

**An exploration into the relationship between
spirituality and urban design with specific
reference to the city of Phnom Penh in Cambodia**

PREVIEW

Thesis submitted in accordance with the requirements of the
University of Liverpool for the degree of Doctor in Philosophy

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Abstract

The relationship between spirituality and urban design is complex. Since the twentieth century, spirituality has often been neglected in western European architecture and urban design education, theory, and practice. My lived experience of the city of Phnom Penh and its dynamic spatial spirituality further highlighted this condition and prompted this research. This thesis explores the relationship between spirituality and urban design with specific reference to the city of Phnom Penh in Cambodia. Based on a combined ethnographic and phenomenological approach, the spatial impacts of spirituality in the urban layout of the city of Phnom Penh were researched through five years of participant observation, twenty semi-structured interviews, photographs, drawings, conversations and relevant literature review. Analysis of the data revealed the prevalent hybrid spirituality of Khmer culture, that includes Animism, Hinduism, and Buddhism, was, and still is, spatially manifest in the urban layout of the city of Phnom Penh in three leading ways. Firstly, through the topographical elements of tree, mountain, and water in their natural, artificial and abstracted presence. Secondly, through both domestic and urban wide scale, where it is evidenced in common housing typologies and significant urban focal points. Thirdly, through a variety of rituals, that include the major national festivals and their associated rituals as well as traditional construction rituals for both settlements and housing. These many and varied spatial impacts of spirituality have dramatically influenced the evolution of the urban layout over time as well as transforming each other. When the layered results were mapped onto a series of plans, elevations and sections, the presence and character of a powerful and dynamic relationship between spirituality and urban design in the city of Phnom Penh in the twenty-first century was clearly demonstrated. Now that a plausible relationship has been rigorously identified and spirituality has been validated as a core design parameter, research can go further into its multivalent character and spatial spiritual impact that could, by extension, inform neighbouring urban layouts within East Asia and beyond.

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Glossary of Terms

Currently and '...rather inexplicably, no official, standardised rules exist for transcribing Khmer into the Latin alphabet' (Boswell 2016:168).

<i>Achar</i>	A holy layman
<i>Baray</i>	A large water repository or reservoir
<i>Brah ling</i>	Spiritual parts of a person (thought to be nineteen in total).
<i>Chaktomouk</i>	This Khmer word literally means 'four faces' referring to the junction of four rivers. It was the pre-colonial name of the settlement that became the city of Phnom Penh during the French Protectorate.
<i>Hora</i>	Fortune teller
<i>Jumneang Phteah</i>	Household guardian spirit
<i>Kmauit</i>	Ghosts
<i>Koki</i>	A species of auspicious tree
<i>Kuti</i>	Monastic residence within the temple complex
<i>Linga</i>	Hindu representation of male reproductive system
<i>Neak Tha</i>	Local territorial guardian spirit.
<i>Naga</i>	Snake or serpentine deity
<i>Phnom</i>	Mountain
<i>Pisnoker</i>	The Hindu god of construction
<i>Prasat</i>	Central sanctuary of ancient temple
<i>Prek</i>	Stream or tributary
<i>Pchum Bun</i>	The festival of the dead
<i>Stupa</i>	Relic repository usually located within the temple complex.
<i>Tevoda</i>	Angel
<i>Vihara</i>	Pagoda usually located within the temple complex
<i>Yantra</i>	Piece of cloth with spiritual text that protects against evil in eight directions
<i>Yoni</i>	Hindu representation of female reproductive system

PREVIEW

Chapter 1: Introduction

God had a pre-eminent claim to the city ahead of kings and merchants. (Kostof 1992:82)

And he carried me away in the Spirit to a mountain great and high, and showed me the Holy City, Jerusalem, coming down out of heaven from God. It shone with the glory of God, and its brilliance was like that of a very precious jewel, like jasper, clear as crystal. (Revelation 21:10 and 11)

