

Text into Form

**Dwelling, Cosmos and Design Theory
in Traditional South Asia**

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Figure 1. Multi-family dwelling, Rangama, Sri Lanka.

PREFACE

This work on dwellings in India and Sri Lanka draws on ethnographic work in the South Asian region as well as on house building manuals that have been composed in the constituent cultures. The history of architecture as we know it is the story of monumental works, especially of European traditions. The intention of this work is to explore the ways in which architecture is produced and interpreted in social locations that have received far less attention and thus to contribute to the record on architecture cross culturally and its place in human experience. In recent years, the scope of architectural history has become more inclusive. Both vernacular and non-European traditions, once excluded from the received canon of the field and relegated to addenda in its surveys, have attracted fresh attention. In addition, the study of architecture, long known for its meticulous attention to taxonomic classification and formal comparison has become newly concerned with meaning, that is with built form that represents and transmits other areas of cultural content. It is common, or at least more common these days to read in the architectural literature of the messages that form encodes, of its narrative structure and of a work of architecture as a text. This is part of a conceptual language, variously infused from anthropology, linguistics and the literature disciplines, that belong to the new architectural hermeneutics.

The position that architecture has a representational function and an ideational dimension is not entirely new. The architect William Lethaby identified the “thought behind form” as the proper subject matter for architectural history over a century ago.

Further, along with arts such as music and sculpture, architecture has long been viewed in the discipline of anthropology as one of the “expressive” aspects of culture. The explicit formulation of architecture as textualized culture is on the other hand rather recent. The growing concern with ideas and meaning has opened up entirely new areas of investigation that point to strategies usually associated with the conduct of ethnography.

For South Asia, there is fortunately a body of exegetic literature that serves as a point of departure. When we examine architectural traditions around the world, we find that the monumental traditions are commonly textualized in a written body of theory building literature whereas vernacular forms such as dwellings are rarely enshrined in this way. The textualization of rules, precepts and intentions is a function of social valuation that commonly segregates the high architecture from the low. In the South Asian world area, somewhat atypically, evidence of both types is found. There is a revered canonical literature that pertains to the design of temples, palaces and cities. There is also a popular canon pertaining to the design of dwellings that is a veritable collage of building practices, astrological propositions, divinatory procedures and prescriptions for construction rites.

This work is concerned with architecture as 'text' in two senses, one metaphorical and the other quite literal. First, as Victor Hugo pointed out in *Notre Dame de Paris*, works of architecture perform socially sanctioned communicative and didactic functions. The cathedral around which he wove his story transposed the divine into lithic form and made it legible. The rich iconographic program and spatial reproduction of heaven on earth visually clarified the Scriptures. A work of architecture thus seem analogous to a book, and in this case was actually a clarification of a particular tract. Whereas Hugo dwelled on gross functional analogies between buildings and books, Lethaby traced strands of meaning, finding and substantive parallels in the content of works of architecture, myths and rites. All were texts that could be 'read' and seen as mutually self referential. Second, this work is concerned with the text in a more literal sense, that is as a written composition on form and production. It focuses on architectural treatises written in Sanskrit, Sinhala, Tamil and other languages of South Asia. The South Asian treatises serve as guides to design as well as to the performance of rites. They also allude very directly to mythic accounts of world order that are linked to architectural and ritual production. The architectural treatise is thus the format in which texts that are linked through a culturally produced logical are practically merged.

This work refers to such architectural treatises, three of which appear in facsimile and in English translation below. They are (1) The Sinhala *Mayimataya* (1961) which was composed by an unknown author in 1837. A previous version of the translation with less extensive annotation appears in Robert MacDougall 1971, (2) The Sinhala *Uluwahu Paenima*, (nd), a pamphlet on ritual practices, and (3) The Tamil *Sri Lalitha Navaratnam Manaiadi Sastiram* (1914).

I would like to thank the friends and colleagues who assisted me in bringing this work to its present form. I owe a debt of gratitude to the support I

received as part of a Faculty Innovation in Teaching Award, from the Office of the Provost, Cornell University. This award provided the funding and technical support for the final editing of the manuscripts and their electronic distribution. Special note should be made of the dedication of the project manager, Noni Korf Vidal, who stuck with me long after the project was officially over so as to bring it to a successful conclusion. Thanks are also due to Danielle Mericle of Cornell University Library and her staff. They provided assistance on this project as well as on the related database of images from South Asia (the Cornell digital collection *Beyond the Taj*) which are being used to support instruction on the arts in the South Asian world area.

Over the years many people discussed particulars and issues with the translations and helped me with them in important ways. They included Christobelle Amarasingam, Don David deSaram, Michael Manikham, Kumar Natesaiyer, Dharmasena Pathiraja, Anoma Pieris, and Milan Rodrigo. I owe a special debt to the Tiruchelvam family, to Punitham, Neelan and Sithie. The photographs in this work were taken by Robert MacDougall during our fieldwork in the Kandyan highlands. Thanks are due to Carlin MacDougall for drawing figures 14 - 18, and to Noni Korf Vidal for her work on figures 8 and 19 and for the design and production of this document.

Robert MacDougall's abiding interest in bringing the content of the popular textual tradition on architecture in South Asia to a wider audience stimulated this work. It is dedicated to his memory.

Ithaca, New York
March 2008



Figure 2: From left to right: Robert MacDougall, Bonnie MacDougall, Dharmasena Pathiraja, R.B. Ekanayake, P.W. Appuhamy, Rangama 1968.

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CHAPTER 1

INTRODUCTION

In a retrospective on the work of LeCorbusier, the European designer of the post war capital city of Punjab State at Chandigarh, India, his Indian colleague B.V. Doshi was asked whether the Swiss architect had ever studied any Indian philosophy. He was asked this question because a certain controversy had swirled around the “cultural fit” of the design of the Punjab city since its inception in the early 1950’s, and most particularly around whether a foreigner who apparently did not know much about India should have been given a free hand in designing the provincial capital from the ground up. “I doubt very much that he had read Indian philosophy,” Doshi reflected. “Basically, people who are philosophers don’t have to study religions or faith. He was a very secretive man, and though he was religious, he never admitted it. I think all creative people are mystics in a sense. Otherwise, how come that the Shodhan House¹ ramp which was done in Paris is very similar to the ramp in the Amber Palace at Jaipur which LeCorbusier had never seen. These people are not only psychic, but at a certain level of creativity, the intuitive level becomes universal” (Kagal 1987:55).

Doshi’s observation expresses a central insight about the experience of the architect wherever he works and whatever his culture, his beliefs about his craft and his quest. In this secular age in which architecture is increasingly viewed as self-referential, we often have to be reminded that its design was rooted traditionally in a sacred discourse whose metaphorical language can still speak to us and help us understand the aesthetic experience in other societies and in our own. The religiosity of architecture does not refer solely to the fact that many of the great buildings of the past were envelopes for altars or images, or that they were temples or churches or otherwise liturgical in function. Rather, the design of any building emerges from a special kind of vision that is likened to that possessed by the shaman in that it reveals some other realm of experience

¹ A work in India designed by LeCorbusier.

or knowledge. It is borne out of an imaginative leap with and through the eye of the mind to a world accessible at first only to the artist. The designer makes previously unrevealed order and beauty manifest, and in this sense, calls to mind the miraculous side of vision and experience.

LeCorbusier touched on this dimension of the creative experience in his writings on geometric order. In *The City of Tomorrow*, he wrote that geometry was “the material basis on which we build those symbols which represent to us perfection and the divine” (1927:1). Later in *The Modulor*, he wrote that the creation of order and beauty through architecture was motivated by a single force he called the “sense of the divine” which was directed to the single end of creating “a paradise on earth” (1954:76). Through these metaphors, he touched on a belief, shared by architects and artists through time and across cultures, that architecture participates in some larger, regular cosmic order that touches the perfect and the mysterious. The revelatory and extra-mundane meanings that have shaped architectural discourse thus link it to a wider field of experience structured through religious symbols. The power of the aesthetic experience lies in its departure from the mundane to a vision that lies beyond the understandings imparted by the commonplace experience of everyday life. It opens a view to something beyond that life, and this helps to explain why the arts have often been understood as divinely modeled or divinely inspired.

In India, Sri Lanka and elsewhere in Indianized Asia, the extrinsic origins of aesthetic inspiration are understood in social communities concerned with the arts through allegories that link them with the work and teachings of Visvakarma, the divine craftsman who produced palaces and cities for the gods. In the South Asian tradition, Visvakarma is the anthropomorphic representation of order and truth in the arts. Visvakarma’s singular example is one that has reminded South Asian craftsmen through time and across trades and aesthetic traditions of ideals in design. It is invoked in rituals associated with the production of architectural works and apprehended through his image. Colorful paintings, popularly reproduced as inexpensive posters, depict him as enthroned and surrounded by attendants and the tools of his craft.

In South Asia, architectural ideals and practices are woven into more inclusive systems of extrinsic signification that have meaning for audiences beyond the confines of communities associated with the practice of the arts. Exemplary models from myth are linked allegorically to the organization of the social and political world and to its production in a concrete format. The most elaborate examples of architectural programs with a divine prototype are the royal capital and the temple city whose ideal form is drawn from a model of the cosmic plan (MacDougall, 1996).

According to South Asian tradition, the world is organized around a central axis, called Mount Meru that is mounted on a square base oriented to the major directions. Mount Meru is girded by rock walls and by oceans containing different liquids in seven concentric rings. Atop Mount Meru lies the temple of the world, the celestial city of the gods. At a distance, along the eight major and minor axes in space lie other cities, those of the regents of the directions. Mythic space is thus imagined as an architectonic construction that is organized according to such principles as quadrature, centrality, ascension and concentricity. From medieval times to the present, the basic geometric order of this world pattern has served as a model for architectural production at various levels of social and political organization and at various scales. The ideal design of towns, royal palaces, temple compounds and houses all have a selective fidelity to the same fundamental organizational principles expressed in the cosmic plan.

OBJECTIVES OF THIS WORK

The architectural legacy of India and Sri Lanka is generally understood through singular monuments from the past of considerable scale and grandeur: stupas, temples, temple cities and other ceremonial centers, royal capitals, palaces and forts. This work is concerned with dwellings and hence with another side of South Asian architecture that is often viewed as lacking aesthetic merit, a true theory and historical significance. Monumental building traditions and vernacular architecture have usually been viewed in studies of the built environment as products of entirely different syntheses and thus as ideationally and practically disengaged. One of the circumstances that has encouraged the segregation of high architecture from the low is the process of textualization that unveils a rational theory and a set of intentions. High architecture has theorists and a literature of exegesis. Vernacular architecture, on the other hand, is usually viewed as arising somewhat more mysteriously out of 'tradition'.

This work provides an opportunity to examine a tradition in which both high and low architecture are textualized and ideationally linked. It explores the meaning of vernacular forms through an analytic perspective that differs from most conventional approaches to architectural analysis in several important respects. First, it takes as its point of departure, indigenous testimony codified in architectural treatises that order ideas and practices that guide builders, ritualists and their clients in the production of architectural works. It therefore examines explicit propositions set forth in the culture area for the generation and the interpretation of form that proceed from the general to the particular and from the abstract to the concrete.



Figure 3. Visvakarma, the supreme craftsman.

In the field of architectural history, architectural analyses more commonly focus on built form as the fundamental area of study and extrapolate the underlying rules or organizational principles from actual examples. Such works privilege the external viewpoint of the investigator for particular analytic ends. The focus on architectural treatises produced in the culture area does not wholly divest this work of the analyst's alchemy, but it does privilege the voices of practitioners, clients and theorists from within the culture.

Second, this work focuses on underlying architectonic values or principles that link the prescriptions set forth in the treatises with more general propositions about order within the constituent cultures. Inasmuch as the South Asian architectural tracts suggest that similar values govern architectural productions as a class including temples, houses and towns, the analysis here, although focused on a particular building type, has implications for the interpretation of the culturally constructed landscape as a whole. Architecture analyses that proceed from realized, individual works direct attention, through their very nature, to the study of surface structure. In architectural description, the attention to the architectural work as a formal composition has typically forced a segregation of dwelling from temple or palace as taxonomically discrete and apparently unrelated syntheses, even in South Asia where there is abundant evidence that formally divergent structures are ideationally linked.²

Third, this work adopts as a premise that the narrative about the ideal built world expressed in the architectural treatises simultaneously projects a vision of the ideal social order and is thus a kind of double entendre. Indeed, it argues that the social order and the design order are mimetic structures that are so closely conjoined in South Asian society that the treatises can be read as narratives about the construction of either or both.

In the following sections of this chapter, I will provide a general introduction to source materials on architecture in South Asia in the perspective of the differing social locations from which they have been produced. This discussion compares the content and social orientation of a canon for monuments written in Sanskrit with manuals in popular languages that centralize the dwelling as a topic. It will draw specifically on several recently translated treatises and

² Brown (1965) and Fergusson (1876) are the standard examples of works on Indian architecture that treat important monuments, mainly temples, as formal types that are ideationally divorced from town plans and non-monumental structures such as ordinary dwellings. They transpose well established interpretive biases from Western architectural scholarship that stress taxonomic classification, exclude meaning and focus on the monumental.

manuals on design composed in the modern languages of the southern regions of South Asia. Three of these manuals have been translated in their entirety as part of this work and appear as appendices. In Chapter 2, I will explore a single motif, the body, that has served as an organizational frame, central allegory and mnemotechnic device for architectural production through time and across regional traditions as it is interpreted in the treatises discussed in Chapter 1. In Chapter 3, I will integrate diverse materials from these works according to six architectonic values that order the production and reception of architectural meaning.

COSMOLOGICAL STRUCTURE AND ARCHITECTURAL INTERPRETATION

The first European architect to focus systematic attention on the relationship between cosmological structure and building form was William Lethaby in his seminal work *Architecture, Mysticism and Myth* (1891). Lethaby drew on the ethnological literature and his own knowledge of the great monumental building traditions of the world in order to argue that architectural form was a mimesis of world structure as revealed through sacred narratives. He proposed not only that architecture was a signifying system that obtains its meaning from other narratives or texts in culture, but that the relationship between text and form was the principal interpretive problem in architectural history and its true subject matter. To Lethaby, it made no sense to interpret a work of architecture solely as a formal composition. As he wrote in the introduction to his work:

The history of architecture as usually written, with its theory of utilitarian origins from the hut and the tumulus, and further developments in that way—the adjustment of forms to the conditions of local circumstance; the clay of Mesopotamia, the granite of Egypt, and marble of Greece—is rather the history of building: of ‘Architecture’ it may be, but in the sense we so often use the word, but not the Architecture which is the synthesis of the fine arts, the commune of all the crafts.

As the pigments are but the vehicle of painting, so is building but the vehicle of architecture, which is *the thought behind form* [italics mine] embodied and realized for the purpose of its manifestation and transmission. Architecture, then, interpenetrates building, not for satisfaction of the simple needs of the body, but the complex ones of the intellect (1).

Lethaby's insight that architecture serves mnemonic and didactic functions and is thus principally a channel for the reproduction and transmission of culture has guided the orientation of this work. Although many of Lethaby's contemporaries regarded his interest in mysticism as eccentric, in recent years, his central idea that the building is encoded with other messages has entered into an architectural discourse that has been shaped by linguistic and literary models. In architectural theory, as well as in other fields such as geography and anthropology that adopt the built environment as a topic for study, the building and the landscape to which it belongs have been explored as systems of signs or as 'texts' that can be read (Venturi, Brown and Izenour 1972; Duncan 1990). The semiotic approach to the analysis of the landscape has shifted attention from the description of the surface structure of the built environment to the study of underlying meaning and helped challenge other analytic assumptions and procedures in architectural history as well. They include the universality of aesthetic norms, the exclusion of vernacular traditions from architectural study, and the emphasis on the experience of the creator over that of the audience (cf. Upton 1991).

Lethaby's related suggestion that the built environment could be read as a visual clarification of a mythically derived world pattern has had a continuous history, especially in the literature that deals with works that are non-monumental, non-Western or both. Both within ethnography and in related fields an extensive second generation literature has arisen that explores the world pattern as a model for building form in both monumental and vernacular building traditions worldwide (Griaule 1965, Kramrisch 1946, Bourdieu 1973, Blier 1987, Duncan 1990). Indeed, from Dogon domestic forms in western Africa to the ceremonial centers of the kingdoms of Indianized Asia, there seems to be scarcely a single traditional building system that has not been interpreted in one way or another as a world model in microcosm (cf. Snodgrass 1990 for a review of this extensive literature).

This work is concerned with the links between traditional South Asian architecture and cosmological models and it therefore acknowledges a debt to Lethaby's insight that architecture is infused with meaning through other culturally constructed paradigms. However, it has been guided less by an intention to provide additional illustrations of the now self-evident relationship between world pattern and architectural form, than it has been by questions pertaining to the social location of this discourse. They include questions about who has been vested in the reproduction of the cosmos in the built form of the landscape, under what circumstances, and to what ends.

