of materials that are typically rare, monumental and distinct from everyday building materials. In addition, bronze, granite, concrete and gravel are also relatively resistant to erosion brought about by natural forces. These materials maintain their formal integrity over time. Lastly, the craftsmanship (joinery, edges, engraving) employed within the materials is intricate and suggests a sacred intent of intense effort.

Archetype: Generate, Materialize, Manifest

Contrasting Illumination:



Figure 14. View of amber light beneath granite slab.

Amber light fixtures embedded in the slits within each of the granite stones illuminate History Walk at night. A second ring of amber lights running along the entire circumference of Spirit Ring (Figure 14), adds to the contrasting illumination at night. The light emanating from these fixtures contrasts immensely with the surrounding darkness at night. The absence of uniform illumination at the Memorial therefore forms an essential quality of visual appreciation of the Memorial at night. The amber light fixtures also provide orientation for visitors at night, i.e., they highlight the linear path along History Walk and the inner and outer walkways of Spirit Ring.

Archetype: *Illuminate, Reveal, Contrast*

Spatial Hierarchy:

The Memorial is organized into three distinct spatial zones – Tradition Plaza, History Walk and Spirit Ring. Each spatial zone remains distinct but successive to the proceeding one. This correspondence and relation between successive spaces reveals rhythmic order to the place. Further, spatial hierarchy at the Memorial is inextricably related to the position of the ceremonial center and the resulting orientation of the Memorial. The intensity of experience at the Memorial therefore, increases with spatial transition from Tradition Plaza onto History Walk to Spirit Ring. Spatial hierarchy at the Memorial therefore, engenders immense significance and



Figure 15. View of Spirit Ring from top of mound.

importance to Spirit Ring (Figure 15), as compared to Tradition Plaza and History Walk.

Archetype: Organize, Correspond, Order

Ceremonial Center:



Figure 16. View of center stone inside Spirit Ring.

The space within Spirit Ring, including the black granite stone (Figure 16), at the center of Spirit Ring engenders a ceremonial center to the Memorial. A communal presence for consecrative acts and rituals is established via the presence of the ceremonial center at the Memorial. These features serve as the actual geometrical center of the Memorial. Spirit Ring and the space it bounds (bronze portals) are associated with intense activity and

meaning, and therefore, serve as the focal point of ceremonial experience at the Memorial. Spirit Ring (particularly the bronze portals and the black granite stone at the center) represent the spatial location where a connection between visitors and the Memorial is most likely to occur. Spirit Ring in its entirety therefore, expresses the conceptual essence of the place. The ceremonial center therefore, serves to complete the wholeness of Place.

Archetype: Focus, Consecrate, Establish

CONCLUSION

The importance and relevance of archetypal principles in place-making has often been unnoticed, under-appreciated or worse, misunderstood. Within the context of contemporary place-making, it becomes necessary to re-evaluate the process, goals and status of place-design as an activity, and from this, explore more appropriate ways of teaching people how and what to design. The speculation of the presence of archetypal principles associated with sacred place is intended to form a bridge between the contemporary place-making process and evolving esoteric wisdom. It is not intended to demystify the sacred, but is intended to indicate the formal design characteristics which can help enable our connection and experience of sacred place. This study has been a process of clarification, yet what remains untouched are the elements of complete mystery - something "wholly other" as remarked by Eliade.²³ It is the purpose of a sacred place such as the Bonfire Memorial to bring us back into the living universe - meaning "all taken together".

The Tectractys could serve as a remarkable philosophical tool to engender greater understanding and clarity to the phenomenology of archetypal principles in sacred place. In this manner, the Tectractys could serve to provide substantive meaning to that which exists at the physical level (typal realm), but remains unseen (archetypal realm) in place-making. It is important to understand that each of the twelve higher-order design characteristics should be connected to its respective archetypal principle to give it deeper meaning. The principles, in this manner, could become guides for the eventual typal exemplifications of real places and the characteristics they possess. It is important to note however, that other principles may be important, which may not be addressed in this study i.e., the twelve archetypal principles examined in this paper do not form an exclusive list.

The archetypal principles, though 'unseen', seem to manifest expression through their substantive counterparts in the material/typal realm. They seem to resonate with the ethereal recesses of the human mind. Observed through the realm of types (physical characteristics of the Memorial), the archetypal principles seem to express higher qualities of space and place, place-making intensions, (both intentional and unintentional), cultural exemplifications and important traditional values. To this extent, the archetypal principles seem to be inextricably related not only to architectural creativity but also to archaic and vernacular ideologies. In this manner, each of the higher-order design characteristics and their underlying archetypal principles are intended as guides for creating a more significant, meaningful and memorable place.

The twelve higher-order design characteristics collectively contribute to giving the Bonfire Memorial a sense of place - Tradition Plaza (distinct threshold); History Walk, Spirit Ring inner walkway, Spirit Ring outer walkway (path-passage); numerical quantities of 89, 12, 27 (numerical significance); views through gateways/portals, views restricted by raised mound (visual markers); north-south axis of History Walk, east-west axis of Tradition Plaza (significant orientation); trimmed groundcover, gravel, tree (ordered landscape); vertical prominence of gateways, grounded center stone of Spirit Ring (ascent-descent); emptiness bounded by Spirit Ring, emptiness within bronze portals (substantial void); monolithic granite, bronze, concrete, gravel (exquisite materiality); amber light fixtures (contrasting illumination); three distinct zones - Tradition Plaza, History Walk, Spirit Ring (Spatial Hierarchy); center stone, space within Spirit Ring (ceremonial center), all taken together, clearly express the qualities of sacred space. To discover all of these characteristics while they dissolve into the wholeness of the Bonfire Memorial is truly a wonderful experience.

The archetypal principles in sacred placemaking could be likened to what Wolfgang Kohler classifies in his work as "Isomorphs" (i.e., the central nervous system of each animal containing an image or imprint that is the counterpart of the proper environment for that species).²⁴ At the Bonfire Memorial, a sense of 'Unity' is achieved by the containment

and agglomeration of the archetypal principles into a memorable whole. When embodied meaningfully, they seem to serve as sentient and mnemonic devices in architecture – principles that help us reremember our quest for the most exemplary model of place – place that is significant and memorable, and place that is sacred.

ENDNOTES

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- 24 Wolfgang Kohler, *The Place of Value in a World of Facts* (New York, NY: Liveright Publications, 1938).

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- Figure 4. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 5. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 6. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 7. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 8. Bonfire Memorial, College Station, Texas, USA.
- Photograph by Arsenio Rodrigues, 2011. Figure 9. Bonfire Memorial, College Station, Texas, USA.
- Photograph by Arsenio Rodrigues, 2011.
- Figure 10. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 11. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 12. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 13. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 14. Bonfire Memorial, College Station, Texas, USA. Photograph by Arsenio Rodrigues, 2011.
- Figure 15. Bonfire Memorial, College Station, Texas,
- USA. Photograph by Arsenio Rodrigues, 2011. Figure 16. Bonfire Memorial, College Station, Texas,
- USA. Photograph by Arsenio Rodrigues, 2011.