The Phnom Penh of yesteryear with its tatty terraces of tumbledown shacks and dull Soviet monoliths is dying. Like a supersized serpent slowly shedding its skin, the city once referred to as the 'Paris of the East' is being resurrected one brick at a time. (Campbell 2008:27)

1.1 Personal story

In the late 1990s, I was seated on the first floor of the Foreign Correspondents' Club café on Sisowath Quay in the city of Phnom Penh. Looking out over the Tonle Sap river through the tall trees at the riverside edge, I experienced an indefinable spiritual connection with the city. This only strengthened over the next decade and in 2008 my family and I relocated to Phnom Penh where we spent the next nine years living and working with a Christian NGO called OMF International¹. My work involved lecturing and teaching design studio workshops at the Royal University of Fine Arts (RUFA). Over a period of eight years I wrote, lectured and refined a 4th/5th year course² in the architectural faculty entitled 'An introduction to Urban Design'. This was successfully handed over to local Khmer lecturers whom I mentored and learned from throughout my teaching practice there. The experience of teaching urban design in the city of Phnom Penh as a practising Christian inspired me to commence this PhD study. I was curious to explore more fully the relationship between spirituality, space and the Khmer person, and be able to share this with my Christian colleagues to facilitate a deeper, more contextualised, understanding of the Cambodian condition.

Further events in my life have also contributed to undertaking this research. I was born in Thailand where the current Thai princess Maha Chakri Sirindhorn signed my birth certificate (see Figure 1.01). I was educated at boarding schools in Malaysia and the UK, but Thailand was my home until the age of eighteen. I studied architecture at the University of Liverpool and have been a fully qualified RIBA accredited architect since 2001. In addition, I hold a master's degree in Urban Design from Manchester Metropolitan University and a certificate in Christian Mission Studies from the University of Gloucester. I first visited Cambodia in my mid-twenties then, after working approximately ten years in architectural practice in northern England, I departed for Cambodia at the age of 32. These life experiences help contextualise this thesis. Since birth, I have enjoyed a physical relationship with East Asia where much of my life has been lived. From the age of seven, I have considered myself a practising Christian, who values the Bible highly in the protestant tradition. Spirituality has always been important to me and has been integrated into every part of my life. Architecture, urban design and the art of space/place creation has been my vocation for over twenty years and something I have continued to develop in theory, practice and education (see Figure 1.02).

¹ OMF International (formerly the China Inland Mission and Overseas Missionary Fellowship), was founded by James Hudson Taylor in 1865. The organisation aims to serve the church and bring the good news of Jesus Christ to the peoples and places of East Asia.

² During this period, I taught over 600 students. The course became one of the leading urban design qualifications in Cambodia and still continues today under local Khmer leadership.

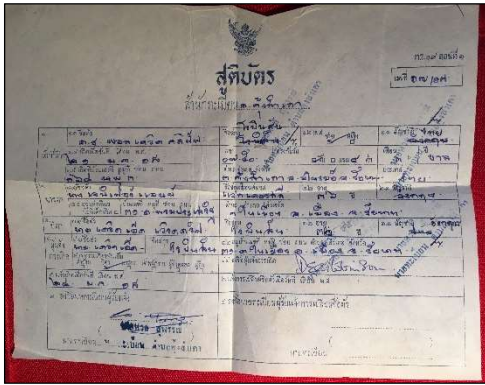


Figure 1.01: Thai birth certificate
(Photo by author 2019)



Figure 1.02: Teaching at RUFA
(Photo by author 2016)

Three ‘things’ struck me as I was teaching the ‘Introduction to Urban Design’ course at RUFA. Firstly, alleged international texts on urban design were predominantly European and American in flavour with token East Asian examples sparingly used. Secondly, spirituality was usually limited in academic texts to reference historic pre-industrial examples rather than current twenty-first century urban layouts. Thirdly there were very few local Khmer texts about the city of Phnom Penh or Khmer urban design. Once I had taught at RUFA for three years and reflected on the experience, I was compelled to think seriously about commencing a PhD. A piece of research that would combine: personal interests; an addition to knowledge in the academic fields of urban design and spirituality; and model the value of further education to my Khmer students³. Upon completion, my long-term desire would be to work with Khmer colleagues to help set up a Master’s programme at RUFA.