In recent works on royal building programs in Indianized Asia, writers have amended Lethaby's central thesis so as to imbue the projection of a cosmological order through architecture with a social and political intent. Cosmological narratives projected in royal capitals or ceremonial centers have been analyzed as projections of sovereign authority and as affirmations of the social order (Aung Thwin 1987, Reynolds 1987, Duncan 1990, MacDougall, 1996). In his work on a royal building program in nineteenth century Sri Lanka, Duncan succinctly summarized this analytic perspective, proposing that the built environment is a system of signs through which "people, particularly powerful people, tell morally charged stories about themselves, the social relations within their community and their relationship to a divine order" (1990:20). In his stimulating and insightful work, Duncan unearthed written and orally transmitted historical commentary to contrast the hegemonic reading of a single landscape, the revitalized highland capital at Kandy, provided by its sovereign producers with the contestatory readings provided by others in the society, especially by those who were forced to construct it.

This work is likewise concerned with hegemonic and contestatory readings of the landscape, but it centralizes testimony of a different type that the myths emphasized by Lethaby or the contestatory accounts of sovereign activities analyzed by Duncan. It contrasts classical treatises on architecture that are viewed as authoritative sources produced in an illustrious past with more recently compiled vernacular manuals on dwellings.

In South Asia, the social forms and the political order that are visually clarified in the form of the built world are codified in models for the production and interpretation of that world expressed in such written narratives. These works claim to belong to the field or 'science' of architecture, that is to be about the construction of the landscape, rather than to be about kingship, cosmic origins or other matters that an analyst might discern as covert subtexts within them. The system of meaning projected by the built environment is co-scripted in literary form as a set of normative, sequenced design propositions that ostensibly underlie the ideal dwelling, temple and city. These treatises are thus not merely of interest as tools for the interpretation of the landscape. They are independent cultural productions that are amenable to the same intertextual analytic procedures that might be applied to realized form. The 'story' that architecture tells about the social world, the political world and their relationship to an extrinsic order is thus twice-told in the culture in two complementary media that, to paraphrase Lethaby, are the vehicles that manifest and transmit the thought behind form. One vehicle is composed of the words of the written text, and the other of the form of architecture itself.

The treatises in question comprise a body of literature in which the allegorical relationship between built form and an extrinsic cosmological order has structured aesthetic, social and political experience throughout the South Asian culture area. In this work I shall place particular emphasis on contemporary manuals on housebuilding as a genre and as productions of a social world that is located in the village or little community. This body of materials permits us to explore the senses in which there a shared body of “thought behind form” in this complex, varigated and indeed very populous culture area, and to what extent design experience been socially layered or contextually framed within regional traditions, sectarian communities and language areas.

Regrettably, the popular written tradition on South Asian architecture has received no systematic attention in the English language literature and is virtually unknown outside the culture area in which it has been composed. Even within the scholarly community concerned with South Asian architecture and culture, in the absence of translations, there is no systematic understanding of the content of these works. I shall compare the form, content and intentions of these manuals with better known, widely quoted and more comprehensive Sanskrit texts that interpret architectural production and social experience ‘from the top down’.

THE ETHNOGRAPHIC BACKGROUND

My own interest in the links between architectural production, cosmological structure and the social world was first stimulated during a field study in a ‘little community’ in the South Asian region.³ Rangama is the pseudonym I have given in writing to this Sinhala-speaking village located in the central highlands or Kandyan region of Sri Lanka where I resided in several periods during the 1960’s and 1970’s (MacDougall, 2003).

My interests in popular architectural theory began with a focus on housing form. In much anthropological description, a stereotypical or ideal house is described and drawn in plan, and in some cases has served as a springboard for profound generalizations about world view, the social order and the cultural construction of space (cf. Bourdieu 1973 on the Berber house). The modest houses

³My use of the term ‘little community’ to refer to the societal dimension of peasant culture in South Asia follows Redfield (1956) and Obeyesekere (1963). Both authors have explored, Obeyesekere for Sri Lanka in particular, the shared commonality of meanings that link the ‘great traditions’ of complex civilizations (usually transmitted and legitimated by textual communities) and the ‘little traditions’, that is, community centered popular culture.

in this village revealed so much variation in the number and arrangements of rooms so as to leave my research partner Robert MacDougall and I wondering how other ethnographers who had worked in Sri Lanka, many of whom admittedly had a less intense interest in these details than we did, had settled on a 'typical' dwelling to present. As we explored the unifying logic, the variations in design and how they had developed over time, the residents' preferences in plan form, materials and a host of other matters became frequent topics of discussion.

These questions were of particular interest since the residents had begun to improve their dwellings by replacing traditional materials with 'modern' ones if they could afford it. At first, few could afford very much, but from the outset, several village structures were already sporting metal roofs instead of the traditional thatch. As part of the changing pattern, a large brick 'bungalow' of modern design with glass windows and a metal roof had been built at government expense for the schoolmaster and was the first of its kind in the village. The first house we had occupied, roofed in thatch, walled in wattle and daub and measuring no more than 150 square feet, eventually fell into disrepair and was made into a storehouse. Thanks to the schoolmaster who was elsewhere on vacation, for a few months one summer we became temporary occupants of the new bungalow which was approximately four times the size of our previous dwelling. Although completely atypical at the time, others like it would follow.

At the time I had no idea that residents who openly admired the dwellings of the town would actually soon build them thanks to a shrewd and timely entry into the cultivation of cardamom, a lucrative cash crop. Over the years that followed, the village was entirely reconstructed with the proceeds from these ventures. By the late 1970's, many residents were able to hire contractors from the towns who were well versed in modern construction techniques including the use of dynamite. They imported roofing tiles, dressed lumber and cement from elsewhere in Sri Lanka and blasted locally available rock so as to construct dwellings of dressed stone. In my initial fieldwork, however, I was blind to the impending transformation and intent on sorting out the material record before me. It was in this context that the following conversation taken from my field notes took shape. It took place between me (B) and a 65 year old resident who was a specialist in astrology (A).

- B:** I'd like to ask a few questions about the different kinds of houses in this village and which ones are good ones—well designed ones and so forth, and which ones are not so well designed. Perhaps some houses, have more rooms than others, or better roofs, or better sites and so forth. What are your thoughts on this matter? What differences do you see in the design of the houses here?
- A:** All the houses here are the same.
- B:** The same?!
- A:** In the towns you get big bungalows and things like that, but the houses here are all alike.
- B:** (Undaunted. Taking a different tack.) What about this house? It's different.
- A:** It's a bad house.
- B:** Really? What's wrong with it?
- A:** Its haunted. It's a very unlucky place. An evil bird lives in the garden here. When it cries, it means someone will die.
- B:** What about the design of the house; the way it was built? What are your thoughts on that?
- A:** That's what I'm talking about. It was built incorrectly. The people who did it didn't consult the proper persons or books, and they made mistakes. That's the reason it's haunted. No one can prosper in this house.
- B:** What kind of mistakes?
- A:** I don't know about each and every mistake. Who can say what mistakes uninformed people will make. But it's sited on *preta* (un-reborn, zombie-like restless spirits) land. Also, it faces north. I have some books on this subject.
- B:** Will you show them to me?
- A:** Yes.
- B:** What about the design of your house?
- A:** We have lived without incident there, so it must be a good one.
- B:** Who built this house?
- A:** Some outsiders from Kandy. They built it on the school playground, so now there is no place for the children to play.
- B:** But was it good for the children to be playing on *preta* land?
- A:** The two things are not connected. Every site has a section called *preta* land, and it is said to be bad to build a house there. But it is only bad for the house. There was no harm to the children. It's just a name for a section of the site.



Figure 4. Dwelling, Rangama, Sri Lanka.

- B: Tell me a little more about *preta* land.
- A: When you go to lay out a house site, you draw it in four squares. The inner square is called the Brahma sector, the next the one for the gods, the next the one for mortals and the outermost square is the one for the *pretas*. (Resident draws a picture showing four nested squares.) A house can cover any of the inner three squares but not the outer one. The schoolmaster's house covers the entire site including the outer one.
- B: So it is not good to have a house covering the entire site without an unbuilt area of land around it?
- A: It brings bad luck to the occupants.
- B: Were there any other problems in building this dwelling that you can think of?
- A: There were problems with the elephants . . .
- B: Elephants? (There were no wild elephants in this area of the country.)
- A: They used elephants to bring the metal for the roof. The elephants developed sores on their bodies.
- B: Was that due to the design of the house too?
- A: No. That was due to evil eye.

To this list of 'mistakes' singled out by the astrologer I could have added a few of my own that had more immediate consequences for my work. The roof on the schoolmaster's dwelling had been inadequately secured by its builders so that during the summer windy season the metal sheets rose and fell in the stiff breezes. At times, the noise of the flapping roof made it necessary for us all to shout. As I transcribed the tapes of our nightly interviews back in the United States, the roof seemed to have a voice of its own and rumbled in the background like thunder.

It would be disingenuous to suggest that the architecturally mediated view of experience expressed by the astrologer was a completely new idea to me at that point in fieldwork, although it was my first intimation of how controversial the particular dwelling in which I was temporarily residing had actually become. My interest in the divinatory side of architectural design as well as textual authority for its practice dated back virtually to the time of my first arrival in Sri Lanka. In the first few weeks of fieldwork in the village, the Divisional Revenue Officer of our area produced an inexpensive Sinhala pamphlet called the *Mayimataya* as an inaugural gift that dealt with dwelling design from this point of view.

The basic thesis of the *Mayimataya* was that as a form the dwelling partakes of broader cosmological forces and patterns and thus influences the



Figure 5. Housebuilding with dressed stone, Rangama, Sri Lanka.

fortunes of its occupants and designers. A translation of this document appears as Appendix I. I recognized it as the same tract on housebuilding that had been briefly summarized by Ananda Coomaraswamy over half a century before in his *Medieval Sinhalese Art* (1908). I subsequently found that the *Mayimataya* pamphlet was a widely circulated document that could be obtained from any Sinhala language bookseller in large towns such as Kandy, the cultural and commercial epicenter of the Sri Lankan highlands, and indeed often from small stalls hawking pamphlets. The *Mayimataya* pamphlet cost fifty cents and was produced on colored paper, generally yellow but sometimes green or rose. It was composed in 282 or 283 rhyming couplets, depending on the edition. There were no illustrations within. On the cover, of which there were several versions, a cobra called the Bhumanaga or Earth Serpent was depicted, paired in two cases with a line drawing of a modest house that looked vaguely like the schoolmaster's.

Whenever I passed by a book or pamphlet seller, I would generally inquire about the *Mayimataya* and ask if there were other books in stock on housebuilding. In this way, I acquired copies of the *Uluwahu Paenima*, a work on housebuilding rituals also mentioned by Coomaraswamy which appears here in translation as Appendix II. I also built up a collection of other works on astrology that contained passages here and there pertaining to building houses and acquired many more copies of the *Mayimataya*. In Colombo, the capital of Sri Lanka, where major publishers and booksellers are headquartered, I learned about another book called the *Vastu Vidya*, a major work written in the 1930's said to be the final Sinhala language word on this subject. It was not available in the market and said to be out of print. I visited the publisher P.K.W. Siriwardhana at his workshop, — just in time, it turned out, to obtain the last complete copy he had on hand.

The book was a thick document printed on the finest paper that ran to approximately 300 pages summarizing everything the author Y.A.H. Appuhamy had been able to compile about the science of building. His sources ranged from classical Sanskrit texts written in India to Sinhala customary practice. This book was intended as an authoritative handbook for the astrological community. Unlike the Sanskrit texts on which it was partially based, however, the house was the principal design problem addressed. Materials from the *Vastu Vidya* that amplify or contradict the details and themes of the *Mayimataya* or otherwise contribute to the composite picture on architectural practice in South Asia have been explored in this monograph and appear in appropriate sections below.

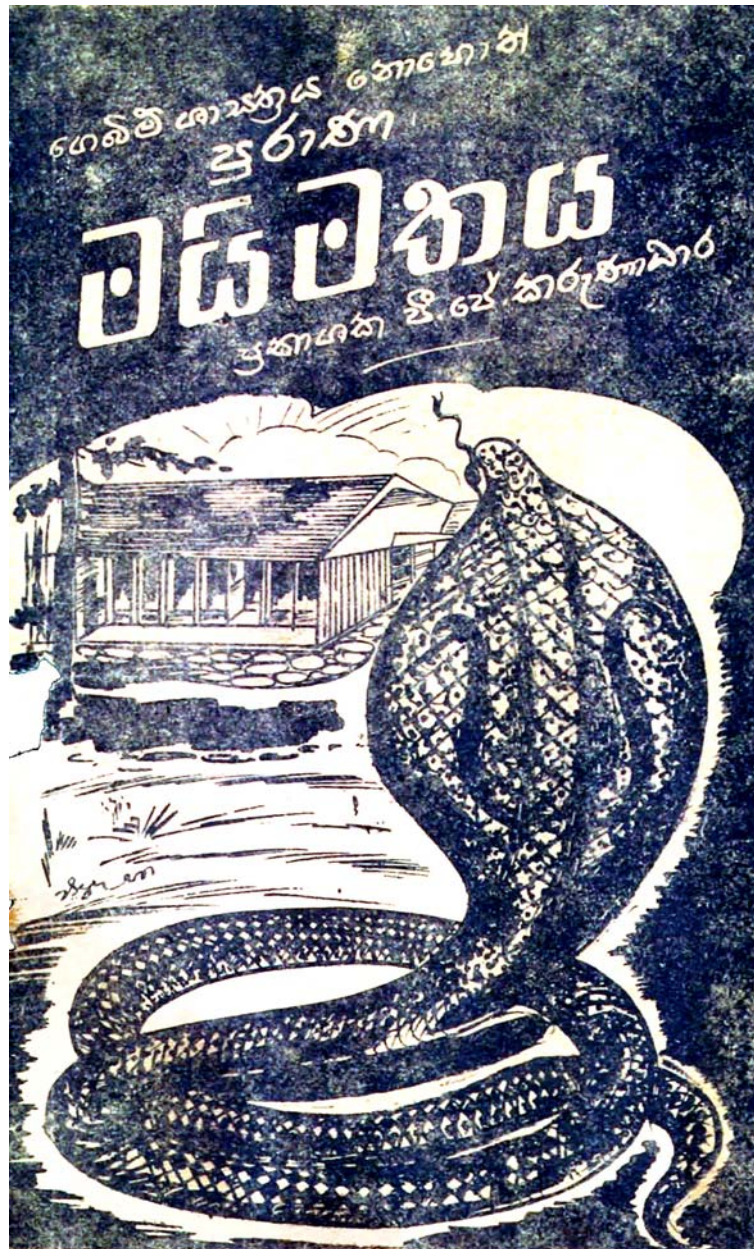


Figure 6. *Mayimataya* pamphlet cover showing the Earth Serpent.

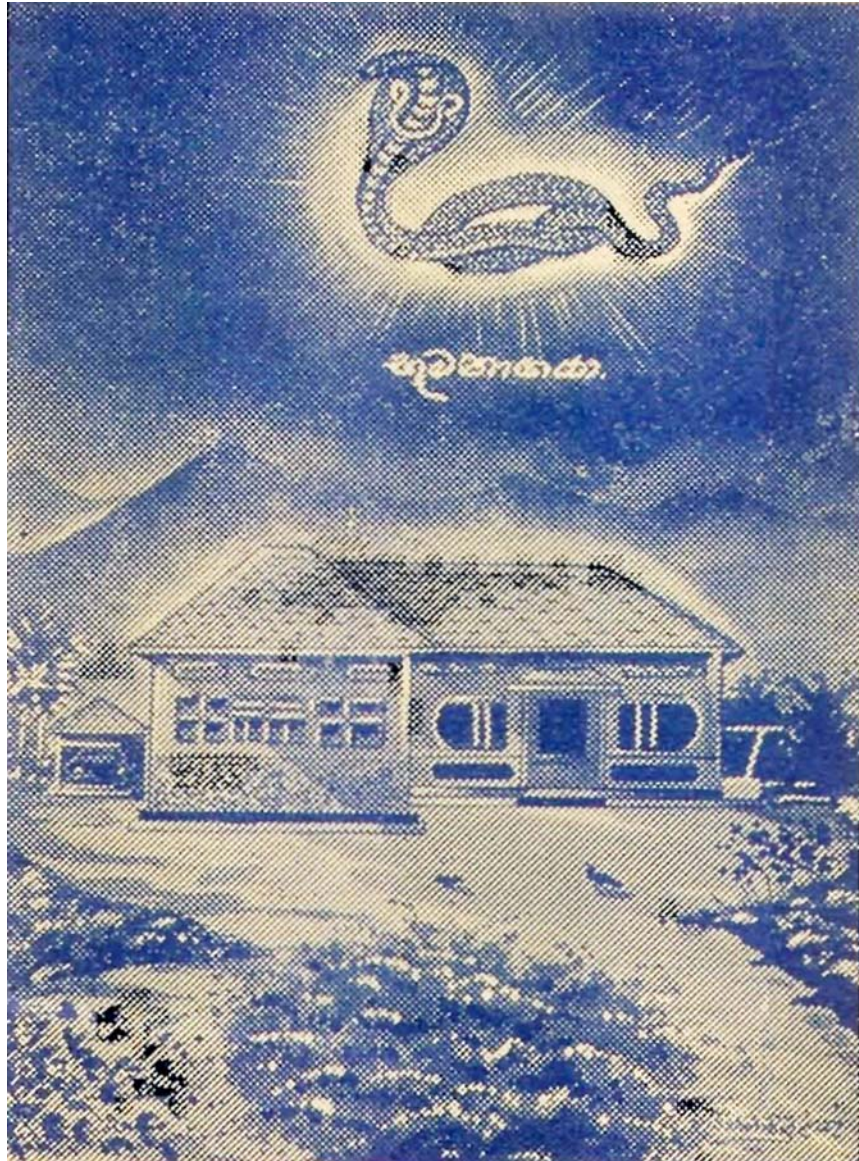


Figure 7. *Mayimataya* pamphlet cover showing the Earth Serpent.

As chapbooks, the *Mayimataya* and to a lesser extent, the *Uluwahu Paenima* were well known to the astrologers in our village, to Buddhist monks and to others involved in one way another in the rites and techniques of traditional housebuilding. Clearly, good translations of these documents were important to any characterization of the corpus of local knowledge on this subject. My first efforts to begin producing them, however, left me with an understanding of why Coomaraswamy has been content to treat the *Mayimataya* in a succinct and generalized summary and to leave the *Uluwahu Paenima* alone.

Some of the astrological questions and those pertaining to housebuilding rites were cleared up in discussions with the specialists in my village who were knowledgeable about such things, although there were enigmatic verses, especially in the *Uluwahu Paenima*, that no one there really understood. Even though both works had become productions of the popular press and therefore were ostensibly intended for a less erudite audience than a work like the *Vastu Vidya*, I actually found the latter easier to read. The verses in the *Vastu Vidya*, many of which were in Sanskrit, were at least accompanied by clear prose commentary in Sinhala, whereas clarity of presentation in the *Mayimataya* seemed to be hobbled by considerations of rhyme and meter. Eventually, I finished translations of both the *Mayimataya* and the *Uluwahu Paenima* that satisfied me, but not until I had consulted numerous dictionaries and botanical indices, at least a dozen people I considered more knowledgeable than I was, and sources in other modern languages on every sticking point.

TEXTUAL SOURCES IN SINHALA, TAMIL AND OTHER SOUTH ASIAN LANGUAGES

The anonymous author of the Sinhala *Mayimataya*, who composed it in 1837, claimed it was based on a South Indian work of the same name written in Sanskrit, the Latin of South Asia and the vehicle of Hindu tradition and liturgy. A highly generalized comparison of the chapter headings of the Sanskrit *Mayamata* with those of another encyclopedic work on architecture in Sanskrit from the same period, the *Manasara*, showed that the former was a work of much greater scope than the modest chapbook circulated in Sri Lanka (Acharya 1946:159-161). Initially no European language translation of the Sanskrit *Mayamata* was available, but soon Dagens published one in French (1970). A comparison of the works made it clear that the Sinhala chapbook was not really an abridgement of the Sanskrit work but was indebted to entirely different sources.

At roughly the same time, I read succinct English summaries of two Tamil manuals on housebuilding, one from India and one from Sri Lanka (Kearns 1876 and Chelvadurai-Proctor 1927), that seemed to address themselves to the same topics as the Sinhala *Mayimataya*. A similar work in Malayalam, the *Manushalaya Chandrika*, was characterized as an authoritative source on housebuilding by Pillai (1948). This stimulated my interest in the folk manual on housebuilding as a genre in the South Asian culture area. Over the next decade, both Robert MacDougall and I collected dozens of such works throughout India in most of its major regional languages including Hindi, Bengali, Oriya, Tamil, and Malayalam.

I had a distant intention to translate some of these materials and to present them side by side with the Sinhala text. With the help of graduate students and friends who knew some languages I could not read (my varying competencies in modern South Asian languages are limited to Hindi, Bengali, Sinhala and Tamil), rough summaries of the contents, usually the table of contents if there was one, of many of these works were later made. The course of least resistance would have been to single out some Hindi materials for translation, since aside from Sinhala, that was the South Asian language I knew best. Since my work on the *Mayimataya* had familiarized me with the technical terminology, especially the astrological terminology, found in housebuilding manuals, much of which is derived or borrowed from Sanskrit in vernacular treatments and thus shared across language boundaries, the Hindi works were comparatively easy to read. However, Hindi is spoken in North India and Sinhala at its southern geographical extreme approximately 1,000 miles away. Although Hindi, like Sinhala, belongs to the Indo-Aryan family of languages, the social and political histories of the areas in which they are spoken have not been closely interwoven, and the relationship between their building traditions is likewise remote.

A comparison with manuals in Tamil seemed to have a more coherent logic, although Tamil is unrelated to Sinhala, and the communities in which they are spoken are popularly constructed in Sri Lanka in terms of their differences rather than their common links. In Sri Lanka, the sense of difference has unfortunately laid the groundwork in the modern era for mutual antagonism, ethnic strife and most recently, especially after 1983, for armed conflict between government forces and Tamil separatists over the issue of Tamil self-determination. Sinhala is separated geographically from the rest of the languages of the Indo-Aryan group, all spoken primarily in North India, by communities in which languages such as Tamil, Telugu, Kannada and Malayalam belonging to the unrelated Dravidian family are spoken. The areas in which Dravidian languages are dominant occupy most of peninsular India as well as the northern tip of Sri

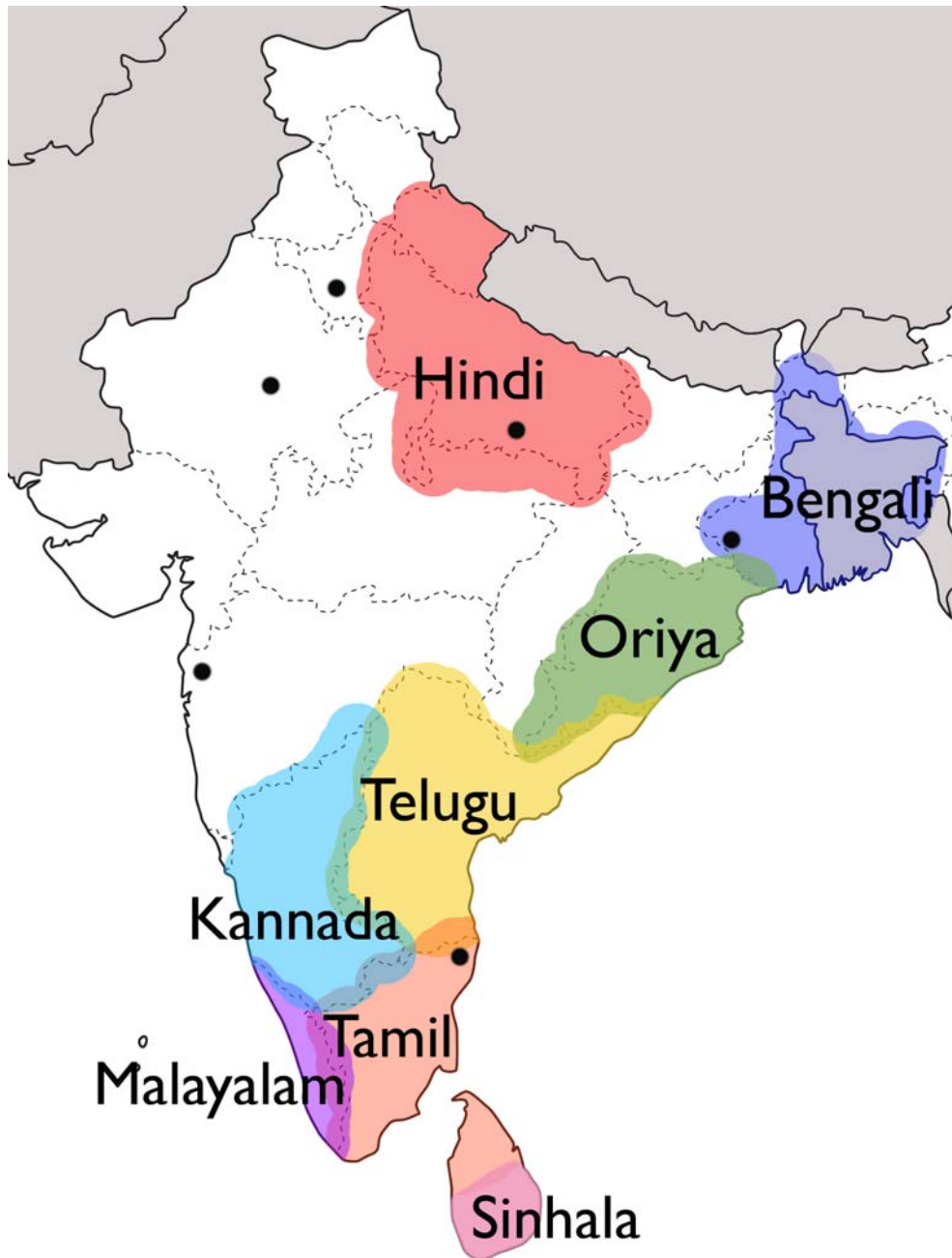


Figure 8. Map of South Asia showing principal languages.

Lanka which is ethnically and linguistically Tamil. Tamil speakers comprise a minority community in modern Sri Lanka (approximately 20% of the population) and a majority one in the adjacent and much more populous state of Tamil Nadu in southeastern India.

Since ancient times, the political and cultural destinies of the Tamils and the Sinhala speaking people have been intertwined. Tamils from South India invaded Sri Lanka, and in various periods of the island's distant history established kingdoms in the north. Later, after the Sinhala kingdom established Kandy in the central highlands as its capital, its rulers were supplanted after a period of time by the relatives of their South Indian wives. Tamil rulers ascended the throne of the Sinhala kingdom at Kandy in 1739 and reigned there until British conquest in 1815. In the architectural realm, Tamil building specialists and astrologers served at the courts of Sinhala rulers who undertook massive building programs at sites such as Polonnaruwa in the Dry Zone of the north. One of the few Sri Lankan architectural texts composed in Tamil, and the only one to have been discussed in the English-language literature, the *Sarasothisimalai* was supposedly composed by a Tamil astrologer at the court of the Sinhala king Parakrama Bahu in 1310 (Chelvadurai-Proctor 1927:339).⁴ At Kandy, it was monarchs who were themselves ethnically Tamil who embarked on ambitious, and as Duncan (1990) has recently reported, highly controversial reconstructions of the city.

In this monograph I have compared the materials from the Sinhala sources with two manuals in Tamil. Both are topically and organizationally similar works on housebuilding from South India now produced for the popular press. The first, the *Manaiadi Sastiram*, is a manual in verse with prose commentary that has been widely circulated in the Tamil speaking community for a century or more by various publishers.⁵ This work contains materials attributed to Maya, a legendary figure in the history of South Indian architecture and the reputed author of the Sanskrit *Mayamata* which also was produced in

⁴ According to Chelvadurai-Proctor, this work was produced for the popular press, but unfortunately, I have been unable to examine it. Materials that the reader is led to believe are derived from this text actually adhere to the contents of modern popular works in Tamil such as the *Manaiadi Sastiram* very closely, that is word for word. If this is the case, then the *Sarasothisimalai* is very probably a modern forgery. If the author is quoting from the *Manaiadi Sastiram*, a text he mentions briefly and does not characterize, it is by no means made clear.

⁵ The *Manaiadi Sastiram* manuals currently in print are reproduced from the same plates as a very old edition in my collection. The two central numerals of the date on this manual have been partially obliterated by a purple stamp. It could be 1902, 1892, or 1882.

the Tamil speaking areas of South India. Maya is commonly acknowledged as an authority in the popular manuals in Tamil. Since the author of the Sinhala *Mayimataya* seemed to have departed significantly from the Sanskrit work on which he said his was based, it occurred to me that he was informed by Tamil sources ascribed to Maya instead. This is a matter that will be addressed in greater detail below. The second work, the *Sri Lalitha Navaratnam Manaiadi Sastiram*, is a work in prose that acknowledges works ascribed to Maya as authoritative sources. It was published in 1914 and is the oldest Tamil manual with a verifiable date that I have in my collection.⁶ A translation of this work appears as Appendix III.

The comparative scope of this survey of housebuilding materials is extended to manuals from several other language areas, although my treatment of them is less extensive. They include the *Manushalaya Chandrika*, a unique work on housebuilding translated from Sanskrit into Malayalam, another Dravidian language of South India spoken in Kerala.

Since I do not know Malayalam, my understanding of the materials in the *Manushalaya Chandrika* is based on the references to it in Pillai (1948) as well as on a detailed summary of the Malayalam manual in my collection that I had prepared as part of this work. There are also references here to materials from manuals produced in North Indian language communities I have surveyed in the original as well as to materials in Oriya, a language of northeastern India, that have been translated by Bose (1932) and by Boner and Sharma (1966).

THE SCIENCE OF VASTU SASTRA AS A UNIFYING IDEAL

Throughout the South Asian culture area the principles of architecture are matters of textual authority. The deference to the text as a source of truth in architectural design is rooted in assumptions about its historical, legendary and sacred origins. In India, Sri Lanka, and other areas of Hindu and Buddhist

⁶ After the compiler wrote this manual, he published a shorter pamphlet under the same title that he referred to as "Part 2" which is not translated here. By the time I obtained it — from a different bookseller than the main book, it was in tatters and lacking a cover. The only way of ascertaining the rough publication date is a testimonial in the back of the book dated 1921. In the first work, there are no references to the Vedic ritual assemblage of deities (see Chapter 2) which is a topical centerpiece in Sanskrit texts but not in Tamil popular manuals. The author seems to have consulted works he considered authoritative after he wrote the main book and decided that this topic was a conspicuous omission. The emendation is devoted in large measure to presenting this information and other particulars gleaned from Sanskrit texts.

South Asia, the principles of architectural design are set forth in a body of materials called *vastu sastra*. Vastu sastra or as it is sometimes called, *vastu vidya* or *silpa sastra*⁷ is a body of knowledge which, like astrology with which it shares overlapping content, and ayurvedic medicine is one of the traditional South Asian sciences. As a named category that identifies a specific area of cultural content, vastu sastra identifies what Duncan has termed a discursive field, that is, “a range of competing discourses constituted by a set of narratives, concepts and ideologies relevant to a particular realm of social practices” (16).

The origins of vastu sastra lie in the the building of sacrificial altars in ancient India, but its growth and diffusion as a body of learning is embedded in the more recent development of an indigenous monumental building tradition that began to take shape early in the first millenium of the current era. The process of codification of its contents in writing came later and in India was largely the work of the Brahmin community whose impress determined its content, social orientation and scope. Although the dating is uncertain, the temple forms described in some of the encyclopedic codifications provide rough chronological brackets. Dagens suggests that the building forms described in the Sanskrit *Mayamata* point to a compilation date in the Chola period between 800 and 1100 A.D. (1985:vi).

The vastu sastra literature is laid down in treatises, the oldest of which are in the Sanskrit language. Some of the more important Sanskrit texts such as the *Manasara* and the *Mayamata* are works entirely devoted to the exposition of this science. These two essentially parallel works, like others of their type, deal with site selection and layout, building types, styles, architectural elements and the rites attendant on bring order into being. Works primarily devoted to astrology and divination often contain substantial sections on architecture as well and expand the scope of the written record. The more general astrological works, especially the widely read *Brhat Samhita*, a work of uncertain date attributed to Varahamihira, have exerted a particularly strong influence on popular architectural manuals.

The Sanskrit masterworks on architecture are popularly regarded as part an unbroken tradition that comes down from the times of the ancients. However unbroken it may be, public interest in these works was largely orchestrated by revivalist movements that intensified during the late nineteenth and twentieth centuries under British colonial rule. At a time when European architectural and engineering traditions were beginning to have an impact on the South Asian

⁷ This term is sometimes used more broadly to include sculpture and other crafts.

landscape, a literature emerged to demonstrate that there was an indigenous science of comparable stature that was truly Indian. It elevated a sectarian literature on design and rites composed by Brahmin literati to the status of a national science.

The Sanskrit treatises were first brought to the attention of an English language audience by Ram Raz in his *Essay on the Architecture of the Hindus* (1834). This work summarized materials from the *Manasara* and other classical sources to suggest that Hindu architecture, especially temple forms, arose from a codified theory and was based on scientific principles. During the years that followed, many Sanskrit works, all of which had been previously been confined to a manuscript tradition, became available in print. Critical editions appeared, frequently accompanied by commentary in modern Indian languages and sometimes in English. The *Manasara*, a Sanskrit work composed in southern India, is the treatise best known to an English language audience, primarily because the translation and promotion of this work became the lifelong project of one author who eventually produced seven volumes of material pertaining to it (P.K. Acharya 1927-1946).

Scholarly understandings of meaning in architecture through Indian eyes are based on the translations as well as on broader studies on art and meaning by Indologists. The most important English language contributions are contained in the works of two individuals in the field who read and interpreted primary sources, the prolific Ananda Coomaraswamy and Stella Kramrisch whose *The Hindu Temple* (1946) remains the definitive work on form and meaning.