1.2 Thesis topic

There is no sacred secular divide in the city of Phnom Penh. The urban layout accommodates a vital and palpable spirituality that is an essential part of everyday life. The relationship between spirituality and urban design has not been clarified in South East Asia. This is in contrast to twentieth century European tradition where spirituality is frequently compartmentalised, limiting its opportunity to impact the urban layout. Alberto Perez Gomez discusses the future potential of this relationship in his influential book, *Attunement*, where he recognises the twenty-first century difficulties ‘...facing the place of spirituality in a nondualistic reality, and highlighting its importance for the well-being and sustainability of human cultures, one in which architecture should play its inveterate crucial role’ (2016:11). The whole human condition, both physical and spiritual, is engaged within the city of Phnom Penh’s urban design. How this relationship between spirituality and urban design expresses itself is understood in this thesis to be the spatial impacts of spirituality that were revealed through the leading themes of topography, scale and ritual.

An exploration into the relationship between spirituality and urban design with specific reference to the city of Phnom Penh.

³ To date there is no established opportunity for a Khmer student to undertake a Master’s degree in the field of architecture in Cambodia. They must travel abroad to develop their education, an opportunity available only to the rich or privileged and not necessarily the most talented.

The above title emerged that would direct the subsequent six years of research. The research methodology that enabled this exploration included both ethnography and phenomenology; a dual, integrated approach that utilised personal experience to facilitate spatial spiritual study in the city of Phnom Penh. Ethnography enabled a detailed understanding of the city. Phenomenology allowed an informed scrutiny of the connections between the phenomena of spirituality and the built environment within this context. The power of topography is common in many leading spiritualities which imbue topographical elements with meaning within their scriptures⁴. The natural topography of the region was researched and explored through the filter of Khmer culture. The agency of three leading topographical elements of tree, mountain, and water were also explored within the manmade built environment of the city. Urban design was understood to include both the large 'urban scale' of the city as well as the smaller 'domestic scale' of an individual housing unit. Khmer rituals were observed and experienced at both these scales and also in relationship to topography, to help describe the characteristics of the revealed spatial impacts of spirituality in the city of Phnom Penh. These leading research themes helped articulate the character of this relationship between spirituality and urban design, how and why it occurred and evolved over time, and what it could be like in the future.

1.21 Spirituality

The study (and place) of spirituality is relevant and necessary when researching architecture and the built environment. It should not be confined to theology or random aspirational sound bites. This thesis topic is an opportunity to rigorously engage with the primary theme of spirituality and start to restore its value to architecture's design agenda; an intent resonating through recent architectural texts (Temple 2007:23, Pallasmaa 2012:13, Borch 2014:7). Therefore, a key term that needs to be explored is spirituality. The following quote highlights the slippery nature of the term and associated understandings of it as it struggles to be captured in a single comprehensive definition.

How we define 'spirituality' and also distinguish and describe different traditions of spirituality is not a simple matter of objective observation. All definitions and descriptions are a matter of interpretation which, in turn, involves preferences, assumptions and choices. ...Sometimes our historical narratives also reflect the interests of dominant groups - whether in a religious institutional, theological or socio-cultural sense. This process may sometimes be conscious but is more often unconscious and uncritical. (Sheldrake 2016:15)

It is not the remit of this research to explore all the variables related to defining spirituality but it is important to address the term briefly to help establish what is to be understood by it within this thesis. Primarily, spirituality is concerned with the human spirit or soul as opposed to material or physical things. Sheldrake (2016:21) contends that the term originated from Christianity where followers were encouraged from the bible to live their lives according to the spirit of God not the spirit of the world. This has been extended to be understood within prevailing organised religions'