In its broadest sense, the science of vastu sastra deals with issues at all levels of architectural complexity including the design of temples, palaces and towns. Like the other traditional sciences of South Asia, its origins are presumed to be other-worldly and its principles universal. The knowledge contained in it is personified by Visvakarma who is said to have revealed it to sages and otherwise to have inspired scholars and craftsmen alike by his perfect example. Although the Sanskrit treatises that come down to us are the work of entirely mortal but often anonymous writers, they are ascribed to the sages as authors, or in some cases to Visvakarma himself, and are regarded in the culture as an authoritative corpus rooted in antiquity. Vastu sastra is sometimes referred to as 'the Hindu science of architecture'. It is nonetheless a science which, as the Sri Lankan tradition amply demonstrates, has found meaning in South Asia beyond the specific confines of the Brahminic tradition.

THE VERNACULAR MANUAL AS A TEXTUAL GENRE

The written tradition associated with vastu sastra also includes a body of vernacular manuals that are located in the experience of the popular culture. Until the 19th century, when print media made the literature on architecture more widely available, vastu sastra as it was known outside of the textual community, was a body of knowledge inscribed primarily in traditional practices. Although there was a manuscript tradition of some historical depth that provided commentary on classical treatises in vernacular languages, the works could only be reproduced through laborious copying, and in any case, very few people in the traditional culture could actually read them. Well into the twentieth century, the overwhelming majority of the Indian population was illiterate in their own language. As for materials written entirely in Sanskrit, they were even more remote from popular experience since this language was then as now the province of priests.

During the nineteenth century, the popular architectural manual emerged as a new genre. Writers amended the classical works for general consumption, incorporating additional materials from the field of astrology and from traditional practice. These works were generally circulated as cheap pamphlets and adopted vernacular forms, generally the dwelling, rather than monuments as their principal subject matter. They provided community-based specialists such as village astrologers with tangible evidence that customary practice is, as it maintains, a matter of textual authority.

In his 1932 effort to explicate Orissan building forms by referring to manuscripts interpreted with the aid of contemporary craftsmen, N.K. Bose focused attention in part on vernacular materials written in Oriya, a language of northeastern India. Aside from this important precedent, however, vernacular materials have been given little attention in translation studies on the South Asian architectural canon which have emphasized classical treatises regarded as more complete and authoritative. The three South Asian manuals on dwellings, the Sinhala *Mayimataya*, the Sinhala *Uluwahu Paenima*, and the Tamil *Sri Lalitha Navaratnam Manaiadi Sasitiram*, that appear in translation here as appendices are examples of this genre and serve as points of reference in this discussion.

TEXT I: THE SINHALA *MAYIMATAYA*

The Sinhala *Mayimataya* is a manual of 283 four-lined verses on housebuilding. Like other works of its genre published as chapbooks in the modern languages of South Asia, the Sinhala text is compressed in length,



Figure 9. Village carpenters and their tools.

complexity and content when compared with those of the venerable Sanskrit corpus. It is concerned principally with dwellings. Iconography and larger scale design problems such as temples and villas discussed in greater detail in the Sanskrit treatises are mentioned only in passing. These restrictions in content can also be characterized formally: the text emphasizes point, line, and the horizontal or planar configuration of the buildings. Design problems related to the building in elevation or as a volume which are discussed in classical treatises are omitted in the manual. Furthermore, with the exception of a brief treatment of doors (there is no mention of any other aperture),⁸ there are no prescriptions pertaining to the vertical plane including building height. The latter is particularly noteworthy because the text is concerned with correct proportions with the building in plan in great detail. Moreover, the text does not deal with volumetric issues such as staging or massing which are posed by the temple forms in the South Asian monumental tradition and treated in the Sanskrit texts. Finally, a substantial portion of the text is given over to astrological or divinatory materials which have, over time, become such increasingly important matters in design that Appuhamy (1937) calls architecture one branch of the giant tree of astrology (i). This concern with fixing the plan in time as well as in space according to the principles of astrology is a characteristic of traditional South Asian design theory that has come to dominate vernacular interpretations of this science.

The Sinhala *Mayimataya* differs from most of the South Asian chapbooks of its genre in its unswerving insistence that it is based on a single authoritative work, that is of a sizable (3,300 verse) text of the same name. The extant texts in the modern South Asian languages are often the personal formulations of a particularly knowledgeable or well-read specialist and summarize materials from a range of sources which nonetheless are not always systematically acknowledged or reconciled if they are in conflict. In the case of the *Mayimataya*, the Sinhala author focuses on just one and poses as translator as well as interpolator. In verses 7-13, he states his mission. His principal objective is to make knowledge heretofore accessible only in Sanskrit available to all in Sri Lanka through the medium of Sinhala, the language of the Sri Lankan majority. Although known to literati, Sanskrit is not formally perpetuated through a designated priestly

⁸ In general, windows are not important architectural elements in the design of the Sinhala dwelling and may be completely absent in more modest structures. The importance of the window in facade organization appears to be of recent origin. The word for window is borrowed from Portuguese. The door is a focus of ritual activity, and its frame may be embellished by carving. The window is not accorded the same treatment either ritually or aesthetically.

class in Buddhist Sri Lanka as it is in Hindu India. The language of canonical Buddhism is Pali. The Sinhala manual is thus represented as a translation of an important cultural resource which otherwise would not have a significant Sri Lankan audience.

INTERPRETATIONS OF THE PAST: THE RELATIONSHIP OF THE *MAYIMATAYA* TO OTHER SOURCES

The Sanskrit work on which the *Mayimataya* is presumably based is ascribed to a “wise and learned architect” named Maya of whom no mention is made in the Sinhala version. This is noteworthy, if for no other reason, than the text bears his name (*Mayamata* is taken to mean ‘the thoughts or opinions of Maya’). One explanation for this conspicuous omission may be that Maya is inconveniently associated with the South Indian school of temple building and hence with Dravidian language and culture from which the Sinhala speaking people have oftentimes sought to distance themselves in forging a self-conscious Indo-Aryan cultural identity. Some sources regard Visvakarma as the architect of the gods (he is credited with the design of the palace of Indra, the tutelary god of the ancient Vedic texts) and Maya as the craftsman for their adversaries, the Asuras. In the Sanskrit *Mayamata*, both names are mentioned: Maya is set forth as the architect-author and generously acknowledged at the outset. Visvakarma is mentioned later in passing as the divine exemplar who reveals himself through the work of earthly craftsmen (Dagens 1985:1 and 10).

As a legendary figure, writer and sage, Maya is regarded as the founder of the Dravidian or Southern school of Indian architecture that represents a distinct stylistic development in temple building, and he is one of the eighteen architects of antiquity mentioned in the *Matsya Purana* (Shukla 1960:61). The *Manasara*, the other great South Indian text on architecture embellishes his reputation and endows him with a divine lineage, reporting that he was born from one of the four faces of Brahma. The *Manaiadi Sastiram* refers to Maya as Adi Visvakarma (the ‘original’ Visvakarma) and says that he was born from the third eye (the eye of omniscience) on the forehead of the five-faced Lord Siva. In the great *Mahabharata* epic he is cited as the designer of Tripura, the fabulous city of the Asuras or anti-gods that was constructed of gold, silver and iron.

A great deal of speculation has appeared in the literature about whether Maya named one person or more than one, whether he was a man or a god, when he lived, and if he actually wrote the works ascribed to him, that need not concern us here. What seems more important is his place as a link in a chain of transmission in the precepts that govern the arts that traces this knowledge to

other worldly inspiration. The knowledge embodied in the science of architecture originates according to South Asian custom in the divine realm, is transmitted to inspired sages and thence through manuscripts and handbooks to the lay community.

The Sinhala *Mayimataya* contains much material of an original nature and must be considered as a parallel but essentially different work from the Sanskrit work on which it claims to be based. Although the works are not completely at odds with each other, there is no overall identity between the two as the composer of the Sinhala text claimed. Whatever his supplemental sources were, he made generous use of them. At least 100 of the Sinhala verses deal with astrological or ritual topics that are not addressed in the Sanskrit treatise at all and cannot have originated there. In addition, there is no relationship between the two texts in the sequencing of topics, even when the same topics are covered, which is so often found when one work owes a clear debt to another. As for those sections that are topically similar, they are often dissimilar in relative emphasis or contain disparate and contradictory details.⁹

It is a matter of interest that the *Mayamata* is probably regarded in the Tamil speaking community as the most authoritative work on vastu sastra. It was originally composed in the Tamil region of peninsular India and its authority continues to be invoked in popular Tamil manuals.¹⁰ A manuscript in Tamil

⁹ The Dagens translations as well as the 1919 Sastri critical edition are based on a Grantha manuscript (#13034) in the Government Oriental Manuscripts Library, Madras. A second manuscript (#13038) with a similar title, the *Mayamatasilpasastra* by one Gannamacharya apparently departs significantly in content from the first. It is characterized by Dagens as “sans rapport avec notre texte” but no further details are given (1970:2). Acharya gives a somewhat different account of the manuscripts in the Madras collection (1946:159-161). There are actually six manuscripts there, numbered from 13034 to 13039, some of them evidently fragmentary. He based his summary on manuscript #13038, that of Gannamacharya which is organized just like the one Dagens says is # 13034. He makes no mention of sharply differing accounts that have no connection with each other. The *Mayamata* in Tamil is nowadays identified with the recent Tanjore Sarasvati Mahal Series translation (1966-68) of the aforementioned Sastri manuscript.

¹⁰ Acharya’s work on the *Manasara* has perhaps obscured the importance of the *Mayamata* in Tamil culture, especially for an English audience familiar with the treatises through translations. Acharya’s devotion to the *Manasara* text eventually turned into a kind of advocacy. He posited an indefensibly early date for it, criticized other treatises as less complete and claimed that the *Mayamata* was derived from it. Dagens (1985) has disputed the early dating and argued that the direction of transmission was of an opposite kind. It is of interest that the *Manasara* is not cited as an authoritative source in the popular literature.

“purporting” to be a translation of it was reported in passing as early as 1834 by Ram Raz (26). In 1876, a missionary working in South India summarized the contents of a Tamil manual on housebuilding ascribed to “Myen” (=Maya) (Kearns 1876). As Kearns explains it:

There is in Tamil a treatise . . . said to have been originally composed in Sanskrit by Myen, who according to mythology was a son of Brahma and architect of the gods. The work under consideration seems to have been formed from selections of existing editions of the original work under the superintendence and guidance of persons having a practical knowledge of Silpa Sastra or at least of persons professing to have such knowledge. It has passed through a second edition from which we may infer that the work is in demand. It were greatly to be desired that a future edition should have a competent Tamil scholar to carry it through the press, for the errors in the present edition are numerous beyond all precedent; and this added to a bad style, renders the perusal of the book anything but pleasant recreation (230).

Fortunately, Kearns put aside his irritation with the popular press and provided us with a partial summary of the text, which in the absence of any known editions is the only record we have of it now. Kearns regrettably omits any mention of a publisher, compiler or date which would give this work a bibliographical identity. Based on his summary, however, it seems similar in content to the *Manaiadi Sastiram* whose foreword suggests an identity with the work examined by Kearns:

A work, the *manaiyadi sastiram* (also known as the *sirpa nul*) by Mayan was discovered in a fragmentary and damaged form. In order to make it useful for all, Annsingh Raja Krisna Siddhanti of Rajamayendram District and Jotisha Aiyasama Pillai edited it with the aid of the works [four supporting works are named]. The present work conforms to the printed edition previously brought out by the two others [in other words, this may be the second edition, as noted by Kearns].

The Sinhala text is thus part of a broader tradition of popular manuals on housebuilding from peninsular India that claim to be related in one way or another to the teachings of Maya. Some works such as the *Sri Lalitha Navaratnam Manaiadi Sastiram* (which is ascribed to Visvakarma) cite works such as the *Maya Nul* or the *Maya Vastu* as authoritative sources, whereas others such as the *Manaiadi Sastiram* merely claim to be based directly on the teachings of Maya himself. The Sinhala work covers the same topics as these manuals, and may have been inspired by them, but this is not to say that it is a slavish copy of any single known work. The Tamil *Manaiadi Sastiram*, for example, is broader in

scope than the *Mayimataya*, more lengthy (92 pages of verses vs. 36, although some of the former is prose commentary which explains the verses and hence duplicates them), quotes from other works, and differs in its particulars. Moreover, the texts belong to different sectarian traditions. The Tamil materials refer to Hindu rites and also provide more elaborate prescriptions for each of the four castes. The Sinhala *Mayimataya*, on the other hand, has been carefully composed within the poetic conventions of its own language and tailored to the divergent traditions of Sinhala Buddhism and social life.

Like other popular manuals, the Sinhala *Mayimataya* is intended for an educated audience (although not necessarily for one that is unusually erudite or classically trained). The reader must be familiar with the basic grammatical conventions of written Sinhala that distinguish all correct writing. Most village astrologers in the Sinhala speaking community are familiar with the manual. It is written in the four lined rhyming verse or *kavi*, a mnemonic form common to both written and oral literature. Unlike other works such as the *Manaiadi Sastiram* that pair verses ascribed to other (often unnamed) textual sources, sages or gods with commentary, the verses in the *Mayimataya* have been composed *de novo* and are, in effect, the commentary. The grammar and the lexicon of the manual belongs to the variety of modern Sinhala often referred to as Elu, sometimes called 'pure Sinhala'. To the extent that Sanskrit borrowings appear in the text, they are common ones, for the most part assimilated to the basic alphabetic/phonological system of modern Sinhala.

Complete comprehension of the materials in the manual thus requires no familiarity with other languages, or with a style of Sinhala so weighted down with classical borrowings that it amounts to the same thing. It does require some knowledge of astrology and its basic terminology which not all Sinhala readers possess. In addition, it presupposes knowledge of the basic canons of the science of architecture which are not matters of general knowledge. Finally, it demands patience with poetic conventions and some willingness to accept that clarity is often sacrificed for elegance and demonstrations of poetic skill. Good Sinhala poets know their homonyms (or at least where to find long lists of them) that permit those plays on words so relished in verse and so vexing to translators. This poet has exploited them generously to create the ambiguities giving this work a fitting oracular flavor which lends its verse on the ancient science of architecture a measure of authority and power.

TEXT II: THE *ULUWAHU PÆNIMA*

The *Uluwahu Pænima* is a popular liturgical manual that appears to be rooted very directly in Sinhala customary practices. The circumstances of its composition are unknown. It contains verses and invocations in prose to be recited in crossing the threshold (*uluwahu pænima*),¹¹ the most important and elaborate of the Sinhala dwelling consecration rites. In addition, it includes a preliminary section of verses entitled Offerings to the Demonesses of the Eight Directions. This service, which begins with an extended hymn to Visnu and involves other personnel in the Sinhala Buddhist pantheon of supernaturals, is intended to expel the demonesses of the directions from the building site. An appendix to the text that presents a service for invoking the blessing of the Alutnuwara God (a regional incarnation of Visnu in Buddhist Sri Lanka) for the newly constructed house is summarized here with minor omissions owing to the difficulty of the Sanskritized passages.

The core of the *Uluwahu Pænima* is similar in style to the Sinhala *Mayimataya*. Its major sections are written in four-lined couplets that link the efficacy of architectural rites directly to the authority and example of the Buddha. Unlike the *Mayimataya*, however, this manual incorporates some extended prose recitations for invoking or commemorating major deities, specifically Visnu, who in Sinhala Buddhism is regarded as the protector of the moral community, and Visvakarma. In addition, there are passages in what is taken to be Sanskrit to be recited by the ritualist. The passages in question appear in italics in the English translation below. Although Sinhala speakers including house consecration ritualists are very likely to be completely unfamiliar with Sanskrit, in these rites it is enshrined as the language in which gods speak and are addressed. In the text, the god Visvakarma speaks in ‘Sanskrit’, and the language is otherwise used to salute the guardians of the major and minor directions. A few stanzas in Pali are also included. Thus, the style of these passages, however horrifying to purists, serves to remind the participants of their own continental origins as well as of the antecedents of their ritual and mythological traditions in a revered body of literature and learning.

In the Sinhala tradition, the ritualist who consecrates the doorframe and the craftsman (generally a woodworker) are likely to be one and the same. The verses laid down in the *Uluwahu Pænima*, especially with respect to this particular rite, provide a perspective, albeit a somewhat oblique one, on the craftsman’s view of design experience that does not appear in the ‘astrological’ housebuilding

¹¹ Details on the transcription of Sinhala words appear at the beginning of Appendix I.

manuals. The recitations compare the rites to be performed with those established as efficacious by the almighty Visvakarma in bygone days. The *Uluwahu Pænima* also devotes attention to the exploits of Visvakarma, recounting his wondrous works in the realm of the gods at some length. The *Mayimataya* pays its debt to him as a great sage at numerous junctures, but is devoid of these inspirational, biographical details. The *Uluwahu Pænima* also delves into the biography the historical Buddha whose power, demonstrated by prodigious feats in overcoming evil, is invoked to protect the dwelling. These mythic accounts link the production of the dwelling with the activities of divine exemplars and thus centralize the experience of the craftsman.

TEXT III:

THE *SRI LALITHA NAVARATNAM MANAIADI SASTIRAM*

This manual is a work on housebuilding in prose from the Tamil speaking area of South India which, as previously noted, was published in 1914. In the preface, the author acknowledges a debt to the teachings of Maya which he says he has studied for twenty years. Whereas in the Sinhala manuals the astrological materials and the programs of liturgical recitations are separated into two independent texts, in the *Sri Lalitha Navaratnam Manaiadi Sastiram* they are combined in one manual as they are in the *Manaiadi Sastiram*.

Although this work appears to be rooted very loosely in the South Indian Saivite tradition (for example, the authoritative measures are said to be those of the temple at Chidambaram where Siva performed his dance of joy), the author is extolled in a prefatory testimonial as a great Vaisnavite. Since the compiler was a Brahmin, the rites described are perhaps not unexpectedly Brahminic in derivation, and many involve priests as ideal officiants. Both Maya and Visvakarma are cited as sages, although the latter is mentioned only once. Neither is extolled or invoked in the rites. As for the astrological material, much of it ranges over familiar territory that can be found in other Indian astrological treatises such the *Brhat Samhita* or works in Tamil and other modern languages based on them which are for the most part unacknowledged. Since it is topically and organizationally similar to the *Manaiadi Sastiram*, it may have been inspired by this earlier work or by others of the genre.

It is of interest that there is a close topical congruence as well as a great deal of similarity in detail between the *Sri Lalitha Navaratnam Manaiadi Sastiram* and the Sinhala *Vastu Vidya*, especially in areas of astrology and ritual that are omitted in the classical architectural manuals of the southern region, that is in such treatises as the *Manasara* and the *Mayamata*. This is not to suggest that the

Vastu Vidya, which claims to be based on more than thirty Sanskrit sources, is rooted in an Indian vernacular tradition, but rather that when it comes to the house, a body of stock motifs and details seems to have arisen through diffusion and is traceable to some of the same authoritative sources. Many of the enigmatic pronouncements of the spare, telegraphic verses in the Sinhala *Mayimataya* are clarified in the *Sri Lalitha Navaratnam Manaiadi Sastiram*, often redundantly and at much greater length.

Indeed, the Tamil work brings the astrological and divinatory content to which the *Mayimataya* often merely alludes into clear focus. Because it is written entirely in prose, this manual is somewhat less demanding than the *Manaiadi Sastiram* which is organized as a sequence of verses, some of which are given no prose commentary. It is exacting in other ways, however. There is unsystematic borrowing of technical terminology from Sanskrit (the ‘Sanskrit’ names of some trees, for example, are mixed up with commonly understood ones from Tamil). Since some of these terms are not glossed in the authoritative Tamil dictionaries, here and there translation problems require an enterprising use of those for Sanskrit.¹² In addition, the detailed treatment given to astrological criteria in this work demands a level of expertise that far exceeds the casual familiarity required by the *Mayimataya*.

THE SECTARIAN CONTEXT AND THE WRITTEN TRADITION

Inasmuch as the Sinhala *Mayimataya* stands virtually alone in its claim to be derived exclusively from a single authoritative Sanskrit work, it is somewhat paradoxical that it was produced at the social, political and territorial margins of traditional Brahminic culture. The modern Sinhala speaking population of Sri Lanka is descendant from emigrants from the subcontinent, probably from its southern regions, who seem to have followed communities of Buddhist ascetics that crossed the narrow strait between India and Sri Lanka in the centuries shortly after the Buddha’s death (c. 2500 B.P.). The community that eventually became ethnically and linguistically Sinhala embraced the teachings of the Buddha as a salvation religion and rejected the Brahminic view of the ritual order with all its social baggage. The modern religious and social system of South India evolved from a Vedic social cosmology that continued to shape social and religious experience on the subcontinent in an independent direction.

¹² Sanskrit has twenty consonantal stops that are represented by just five letters in Tamil. Thus, the use of a Sanskrit dictionary to read words represented in a Tamil sources involves educated guesses about the original spelling.

According to the *Rig Veda*, the social body of Hindu society was born from the sacrifice of a cosmic person or Purusa. The allegory of the Purusa was used to explain the hierarchically arranged social order that subsequently arose. The lowest stratum of Hindu society, the Sudra class that comprised laborers and artisans, was created from his feet. The thighs or mid region gave rise to the Vaisya class which was composed of merchants and farmers. The Ksatriya ruling class, composed of warriors and by extension monarchs, was created from the chest and the arms. Lastly, the head of the Purusa gave rise to the priestly or Brahmin class. These hierarchically arranged classes were ranked from the head downward in a descending ritual order and were aligned in ancient times with a parallel structure that hierarchically arranged the physical universe. The four classes of society were known as *varnas*, and in time came to be associated with certain social duties within the society that were also textualized. A basic distinction grew up between the three highest or 'twice born' classes who mastered and transmitted the ancient Vedas as part of their obligations to society and the Sudras whose ritual status excluded them from textual study. In the post-Vedic period, the varna or caste system has been fragmented into a much larger number of occupational groups (*jati*) a circumstance that is sometimes explained as the result of intermarriage between members of different *varnas*. It is in part the result of the successive inclusion of social communities that stood outside the caste system into its formal structure.

As the highest stratum in the ritual order, Brahmins were most closely associated with sacred literature and were charged, in the ideal society, with scholarly and ritual obligations especially those associated with knowledge and practices from the Vedas. In time, they became closely associated with certain other fields of textual knowledge, especially with the increasingly influential field of astrology. The warriors assumed the protection of society and by extension the maintenance of the political order as their special obligation, and kings were drawn from their ranks. The Vaisya as traders, pastoralists and merchants were engaged specifically in food production, marketing and exchange. In contemporary society, Brahmins as priests remain at the apex of the social and ritual hierarchy, and occupationally defined endogamous groups often have an ethos of descent from one of the main *varnas*.

In Sinhala Sri Lanka, a caste ideology is carried forward from ancient times as in Hindu communities, but without its Vedic textual identity or its classic quadripartite structure. In the modern communities of the Kandyan highlands for example, the area of Sri Lanka in which the *Mayimataya* was produced, the much abridged ritual order is identified not with cosmogonic origins from

the body of the Purusa, but with occupational roles supposedly assumed much more recently in the feudal society under the Kandyan kings. There are no Brahmins in the modern Sinhala social order; in Sri Lankan Buddhism the liturgical functions of this class are performed by Buddhist monks who are an ascetic order drawn from the society at large, not from an occupationally specialized endogamous community. Further, there are no castes that are the functional equivalents of the warriors, although in the feudal order of Kandyan kingship the rulers contracted marriages with South Indians drawn from this stratum. It seems likely that those groups who embraced the more inclusive Buddhist doctrine were drawn from the lower rather than the higher orders of traditional Hindu society. Perhaps as a consequence, in the Kandyan highlands today, there is essentially only a broad bipartite caste structure. The highest and statistically dominant endogamous group is the Goyigama or farmer. A variety of service castes, including washermen, drummers and potters, belong to the second stratum.

Elsewhere in Sri Lanka, there are other castes woven into somewhat different locally defined hierarchies, but there is no agreed upon ritual order across regional boundaries, or sometimes even within them. The varna ethos is only vaguely apprehended, and then only by literati who know something of the organization of traditional Indian society from textual sources. The story of the Purusa is more or less unknown. In fact, both in the orthodox tradition of the Buddhist texts as well as in the popular culture, there is no acknowledged cosmogony. The 'myths of origin' that are important in Sinhala culture are legendary narratives that trace the birth of the Sinhala nation to the dawn of the Buddhist era. An Indian prince named Vijaya is said to have crossed the straits with his armies approximately 2,500 years ago and given rise to the Sinhala race. In the Kandyan highlands, social stratification in the contemporary setting is referred to even more recent historical circumstances, that is the feudal order of Kandyan society.

In Sri Lanka the functional equivalent of the Brahmin class is the ascetic community of Buddhist monks (*sangha*) that constitutes a sectarian textual community centered on the study and transmission of sacred literature, especially the Pali canon that embodies the word of the Buddha. Members of the sangha often double as specialists in other areas of textual authority such as astrology and traditional medicine, as Brahmins do in the adjacent Tamil-speaking Hindu communities. Because the priesthood performs important social functions associated with the interpretation and transmission of both secular and sectarian knowledge, a temple and a resident monk are important community ideals.

Since not every village has a monk associated with it, lay specialists in astrology, medicine and liturgy often perform some of the same community functions, as they did off and on in the village in which I lived during those periods when there was no monk resident at the temple.

Like the Sri Lankan Sinhala Buddhists, the Hindus in the adjacent Tamil-speaking regions also participate in the great tradition of a salvation religion that is textually sanctioned, but in contemporary society, the exemplary figures are those of Siva or Visnu rather than the Buddha. As moral and devotional communities, each with its own constituency, personnel, texts, locally-constituted practices and characteristic monumental building traditions, the Hindus and the Buddhist religious systems of the southern geographical extremes of South Asia are contextually independent. The Buddhist tradition in Sri Lanka nonetheless bears numerous traces of its original roots in the broader traditions of the subcontinent as well as of its more recent interactions with other sectarian communities. Sri Lankan Buddhism incorporated pan-South Asian deities and cosmographic motifs into its synthesis, giving them new significations in the perspective of the life, spiritual example and authority of the Buddha.

Visnu, for example, is propitiated as an aspirant to Buddhahood and as the protector of the Buddhist community. In this capacity he is enshrined as a subsidiary deity in Buddhist temples and invoked in architectural rites. Mount Meru as the mythological cosmographic axis of the universe, Visvakarma as the divine craftsman, Sakra (Indra) as the god-king of the prototypical celestial city, the Four Quarters as ruled by divine regents, and the physical universe as vertically organized into ascending and descending worlds, are among important additional elements and motifs that structure both Buddhist and Hindu religious experience and architectural expression as well.

The architectural treatises, especially those in modern languages, have thus been shaped through time and across regional boundaries by locally constructed social, religious and building practices. There is consequently a great deal of variation in detail, often contradictory detail, between classical and vernacular formulations, and between modern texts written in different areas of the region. There is no monolithic body of common facts, only a certain conviction that the science of architecture is grounded in universal truths. There are common theses however, as well as shared motifs, and these threads have lent textual sources on architecture a degree of transparency across linguistic and sectarian boundaries. In housebuilding manuals there is in addition a special emphasis on astrological content that is seen as universal in application.

Astrology is neither Hindu nor Buddhist in construction, nor peculiar to a particular region. Astrology is primarily derived from Greek sources and from

Islamic works directly indebted to them and practiced throughout South Asia in all sectarian communities. The conviction that textual sources were either directly produced by inspired sages, who are not in the main sectarian figures, or were derived from such writings further endows the written tradition with an authority that appears universal in scope. This helps to explain why literati in one region have remained open to writings composed in other regions or historical periods, and more particularly why a Sinhala writer in Sri Lanka could advance a work such as the *Mayamata*, written in India and composed in Sanskrit, as a legitimate source of authority for practice in contemporary Sinhala life.

THE INTERPRETATION OF THE ARCHITECTURAL TREATISE AS A BUILDING MANUAL

Nineteenth and twentieth century writers who translated South Asian works on vastu sastra and presented them to a more general audience portrayed them as comprehensive treatises on design composed by practitioners during an era of immense importance in the history of Indian architecture. In fact, Acharya drew a parallel between the place of the *Manasara* in the Indian tradition and that of the treatise written by the Roman architect Vitruvius for classical forms, and even suggested that they might be derived from a common source. Writers saw the Sanskrit treatises as documents developed for use within the community of designers, that is as records or handbooks written by architects for other builders (Ram Raz 1834; Acharya 1927; Bose 1932; Shukla 1960). As Acharya put it:

... that the sole object of a work like the *Manasara* was primarily and ultimately practical in giving general as well as special guidance to the builders of the time, and also of the future generations will be clear even to the casual reader of the book" (1934: xiv).

These writers hoped that the treatises would allow them to understand how monuments dating from the medieval period were planned and constructed, especially since there is a dearth of inscriptional or archival evidence and these are the only written records of substance on Indian architecture from within. The assumption that the works were systematic, technical codifications of knowledge derived from and essential to practice left the translators in the awkward position of having to explain why they contained no drawings, substituted divinatory formulas for the essential applied mathematics that was actually involved in medieval monuments of stupendous scale, and further did

not refer to any extant works as prototypes or even in passing.¹³ Writers sometimes defended the indifferent organization, enigmatic character, and topical incompleteness of the treatises by arguing that they were never intended to be complete treatments in the first place. As Bose wrote:

The fact is that the master builders of ancient India transmitted most of their technical knowledge by mouth. The craftsmen (silpins) therefore only recorded such information as they were likely to forget . . . But these details were kept in a sort of cryptic form . . . The canonical books of the silpins are therefore of the nature of mnemonic notes and are consequently unintelligible to one not belonging to the caste of silpins. This has been the reason why, in spite of the labours of the scholars, our knowledge of Indian architectural science has not advanced as far as might have been expected (2-3).

There was a second problem. Sometimes the contents did not appear to be about building at all. In examining the *Manasara*, Ram Raz was obliged to note the following:

. . . a considerable portion of the whole is occupied with a minute description of the mysteries, rites and sacrifices to be performed on various occasions in the building of temples, houses, villages towns and cities; the ceremonies attending the consecration of images, the mode of determining the propitious moment for commencing to lay the foundation of an edifice, as well as rules for predicting the future prosperity of him who causes the edifice to be raised, by the aspect of the stars, the situation of the building with respect to the cardinal points and other astrological devices (5).

The other works he examined were similar. Thus, although the treatises contained enough materials on the formal organization of buildings or towns to invite comparison with nineteenth century Western engineering practices, they had many troublesome properties including interpreting the entire subject in mystical terms. Ram Raz, a judge and magistrate, was uneasy about how these beliefs in “divinations, omens, prodigies etc.” and “other extraneous matter” including “minute descriptions of religious rites” would be received in a work on

¹³ In the same period that both the *Manasara* and *Mayamata* were codified, the 11th century Chola king, Rajaraja erected the great Brihadesvara temple at Tanjore which was like a Gothic cathedral in scale. Its main feature was a massive pyramidal tower nearly 200 feet high crowned by a capstone estimated to weigh 60 tons.

architecture. He edited out a good deal of the non-architectural material including the entire seventh chapter of the *Manasara* dealing with mystical diagrams and sacrifices as subject matter that was neither “interesting or instructive to the European reader” (1834:41).

The classical treatises nonetheless appear to be more directly rooted in ritual practice than in that of the crafts. They were composed by Brahmin literati who linked architectural expression to ritual settings perhaps initially through the building of altars. The built came to be understood both as a setting for rites and as the product of rites. As the community that textualized architectural production in this way, Brahmins became recognized as architecture’s main theorists.

The Brahminic perspective on architecture as ritual and cosmological reproduction was later extended to new sovereign preoccupations: ambitious building programs, generally temple building programs, of unprecedented scope whose ascendancy began in the period in which the early works were composed. Since the works do not refer to historic building programs or even to actual examples, the role of the textualist in practice is unknown.¹⁴ In any event, it seems unlikely that the treatises were ever intended to be reference manuals for craftsmen themselves, as Acharya implied. Aside from the fact that many of topics of a practical nature that arise on the ground are often omitted, these works were written by members of a textual community schooled in Sanskrit and craftsmen and artisans did not belong to it then, nor do they now. Historically, craftsmen have been Sudras who in pre-modern society were not only largely illiterate but formally excluded from the textual community as a class. The absence of drawings that might have served to bridge this gap only serves to suggest that production of visual images may have been as strange to the textualists as the world of writing was to the craftsmen.

The personnel of the architectural past to which the treatises refer were therefore drawn from asymmetrical social locations and representational traditions. This helps to explain why the architectural classics are works of a somewhat different nature than the pattern books nineteenth and twentieth

¹⁴ The historical record on this matter is not clear. Kings commonly took credit for major architectural productions in South Asia without acknowledging their subordinates whether Brahmins or not. At Jaipur, a city in Rajasthan that was planned and built in the eighteenth century by the Maharaja Sawai Jai Singh, the architect, Vidyadhar, a Bengali Brahmin, was generously credited. On the other hand, the Maharaja built important observatories in Jaipur as well as elsewhere in India without sharing the credit for their design or construction with anyone (cf. MacDougall, 1996).

century translators hoped to find. The vernacular manuals follow suit. The topics singled out for special emphasis are those that link the building to a social order or to a cosmological one, not those that school the reader in carpentry, plastering, or other practices in building a village house. A distinction between mere construction and real science is often carefully drawn in the constituent cultures of the region and is reminiscent of the one Lethaby sought to make between 'building' and 'architecture' as wholly distinct ideas. Lethaby wrote of architecture as a "code of symbols" that was "accompanied by traditions that explained them." "The main purpose and burden of sacred architecture—and all architecture, temple, tomb or palace, was sacred in the early days—," he wrote, "is thus inextricably bound up with a people's thoughts about God and the universe" (2).

In the following section, I shall contrast classical treatises and vernacular manuals as projections of complementary and distinct social worlds that are united by a common concern with, as Lethaby put it, buildings that enshrine ideas and satisfy the complex needs of the intellect. The Sanskrit and vernacular works that are ascribed to Maya or derived from his teachings allow us to proceed from examples that are regarded as historically linked.