⁴ For example: in Buddhism trees are venerated '...with the hundred roots there, the great Bodhi-tree set itself in the fragrant earth, pleasing the people...At the moment the great Bodhi-tree set itself in the bowl, the earth quaked and there were various miracles (Mahavamsa, Chapter Eighteen: 591-594). Mountains are sacred in Hinduism where the belief is held '...that Mount Meru, a golden mountain, is the centre of the universe. Mount Meru is the most sacred object in the universe because it supports the heavens and the gods' (Hinduwebsite.com: 2019). In Christianity water becomes a powerful symbol when Jesus says to his followers that, '...whoever drinks the water I give them will never thirst. Indeed, the water I give them will become in them a spring of water welling up to eternal life' (John 4:14 NIV:1979).

terminology (Christianity, Buddhism, Islam, Hinduism, Animism etc...) and would have dealt with the whole human condition both seen and unseen. George E. Saint-Laurent (2000:6) elaborates it further, describing spirituality as the inner meaning of human experience under the impact of a world view. (The assumption being that each world religion has its own defined world view.) From the enlightenment era, the term started to be used in contexts separate from any organised religious belief (Perez Gomez 2016:Chapter 3) and became personalised and relativized (Steensland et al 2018:450); defining a connection to the unseen world that is unique to every individual and not necessarily related to traditional organised religion (Elkins 1988:5). In the widespread use of the term today the following common characteristics are associated with it.

[Spirituality] refers to the deepest values and meanings by which people seek to live...it implies a holistic, integrated approach to life. It also involves a quest for 'the sacred' understood in broad terms as the depth dimension of life...it relates to a sense of goal and purpose...it involves the development of the non-material element of life. It is also associated with human thriving. It involves a quest for virtue as against pure self-interest...and...evoked the sense of a self-reflective life as opposed to an unexamined life. (Sheldrake 2016:20)

The characteristics identified above have been helpful in establishing the following parameters for the term within this thesis. Spirituality will be considered to be present in the world and experienced by human beings. It will be considered to be unseen and non-physical although the physical realm can influence it. It is not just sensual or of the human spirit but it is something more than the five senses, though these do point towards it (Pallasmaa 2012:108). Spirituality will also be considered as a felt connection with an 'other' spirit world (traditionally articulated by organised religion such as Hinduism, Buddhism, Christianity or Animism etc...). Spirituality will also be observed as an action expressed in ritual (private and public) that can change over time and be developed or enhanced (Bell 1997:137). This is how the character of spirituality will be understood when discussed within this thesis.

1.22 Urban Design

The City is the ultimate memorial of our struggles and glories: it is where the pride of the past is set on display. (Kostof 1991:9)

Like the term spirituality the key term 'urban design' is difficult to define due to its multi-disciplinary character. This term has been preferred to the term 'urbanism' as it emphasises specific design approaches and practices. Urbanism is an exceedingly broad field, highly theoretical, which contains the discipline of urban design as well as the disciplines of urban planning, urban sociology and urban geography. Rowley identifies the first use of the term, in the mid-twentieth century, to cover a spectrum of scale from '...the regional/national scale to the design of street furniture' (1994:174). This understanding is still present today, so it is helpful to focus on essential characteristics when using the term that are not exclusively focused on continuity and enclosure (Oktay 2016:8). For the purposes of this thesis the term urban design will refer to the space and place making that constitutes the urban environment and layout of the city (Buchanan 1988). It will be considered as the design of cities, streets and spaces that takes into account built form and topography. It also accommodates human behaviour and the influence of power within the city. It is three-dimensional, spatial design that deals with both the visual and non-visual aspects of the environment. It is concerned with architecture at both urban and domestic scales which will include the experience of