THE GREAT TRADITION TEXT AND THE SOCIAL ORDER OF THE IDEAL STATE: THE SANSKRIT *MAYAMATA*

The Sanskrit *Mayamata* is an architectural document of broad scope that outlines a building program for a entire kingdom or fiefdom in over 3,000 verses divided into thirty-six chapters. Like the *Manasara* with which it is often compared, it is built up on the fundamental proposition that a design is auspicious when it is coherently reconciled with broader cosmological forces. In the *Mayamata*, the numerous rules and prescriptions intended to produce this outcome generate a concrete reproduction of a social universe as viewed from the top down, with the ruler at the apex. No particular ruler or dynasty is mentioned as having commissioned the work, however, and the omission of any reference to actual buildings or building programs further dislocates the text from any recognizable social or historical setting.

Architectural 'sites' are said to include all places where mortals and immortals dwell and to be of four types: the earth or topographical sites, buildings including temples, houses, palaces, and pavilions, conveyances including war chariots, palanquins, and seats including thrones and beds. Two full chapters are focused on the trappings of feudal or divine authority: one on palanquins and chariots, and the other on beds and seats including thrones. An extensive

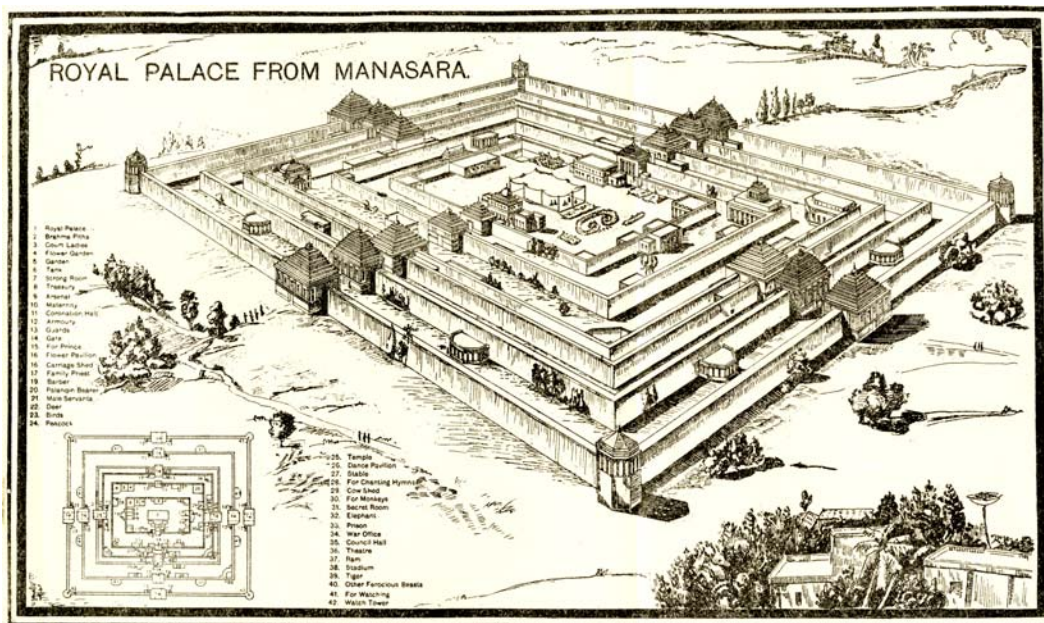


Figure 10. Royal palace scheme according to the Manasara, as depicted in Acharya (1946) showing nested quadripartite plan.



Figure 11. Precincts of the Meenashi Temple at Madurai, showing views of nested, quadripartite plan.

chapter of 228 verses (nearly the length of the entire Sinhala text) is devoted exclusively to palaces of rulers of various classes from hypothetical local lords to equally hypothetical emperors. All are rectilinear and built up in nested, concentric zones, each separated from the outer ones by a wall pierced with gates. Seven chapters of the text are devoted to the royal production of temples ranging up to twelve stories that are likewise enclosed by walls and galleries in a nested pattern. The concentric organization of both temple and palace which implicitly aligns them as reflexive images, is a mimesis of the organization of the physical universe as a whole with Mount Meru at the center. Thus, the plan of the royal palace, in recalling the cosmic plan, simultaneously identifies the earthly residence of the god (the temple) with that of the monarch (the palace) and the dominion of the earthly sovereign with that of the cosmic ruler.

Virtually every feature of the physical design and indeed many design procedures and ritual components reproduce the social order as viewed from the apex. For example, even the fashioning of the rope that is used to measure out the building site is dictated by the station of the patron in the ritual order: the thicker, three-stranded one is prescribed for use by gods, Brahmins and kings, whereas for the other two classes it is to be made of no more than two strands. Two chapters of the *Mayamata* are devoted to dwellings, ranging from unified structures (houses with a single main building) to elaborate productions with seven main buildings or more. The house plans for the most part are those that are of such a scale so as to be feasible plans only for rulers or those under royal patronage. They are presented as suitable for kings, kings and Brahmins, or kings, Brahmins and gods. Although Brahmins and rulers theoretically occupy discrete strata in the ritual order, the differences between them are generally elided. When prescriptions for dwellings of Brahmins are mentioned, those of the kings or princes are generally said to conform to the same rules. In fact, one dwelling type is mentioned as suitable for Brahmins and kings precisely because it resembles a temple.

No comparable attention is given to the dwellings of the Vaisya and the Sudra who constituted the numerically dominant social classes, although a few dwelling types that are explored in detail are said to be suitable for all four castes. In one of the few places that the Vaisya and the Sudras are specifically mentioned, they are arranged somewhat cavalierly in a linear order between gods, Brahmins, kings and the heterodox on the one hand, and soldiers and women who live by their charms on the other (Dagens 1985:209). The hierarchical motif is replicated again and again, even when it is not overtly conjoined with vertically organized social classes. Temples are classified according to the number of storeys, houses



Figure 12. Precincts of the Meenashi Temple at Madurai, showing views of nested, quadripartite plan.

hierarchically arranged according to the number of buildings, and palaces according to the number of enclosures.

Two chapters are devoted to villages and towns which are to be laid out by sages as holistic designs with differing street patterns and in various shapes and sizes. The concentric footprint of the royal palace is projected onto the simple village which is said to be organized into four zones. The central rectangle is named the Brahma sector, the next the one is named for the gods (*daiva*) the next the one for men (*manusa*), and the outermost rectangle is the one for restless, 'evil' spirits (*paisacha*). As in the organization of the royal compound and the universe as a whole, villages are to be bounded by liquids (moats or rivers) and walls (ramparts) and pierced by gates. The universal plan is thus conflated with a natural order (Brahma/gods/men/evil spirits) organized from the center outwards and thence with a ritual and social order that restricts the center to the temple consecrated by Brahmins and the next two rectangles to the residences of Brahmins and kings.

If little attention is devoted to the design of dwellings for the lower classes, a great deal is lavished on their placement so as to locate them in less desirable areas in a village or town and to segregate them residentially from the Brahmins and rulers. The dwellings of 'craftsmen' must be placed in the unrestricted periphery since it is the only remaining area. The *Manasara* is more direct in restricting the Sudras, and in some cases, the Vaisya to the peripheral or 'evil spirit' zone, and adds other details (Acharya 1934:74). The logic that distances occupational groups or castes progressively from the center according to ritual status is essentially the same. This logic is further applied in the *Mayamata* so as to exclude certain undesirable structures or functional zones from the architectural order of the community entirely. They include the dwellings of untouchables who are repeatedly mentioned as persons to avoid or contain, cremation grounds and the cemetery for inferior classes.

The construction rites outlined in the *Mayamata*, which are elaborate and costly, associate the production of a cosmologically correct building both with the lavish public display of wealth and worldly power available only to the select few and with the esoteric textual knowledge of the Brahmin. In the initial rite of site consecration, forty-five deities are propitiated who 'reside' within a ritual diagram drawn on the site (see Figures 14-18 and Chapter 2 for further discussion). For this event, the *Mayamata* prescribes separate and different vegetal and blood sacrifices for each and every deity, ranging over the full dietary spectrum from cooked rice, sea fish, dried meat and butter to goat's fat. In the building consecration ceremony, another round of costly offerings is made to the same deities as the architect materializes covered in gold jewelry.

The foundation deposits that are to be placed in a dwelling commemorate the deities of the ritual assemblage once again. The deposits are to include various substances of value (all of which should have been purchased according to the *Mayamata*) including grains and precious stones. A container placed in the ground is to hold other substances specifically associated with each of the deities including cinnebar, emeralds and pearls, and in some cases small images in precious metals including gold. In a final display of the power and wealth of the patron, when the building is completed, the *Mayamata* urges the owner to shower the architects and craftsmen with grain, money, cows together with their calves, land and fine clothes.

We learn little from the classical treatises the social organization of the building program or the organization of guilds or social communities that took responsibility for the construction of monumental architecture of considerable complexity and scale. Instead they provide us with idealized, even fictionalized constructions of these communities that reproduce them within the framework of Brahminic values. For example, architects are hierarchically arranged according to their textual expertise and authority into four classes (apparently all twice-born individuals since all study the Vedas), that are suspiciously reminiscent of the varna hierarchy. According to the *Manasara*, the master-builder (*sthapati*) who is at the apex by virtue of his knowledge of all branches of learning, is descendant from Visvakarma and acts as a guru to all the others. He is often referred to as a master teacher (*acharya*) and therefore resembles a Brahmin, although the treatises carefully sidestep his relationship with the Brahminic community. Below him comes the draftsman or surveyor (*sutragrahi*) who is descendant from Maya. Classes of designers and carpenters follow (Acharya 1934:6-7). The *Mayamata* says that the master-builder comes from a renowned land, and he is of mixed caste (Dagens 1985:10). Otherwise, details on the caste affiliations of builders of all types are almost completely lacking.

Whatever their caste status or social opportunities may actually have been, builders of all classes are further idealized in the classical works in terms of virtues that support the ideal social order as viewed from above, and especially as viewed by the Brahmin. All study the Vedas, for example. The *Mayamata* describes the master builder as just, compassionate, free from envy, and free of the seven vices. His subordinates are likewise, skillful, pure, strong and above all, compliant. They are “always respectful towards the master and joyous; they are always faithful to the architect’s instructions . . .” (Dagens 1985:10). Inscriptional evidence cited by Acharya (1946) suggests that the lot and deportment of craftsmen under the yoke in real building programs nonetheless sometimes departed sharply from the ideal. They are mentioned as subjects of

outcasting for unspecified crimes and were sometimes readmitted to the caste order and given absolution after building a temple (585-586).

THE SOCIAL ORDER OF THE POPULAR TRADITION

Popular housebuilding manuals in modern languages such as the Sinhala *Mayimataya* and the Tamil *Sri Lalitha Navaratnam Manaiadi Sasitiram* exhibit certain symmetries with the classical models but clear differences in social orientation and architectural scale. The propositions that the principles of architecture are derived from divinely bequeathed knowledge and that good design reproduces an extrinsic order are common to both. In the Sinhala *Mayimataya*, for example, Visvakarma, the 'original' Sanskrit text, and the sages are mentioned frequently in order to establish that the prescriptions within are matters of ancient authority. It is of interest that the sages are sometimes called forebears so as to legitimate the linkages between the modern works and the authority of the past. Further, both modern works and the Sanskrit treatises they re-interpret and substantially amend, have been compiled by literati, often by writers with knowledge of more than one language, rather than by craftsmen/builders. Astrologers or those with knowledge of astrology, whether members of a priestly or ascetic order or not, have played a principal role in the writing of modern works that have known and identifiable authors as they probably did in anonymous works such as the Sinhala *Mayimataya*.

THE POPULAR MANUAL AND ARCHITECTURAL SCALE

The most striking differences between the Sanskrit *Mayamata* and the popular manuals that claim to be based on the teachings of the sage who inspired it are those of architectural scale. The social universe depicted in the popular manuals is the village community, the main design problem is the dwelling, and the focus perforce is on the individual householder. Both the village and house are topics in the Sanskrit work, but with important differences in perspective. The former is seen as a design problem through the eyes of a distanced authority, whereas in the vernacular texts, the village is an existing social and physical reality that is already drawn. In the Sanskrit treatise, the dwelling is likewise a design problem but it is presented as part of a range of discrete types hierarchically arranged, chiefly according to internal complexity and size, that visually clarify the political order as interpreted from above. The palace stands at the extreme end of this continuum. In the Sinhala *Mayimataya*, the palace is omitted as a design problem and the relationship between dwelling size and ritual status or



Figure 13. Contemplating the architectural: street game, "the tiger and the goat," near the Meenakshi temple complex, Madurai.

political authority is left unexplored. Although dwellings of different scales are mentioned, there are no details given about their internal organization or the relationship between gross size and social status.

In the *Sri Lalitha Navaratnam Manaiadi Sastiram* the association of larger multi-building compound dwellings with higher castes is reduced to one succinct passage that concludes with the assurance that unified structures (those with a single main building) are good for everyone. There is no mention in either text of the many classes of architects and the storeyed buildings through which the Sanskrit treatise extends its exploration of hierarchy. In fact, it is striking that there is little discussion of the vertical dimension of buildings at all.

Virtually every other design problem that alludes to political or social control over a tract larger than the dwelling site is likewise omitted. In fact, of the four categories of architectural production mentioned specifically by the Sanskrit *Mayamata*, two conveyances (chariots) and seats (thrones) which touch on particularly potent projections of royal authority are conspicuously missing in the popular manuals. In the *Sri Lalitha Navaratnam Manaiadi Sastiram*, the discussion of furnishings is basically pared down to a discussion of the construction of the householder's bed. Its cosmologically correct construction is connected rather pointedly to questions of health and the production of offspring. Neither of the housebuilding manuals gives any attention to the planning of forts, towns, and villages which are projects well beyond the authority of the audience addressed. Furthermore, the extravagant rites of the Sanskrit text are dramatically abridged and the stabilizing, anachronistic Vedic deities omitted completely.

The *Sri Lalitha Navaratnam Manaiadi Sastiram* contains an interesting prefatory passage that legitimates its focus on dwellings. Whereas in the classical treatises, order in the society is associated with values set forth by elites or imposed from above, this one pursues a logic that wholly recentralizes it around the proper construction of the house. The dwelling is said to be the most important of all architectural problems because the destiny of the householder is bound up with it, and he is at the social fulcrum of the world. The *Vastu Vidya* also explores this idea and calls the householder foremost among men since the other classes of men are dependent on his beneficence for their needs. Priests and ascetics are mentioned specifically as persons who enjoy the support of the householder. Since the dwelling influences the good fortune of the householder, order in the society at large is construed in both works as a function of its proper construction.

THE POPULAR MANUAL, SOCIAL ORIENTATION, AND ASTROLOGY

Astrological criteria that are relegated to incidental entries in the Sanskrit treatise, are brought to the forefront in the popular manuals and dominate the texts. In the Tamil manuals, materials from the field of astrology are presented in even more extensive detail than they are in the Sinhala *Mayimataya* and largely account for their greater length, as the translation of the *Sri Lalitha Navaratnam Manaiadi Sastiram* in Appendix III suggests. The excision of monumental building types as central topics and the elaboration of the astrological components thus radically transform the basic content of what is popularly taken to be the science of architecture. In fact, the original structure is for all practical purposes evacuated, and another inserted in its stead.

The detailed attention given to astrological matters is part of a shift in emphasis that brings the built environment into focus from the perspective of an individual who has no particular claims to authority or pretensions to rank. He could be a Brahmin, a warrior, Vaisya, or Sudra, as the *Mayimataya* text suggests in a number of passages that defer overtly to their Hindu sources, or belong to one of the occupationally defined Sinhala castes mentioned by name elsewhere. Whoever he is, he is a man of no special means or political influence living in an ordinary village.

In the rigid orthodoxy of Brahminical Hinduism, personal worth and hence destiny both in this life and those that follow was largely a product and function of ritual status. The higher economic and social status enjoyed by the privileged classes or priests, warriors and kings was and is regarded both as ordained at the cosmogony and as the cumulative result of meritorious prior lives. Astrological theory introduced a certain flexibility into the grim prognosis for those at the lower extremes of the social order by suggesting that certain cosmic alignments act on the person, not on the class. In fact, one of the enduring attractions of the Buddhist alternative was that it extended this thesis to the core issues of spiritual worth. It is this cosmically chartered but essentially individualized course through the life cycle that the astrological passages of the *Mayimataya* and the Tamil texts draw out in detail.

In the social world depicted both in the Sanskrit treatises and those of the modern, popular tradition, the individual belongs to a heterogeneous society of stratified classes. The design and situation of his dwelling reflect his place in that order. But the *Mayimataya* stresses that anyone, whether he is high born or low can find an auspicious site and build a house that will bring him good fortune.

In the *Sri Lalitha Navaratnam Manaiadi Satiram*, the preordination of individual destiny is likewise qualified. As the compiler notes:

There is a saying in Sanskrit that the householder will be blessed with a suitable wife, offspring and a house in accordance with what he deserves from his past births. So, each householder will have what is his due. But he should strive to make the best of what he has. The central feature in his happiness is his house. (Translated from the preface.)

Another passage places all castes on equal footing before astrology:

When Venus and Jupiter are setting, or when they are waning, no house construction should be attempted. Whatever caste the housebuilder belongs to, if his birth planet is aligned with an opposing planet, or has set, or is declining, it will be outsiders, not the householder who will eventually occupy the house.