Figure 1.04: *Angkor Wat (Photo by author 2012)*

Era two (800-1431) was dominated by the Angkor empire where power, spirituality and built form became integrated on a massive scale to create the urban layout of the city of Angkor (see Figure 1.03): 'Around the conspicuous, massive stone monuments lay a vast ephemeral city of timber houses, mud and sand embankments and long channels of water extending more than 1000sq km between the lake and the hills to the North' (Choulean 2003:107). Architecture served both ritualistic and political purposes through the predominant cult of Devaraja (god-king) and its worship of Shiva¹² (Marston and Guthrie 2004:8). The famous construction of Angkor Wat¹³ (see Figure 1.04), was dedicated to Vishnu (evidence of a changing spiritual emphasis driven by Indianisation). By the end of the era, Buddhism was in the ascendancy within the nation's hybrid spiritual condition which in part contributed to the empire's downfall¹⁴ and defeat by the forces of neighbouring Siam¹⁵. Most historical records relate only to royalty as there is a distinct lack of information relating to the everyday condition of the Khmer people. Due to the ongoing Siamese threat, the decision was made during the reign of King Ponhea Yat¹⁶, in 1431 to abandon Angkor and construct a new capital city further south at Chaktamouk (Groslier 2006:5); the location later known as Phnom Penh in the nineteenth century. The implications of this abandonment were extraordinary. The mountains of north west Cambodia were left, physically, spiritually and symbolically, for the water rich plains of the south.

Era three (1431-1863) has the least historical, architectural or archaeological data to inform it and is commonly known as the dark ages. The nation's capital city changed location five times through four locations (see Figure 1.05). No significant urban design projects were constructed; indicative in part to the growing influence of Theravada Buddhism throughout the nation. The Khmer king was no longer considered a god-king and ceased to wield the absolute power necessary to construct the large scale urban design projects of the previous era. The Portuguese Roman Catholic missionary, Gaspar da Cruz became the first known European to visit Cambodia in 1555. His writings recognise the widespread presence of hybrid spirituality¹⁷.

¹² This cultic strand of Hinduism is expanded in greater detail in Chapter 3.

¹³ Angkor Wat, built in the twelfth century, is still used today on the flag of Cambodia (see Appendix 3).

¹⁴ See Chapter 3 'The origins of hybrid spirituality' for expanded detail.

¹⁵ When the Siamese invaded in 1430 they carried off '...the last remnant of the intelligentsia at a time when it could not be replaced' (Palmer Briggs 1954:259).

¹⁶ For a chronological list of subsequent Khmer kings post era two see Appendix 2.

¹⁷ He speculated that during the reign of King Ang Chan monks represented one-third of the male population.

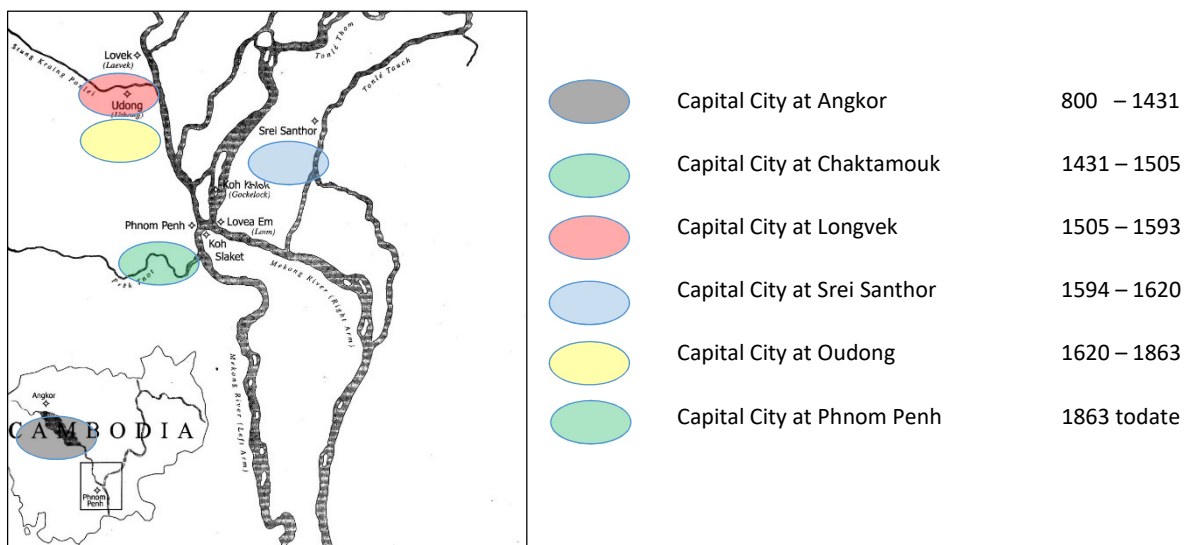


Figure 1.05: Map to show capital city locations during era three (Drawing by author 2016)

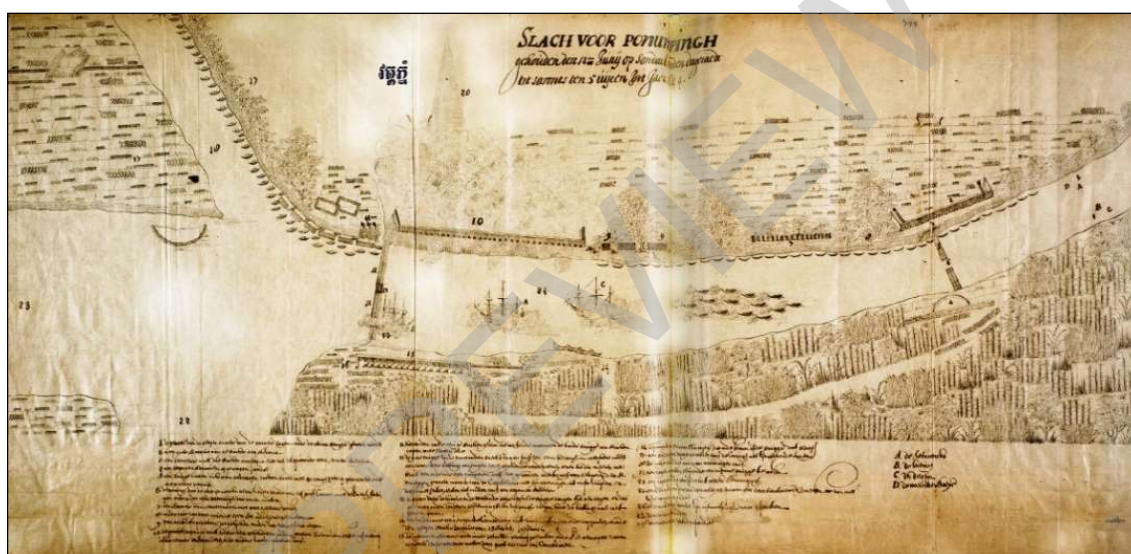


Figure 1.06: Dutch Map to show the 1644 Battle of Phnom Penh (CambodiaWatch 2018)

From the seventeenth century a growing foreign influence impacted the fortunes of the nation while the capital city was based at Oudong. East Asian merchants, European mercenaries¹⁸ and Dutch traders were all involved in violent royal intrigues (see Figure 1.06)¹⁹. A steady decline in maritime trade resulted as Cambodia's access to the sea became increasingly closed off by the Vietnamese to the east²⁰ and Chinese merchants to the south. 'Phnom Penh became a backwater, and by the eighteenth century Cambodia was a largely blank area on European maps' (Chandler 2008:105).

¹⁸ Most notably the escapades of Portuguese mercenary Diogo Veloso and his Spanish companion Blas Ruiz which can be read in the Portuguese American Historical and Research Foundation, Inc. (2013).

¹⁹ In 1643 the Dutch residents of the capital were massacred. This led to an unsuccessful avenging raid by the Dutch admiral Harouze in 1644 whose fleet was driven off barely intact (see Figure 1.06). See Van Der Kraan (2009) and Kersten (2003) for detailed and dramatic accounts of these events.

²⁰ Chandler details three long term effects of the Vietnamese intervention in 1658. 'First the takeover of Saigon (known to Cambodians even today as Prey Nokor), meant that Cambodia was now cut off to a large extent