The house as an extension of the deterministic order affecting the householder is thus advanced as an important instrument of control over personal destiny in the vernacular tradition. As it is popularly understood in the West, astrology is concerned with timing, that is with the 'when'. Celestial elements that mark or represent points or progressions in time, also have an orientation in space, that is, if one takes celestial bodies for example, along the ecliptic, and are therefore equally concerned with the 'where'. As it is practiced in South Asia, the science of astrology is concerned with these twin aspects of cosmic order: temporal projection and spatial alignment. It is thus more accurately a science of placement both in time and space.

Like the individuals who occupy it, each dwelling has a true astrological identity and thus an origin and destiny in time and in space, according to the housebuilding manuals. The simplest parallel between the destiny of the house and that of the 'housed' is the one drawn by the timing of building operations. An auspicious astrological confluence at the times these activities are undertaken predicts good fortune, just as the horoscope of an individual presages his social and biological destiny. In this sense, the inherent constitution of the dwelling is much like that of human: it has an invisible cosmic construction that resembles a horoscope. Since its destiny and that those who occupy it are cosmically conjoined, astrological calculations are contrived to give it an identity compatible with that of its owner.

In the Sinhala *Mayimataya*, the individually charted course seems to take on a uniquely Buddhist construction. This manual places special stress on the

ethical conduct of the builder and its consequences for his ultimate destiny in the social order. All treatments agree that the builder must be learned and pious. In the Tamil texts, however, the latter quality is connected to his faithful performance of certain rites, so as to suggest that a good craftsman demonstrates his spiritual mettle by knowing his place, in this case in the ritual order and before the gods. Nothing is said about this in the *Mayimataya*. Thirteen verses of the *Mayimataya* are devoted to the ways in which the individual builder can improve his lot both here and in the hereafter by practicing good craftsmanship in the interests of others. The text elides the great gulf between the high and the low with the daring claim that a conscientious craftsman can acquire enough merit in this life so as to be reborn as a king in the next. In the Indian texts, no mention is made of the possibility of leapfrogging through the caste order in future incarnations.

TEXTUAL GENRE AND THE UNDERSTANDING OF THE PAST

Through the judicious paring and highlighting of topics from classical sources, and the introduction of entirely unique details and motifs from customary practice and the autonomous field of astrology, housebuilding materials reframe the science of architecture as a popular discourse and as a projection of a community centered social order. The logic of an extrinsically ordered design theory is essentially uncontested, although in the popular manuals it is centralized in a naturalistic order derived from astrology rather than in cosmogonic allegories that align the authority of rulers with that of the gods. Housebuilding manuals nonetheless acknowledge the authority of the classical texts, the sages, divine authors and even the Vedas, so as to endow materials that have been gathered together from disparate sources with a unified history.

The popular literature tailors the science of architecture for general consumption in another important way. It addresses the fundamental political issues of who should control the body of knowledge contained in vastu sastra and by extension who can benefit from it. In the overtly revivalist literature from the nineteenth and twentieth century, a tradition to which all the popular manuals examined here belong, the authority of the textual community over these understandings is indirectly challenged through 'translations' from Sanskrit into modern languages that have a much wider audience. In addition, the textual community is variously depicted as having obscured ancient knowledge, hid it from those who needed it, or neglected it, and therefore directly confronted. The *Mayimataya*, for example, decries the language of the Sanskrit treatise, studied and revered by Brahmins as the vehicle of all knowledge and the word of the gods, as a thicket that no one can traverse. In the *Vastu Vidya*, Appuhamy

ascribes the decline of the science of architecture in modern times, in part to the circumstance that the people “who kept the system a secret” died off. Iyer, the compiler of the *Sri Lalitha Navaratnam Manaiadi Sastiram*, himself a Brahmin, takes on the textual community of the past in more explicit terms:

Our forebears followed astrology as one of the the six sciences and practiced it and observed the necessary procedures and ceremonies as required. We have likewise followed our ancestors. Unfortunately those people who learned these sciences kept them all to themselves, and the knowledge of the sciences died with them and were of no use to others. Their writings were neglected by their descendants and eaten up by termites. Foreigners like the British, Germans, French and the Americans have always studied and mastered whatever scientific treatises, books and papers that were available to them and disseminated them all over the world. In so doing, they not only achieved recognition and acquired knowledge, they also benefited many people. The most important concern of astrologers, scientists and architects is the house or dwelling place. Housebuilders have to know the date, time, place and method of building any house. I have collected information from books. I have also studied books written by Maya on this subject for twenty years and collected opinions regarding the Site Spirit in order to help those interested in the subject. Those who do not build houses according to the rules set down in the sastras will undergo, as we know, much hardship and suffering. It is with a view of helping people that I have attempted to write this work. (Translated from the preface.)

The critique of the textual community as one that preserved the ancient traditions but ultimately undermined the crafts is by no means confined to the brief prefatory remarks in the modern manuals. In his English language work on indigenous architectural treatises from the Malabar coast, Pillai, a non-Brahmin, takes a more extreme position that attacks the Brahmins as a social and moral community. He insists that Brahmins hijacked the ancient science of architecture from its rightful heirs, the *silpis* (architects). The convoluted reasoning rests in part on a belief, promoted in the classical texts by Brahmins themselves, that builders once belonged to hierarchically organized classes and enjoyed a higher social position in the society than they do now. As Pillai writes:

The Silpis undoubtedly occupied a very high position in India. From [the] *Manasara* it is seen that the study and application of the Vedas was one of their primary qualifications at one time. But the author of the *Manushalaya Chandrika* completely left out the Vedas as a

subject for their study. This is not merely an omission; for the Silpis by this time had fallen from their once high position, probably [to] the low position in which they are found in some parts of India today. The cause of this degradation is very difficult to explain, yet it can safely be said that it was due to the rise of the Brahmins who, from a servile position, assumed dictatorial powers even over the kings based on spiritual claims. The Brahmins were mere priests in early Vedic days. Later on they became so powerful that even the kings of Ayodhya [Lord Rama's capital] had to bow before [them]. The Bhargavas, another family of priests specialized in warfare; the famous Parasu Rama claimed to have exterminated the entire race [of] Kshatriyas, not by any spiritual powers, but by force of arms. In early days, the study of the Vedas was not confined to any particular class, it was common to all. Those who had a special aptitude for learning took up the study, including the Silpis who needed it most on account of their profession (287).

Pillai argues that Brahmins divided and codified the Vedas, depriving the architects of the use of them. He depicts Brahmins as charlatans who lacked the practical experience necessary to understand the significance of the science, and instead perverted "the mathematical diagrams, survey sketches and such . . . for sorcery and necromancy, to establish their [own] importance and to squeeze money out from a credulous public" (289). The result of this devolutionary process, according to the author, is that at present the main practitioners of the crafts are non-caste Hindus. "Especially in the South," he writes, "they belong to the so called untouchables. Yet at the time of the rituals and ceremonies they don the sacred thread and perform "Pujas" (sacred rites)—indicative of the fact that their ancestors at any rate were "Dwijas" [twice-born] or men of rank and position. It is this class of Silpis who nurtured and maintained the Silpa-Sastras and handed them down to posterity" (7).

CHAPTER 2

ARCHITECTURAL PRODUCTION AND THE BODY AS THE ORGANIZATIONAL FRAME

The components that make up the universe are likewise those that make up the human body and similarly, the members of the body are reflected in the makeup of the dwelling. The whole of the dwelling is made up of different parts or limbs, as is the human body. *Manaiadi Sastiram*

Through time and across cultures, the human body has served as a central metaphor for the organization of architectural space. In the Western architectural tradition, beginning with Vitruvius, continuing into the Renaissance and culminating in the precise mathematical relations of LeCorbusier's Modulor, it was the proportional relationship between the componential parts of a coherent whole that stimulated the analogy. In the building forms of the Dogon and the Batammaliba in western Africa, the nomenclature of the constituent parts of the body is literally transposed onto domestic space (Griaule 1965; Blier 1987). Elsewhere, the corporeal motif in architectural design has been expressed through a narrative of sacrifice, for example, as in the body of Christ in the Gothic church tradition, or as Hersey (1988), has recently argued, in the iconography and nomenclature of the temple forms of the classical world. Wherever it is found, and however it is interpreted, the human body has served as a mnemonotechnic matrix for the organization and transmission of knowledge considered central to building organization and landscape design. This chapter considers the body as a motif and mnemonotechnic system in South Asian architectural theory as it was first expressed in the medieval classical treatises on architecture and later reframed in the vernacular tradition.

COSMONOGENESIS AND THE ORIGINS OF ARCHITECTURAL ORDER

When Le Corbusier was commissioned to design the new capital of the Punjab at Chandigarh in the early 1950's, he laid out the city in the form of a

grid of 46 sectors and likened its form to that of the human body. Among other analogies which emerged in his perception of the city as a complex organism, were his references to his now famous set of buildings known as the Capitol Complex which he placed in the northeast as 'the head' of the city, and to his commercial complex which occupied a more central position as 'the stomach'. As the recollections of his colleague B.V. Doshi suggest, LeCorbusier had no specific knowledge of Indian architectural traditions when he set down his design, but he displayed what might easily have been interpreted as a prescient knowledge of them. In the South Asian tradition, the site is likewise laid out as a grid expressed as a single human body which is worshiped as a divine presence and occupied by 45 additional deities as shown in Figure 14.

It is superimposed on a square. In the South Asian tradition, the fixed position of the directional guardians, the meaning attached to the orientation of the plan in space around an oriented center, and the origins of this square are expressed in one of the great cosmogonic myths of the Hindus, two versions of which are discussed below. It describes the manner in which, ordered, oriented space was first conferred on earth and represents it as a named, divine presence that is presented in anthropomorphic form.

The best known cosmogonic account appears in the *Brhat Samhita*, the Sanskrit work on divination and astrology attributed to Varahamihira. According to this source, in the Golden Age there was once a "nameless thing" in the realm of the gods, generally taken to be one of the Asuras (Titans or anti-gods). It blocked heaven and earth and earth with its body. The gods finally seized it and threw it to earth face downward where they settled on it forever in an order arrangement within a square oriented to the four directions. Lord Brahma gave the name *vastu purusa* (the man/spirit of the vastu, hereafter 'Site Spirit') to this railed in being on earth (Kramrisch, 73 ff). The *vastu* is the remainder or 'remains' left over from the sacrifice of this being and is the material from which a system of order emerges. The remains are transformed in the sacrifice of the Titan and are reborn as order in this world. The Site Spirit is thus ordered space on earth personified as a supernatural being. The oriented polygon (*mandala*) in which he resides places the process of cosmic ordering within an architectonic frame. The remains of the fallen Titan came to lie on the earth with the head in the quarter of light (E/NE) and the feet in the quarter of darkness (W/SW). His archtypical image is recalled ritually in the construction and form of all ordered space and provides the matrix for additional design operations pertaining to the organization of the building which are described in greater detail below. As the gods decreed in the beginning, he and the anchoring deities who took up their



Figure 14. Disposition of the Site Spirit on the 81 square grid according to the *Brhat Samhita* and other sources.

stations forever on his body are to be propitiated by all who build structures in this world for men or for gods.

The popular manual, the *Sri Lalitha Navaratnam Manaiadi Sastiram* gives a more embellished treatment that differs in some details. According to the manual, in the Silver Age, an Asura named Mahabalan dozed off in the celestial waters. The gods had been terrorized by him and approached Lord Brahma (the Creator) for a strategy to save them. Brahma gathered the gods together to push the troublesome demon to earth while he was sleeping. The demon was enraged and complained to Brahma that he had been tricked since he had been

pushed to earth while he was off guard. Brahma appeased him. He legitimated him with a new name, the name of Site Spirit, and in so doing acknowledged that the creature's rightful abode and dominion would henceforth be on earth.

Perhaps the most interesting departure from the version given in the *Brhat Samhita* is the incorporation of astrological materials into the text of the cosmogonic myth. According to the Tamil manual, the creative act that brought ordered space into existence on earth, i.e., the expulsion of the demon from the realm of the gods, took place in the fortieth year of the Hindu cycle, in the month of Puruttasi (September-October), on a Saturday which fell on the third day in the dark lunar fortnight. The exact position of the moon in its twenty-eight day cycle is also given. On that occasion, Brahma informed the Site Spirit that those who wished to ensure prosperity for themselves would perform puja to him, and that those who failed to do so would face misfortune and death. For this reason, the manual urges the reader to venerate the Site Spirit when the foundation of the house is laid and at the time the house is first occupied. Furthermore, it states that offerings should be repeated on an annual basis, at the time of the birth of a child and under the following additional circumstances: when windows, cupboards and stakes for the house are put in place; in the event that the structure collapses and needs to be rebuilt, or if it is struck by lightning or consumed by fire; if the building becomes infested with snakes, other bad elements, certain owls, crows, pigeons, other wild animals and so forth; and finally if the peace of the site is disturbed at night by ominous noises made by cattle, horses, and cats.

Most indigenous works describe or depict the position of the Site Spirit as lying face downward as shown in Figure 14. He is represented as having a right side and a left one with the former disposed to the south and east and the latter to the west and north. The *Manushalaya Chandrika* and other popular texts from the Malayalam speaking area are the only vernacular treatments from South India that actually depict him. They show the Site Spirit face upward in which case the directional alignments with right and left are reversed.¹ The Sanskrit *Mayamata* describes the Site Spirit as lying with his head to the east and with his limbs extended to the minor directions as shown in Figure 16.

The Sinhala *Mayimataya* draws on the corporeal motif associated with cosmogonic account of the Site Spirit, but the narrative of his descent is omitted, and as previously noted, in Sinhala culture, largely unknown. The manual gives instructions for making offerings to consecrate the site on which there is an

¹ Kramrisch cites textual sources which show that during worship the Site Spirit is contemplated in his true nature facing upward, the direction from which he has come (78).

indwelling deity called the *vasu devi* that serves as an organizing frame.² The orientation of the body is not described. According to the manual, the offerings or *bali* (sandalwood, boiled rice, flowers, lamps, precious metals, and a young coconut) are to be made on the mouth or the navel of the figure. According to the Sanskrit *Mayamata*, the navel is at the geometric center of the site, an area associated in all regional traditions including the Sri Lankan one with Lord Brahma, the Creator (cf. Appuhamy, 56-58). The mouth/head is located in the east according to the Sanskrit *Mayamata* (Figure 16) and the northeast according to most other accounts. In traditional cosmology, these are the directions of light, creative energies and new beginnings. The east is the most auspicious of the major directions, associated as it is with the rising sun, and the northeast the most auspicious of the intermediate ones. Throughout the culture area, it is associated with Lord Siva and hence with fecundity. The northeast is also perceived as an upward facing axis and hence represents a privileged link between the world below and the gods above.³ The Sinhala manual enjoins the householder not to make offerings in the area of the deity's feet. According to the Sanskrit *Mayamata* which represents the deity as spread eagled across the site, this would represent the southwest (the right foot) and the northwest (the left one). In other versions in which the feet are presented as pressed together and thus occupying only one direction it would be the southwest alone. In traditional Hindu cosmology, the southern quarter is considered one of 'evil portent'; southwest is the direction of the ancestors or of Nirutti who personifies the dangerous aspects of the earth and destruction (Kramrisch, 93). As for the west, it is the dark quarter, and the northwest is associated specifically with deities of affliction.

The oriented square occupied by the Site Spirit is so sketchily described in the Sinhala *Mayimataya* that it is necessary to turn to other works in order to arrive at an understanding of its original internal order. Standard accounts such as the Sanskrit *Mayamata* and the *Brhat Samhita* describe the disposition of the anchoring deities within the squares, and lay out and name the main axes and orientations, although not all these accounts concur on all details or are exhaustive. The *Vastu Vidya* (Appuhamy 1937), for example, is the only contemporary text I have examined that actually preserves the names of the lines (*sira*) (20 in an 81

²The term *vasu devi* seems to have been derived from *vastu purusa* by the *Mayimataya* author, but it literally means goddess of fortune. I found that some modern Sinhala readers had no idea who *vasu devi* was; a few others identified 'her' with Lakshmi.

³This link is given architectural expression in many popular texts. In dwellings of more than one storey, it is said that the stairway should be located in the northeast.

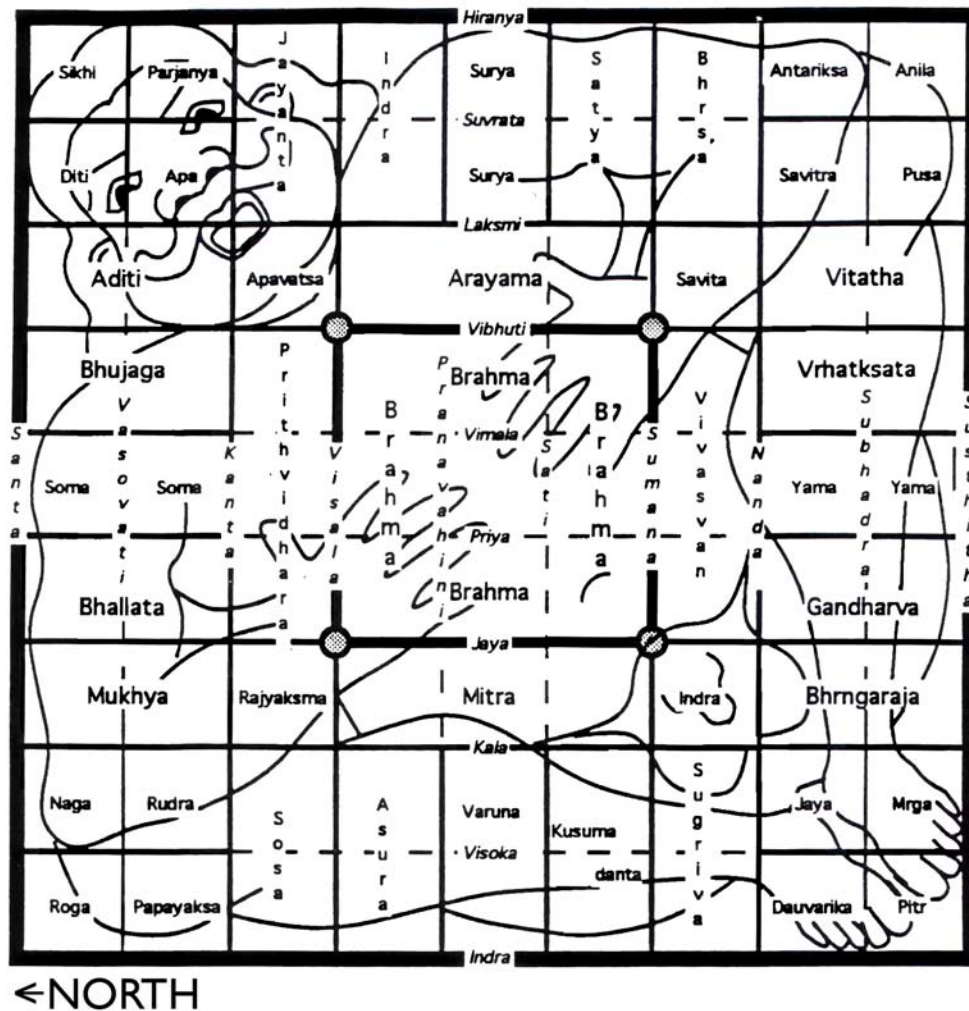


Figure 15. Disposition of the Site Spirit on the 81 square grid according to the *Manushalaya Chandrika*.

unit pattern and 18 for the 64 unit figure) that segment the square into its well known grid pattern.⁴ According to tradition, forty-five deities including the gods of the major and minor directions at their stations reside in the oriented square in a checkerboard arrangement of 81 or 64 squares. The former, called the *paramashayan* diagram in the Hindu tradition, is said to be the matrix from which a house plan departs; the latter, called the *manduka* diagram, is said to be good for temples. Some sources say the 81 square plan should be used for both.

⁴ The source of the names appears to be the text *Vastuvisvakarmaprakash* (cf. Bhat 1981:475).

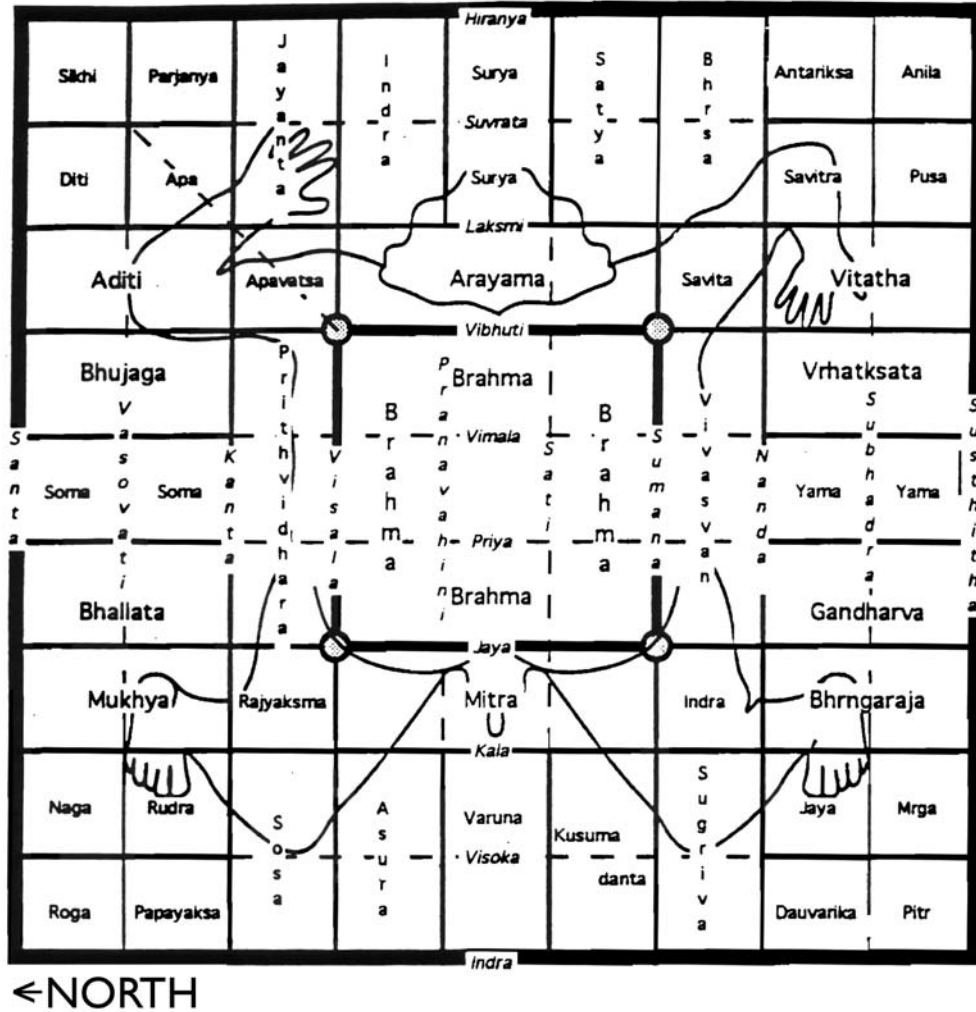


Figure 16. Disposition of the Site Spirit on the 81 square grid according to the Sanskrit *Mayamata*.

There are other matrices built up on this system of squaring, ranging from arrangements of one square to 1,024 (cf. Dagens 1985:23-24). The most important ones, and the only ones treated in the general popular literature, however, are those of 64 and 81 squares.

The disposition of the deities in a 64 square diagram differs in some details from that of 81. A comparison of the two arrangements appears in Figures 17 and 18.

An extended discussion of the meaning and arrangement of this original array which includes the major deities of the Vedic period who are now specialized

as directional guardians appears in Kramrisch 1946. The names of the deities are subject to some variation; the complete model of the oriented diagram and its components as presented in a Sinhala language source (Appuhamy 1937) has been used as the basis for Figures 14, 17, and 18. According to tradition, the Site Spirit is held face downward in a immobile position by the gods who are seated on him. The fixed nature of any ordered space is thus analogized to the image of the earth as a whole which is fixed or held in position at the cardinal points.

In the Brahminic tradition set down in the classical treatises, the Site Spirit square serves a mnemonic function in three different areas of practice. First, it is an organizational frame for rites, and as such locates the deities to be propitiated and organizes them outward from the center in order of importance. Second, it encodes elementary astrological or astronomical configurations, as noted below. Third, the body parts and/or the constituent deities serve as an organizational frame or locators for elements and features of the building or site. These matters are explored in the following sections.

THE VEDIC ASSEMBLAGE AND THE MNEMONOTECHNIC TRADITION

One should meditate on the image of Isa (Siva) as being seated on a bull accompanied by his consort, wearing a tiger skin, having a whitish complexion, adorned with all ornaments, carrying a tabor in the right hand and a doe in the left, the upper right hand being in the attitude of imparting protection and the upper left hand in that of bestowing a boon *Manasara* (Acharya 1934:48).

In the classical texts on architecture, the Site Spirit is described as a sacrificed being held firmly in place by the deities who reside on his body, that is as 'fixed'. Kramrisch (1946) provides an elegant analysis of the representation of cosmic temporal cycles within this static configuration. As she explains it, the main orients to the major directions of the square in which the Site Spirit is placed are the representation of the solar cycle. In the outer border of an 8x8 or 64 unit figure, there are 28 segments representing the constellations or asterisms through which the bodies of the heavens including the moon pass and thus the days of the lunar cycle. In the border of the 81 unit figure, the number is augmented by four (representing the four directions) to 32. Hence, this is the place where the movements of the sun, represented either by the square itself or by four extra compartments within its border, and those of the moon, represented

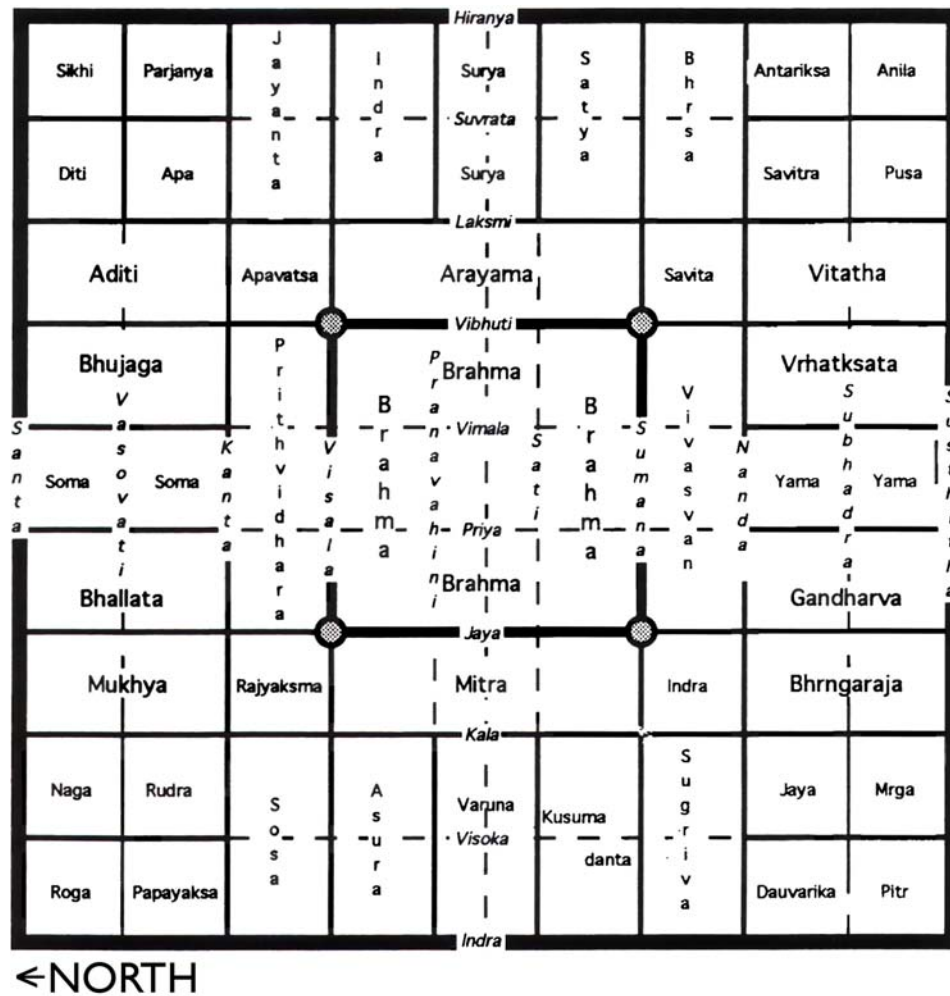


Figure 17. Disposition of the deities on the 81 square *paramashayan* grid.

by 28 segments in the outer border, are brought into order and harmony in a single form (35).

In his work on Hindu approaches to art and science, Pillai has emphasized the mnemonic functions of the Site Spirit in ritual which he refers to extravagantly as a 'demon for memory training' (49). According to him, since the relative position of the 45 deities on the squares was difficult for ritualists to remember, "a demon was felled on the floor and gods were located on his body and limbs." "The utility of the story cannot be denied," he wrote. "In spite of elaborate descriptions given in the texts, I found it difficult to locate the gods in their correct

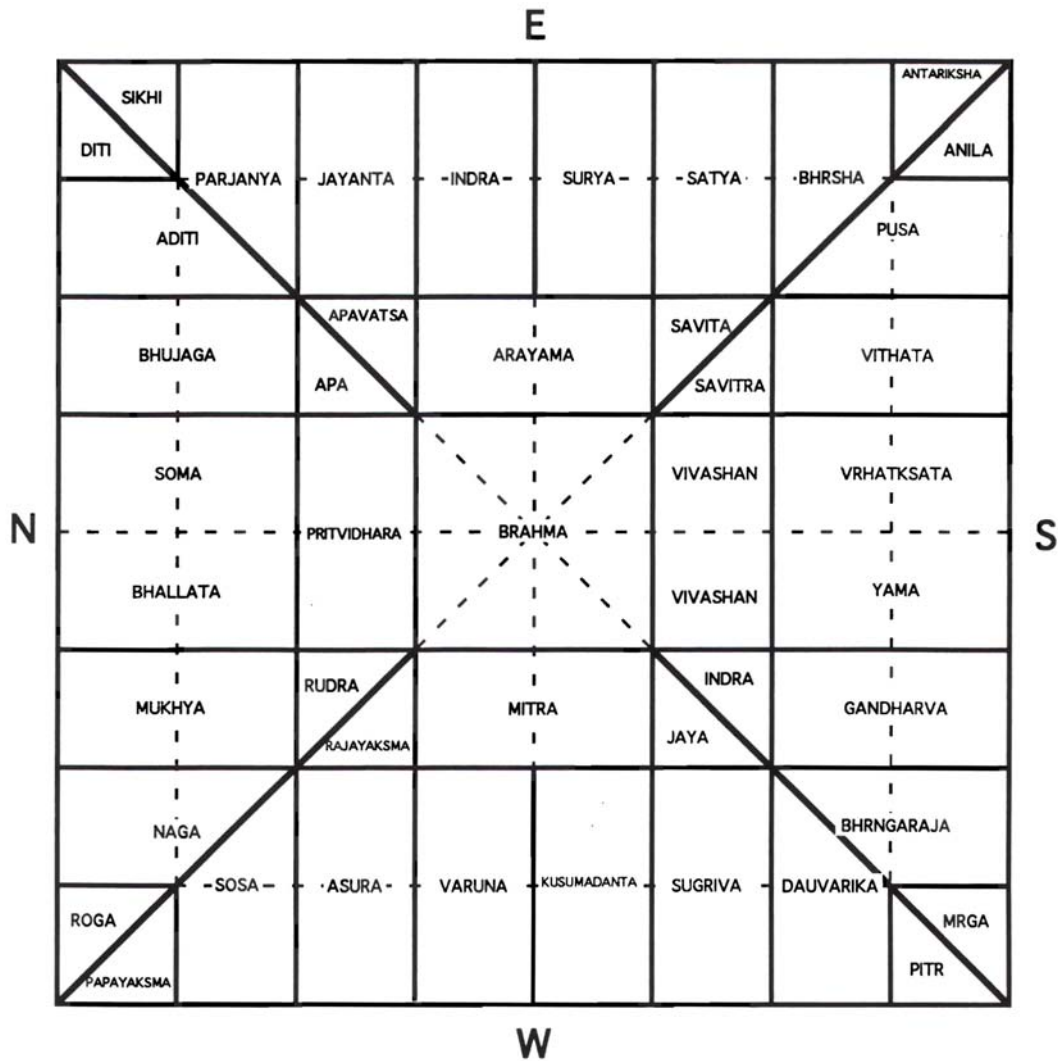


Figure 18. Disposition of the deities on the 64 square or *manduka* grid.

places until I had recourse to this cock and bull story of the demon" (49). As noted in Chapter 1, the Vedic deities and their fixed arrangements served as a matrix for the elaborate ritual productions associated primarily with the monumental architecture of the feudal state. Their alleged practical importance in design derived from their function as locators for elements within formal

compositions (entire towns, for example) of considerable internal complexity. The classical materials are virtually devoid of clarifying diagrams or images.⁵ In their place we find a mnemonotechnic assemblage that ostensibly enabled the ritualist or architect to form a mental image of the overall site or building plan. In the *Manasara*, an entire section of the text first locates the deities and then urges the reader to meditate upon each one in place. Rich contemplative imagery is provided. For example, in meditating on the squares associated with Brahma, the creator, the reader is asked to imagine the deity as follows:

seated on a lotus throne, as being of golden complexion, possessing four hands, four faces, eight eyes, wearing white clothes, twisted hair, a diadem, a sacred thread and outer garment, adorned with earrings, possessing eight ears and four necks, holding a water pot and a rosary in the two left hands and the foreparts or hindparts of two right hands imparting protection, and the remaining being in boon-giving attitude, decorated with all ornaments, bearing sacred marks on the cheek, assigned to the central plot of all plans, and assuming these characteristic features for the purpose of creation (Acharya 1934: 45-46).

The ritualist or architect thus imagines a chess board that is completely populated by figures that are richly colored, dressed, ornamented and uniquely postured. Some of them are startling or hideous in their appearance. For example, Naga has a serpent's head, Mukhya an elephant's face, Bhallata a ram's face and Mriga that of a deer. Roga (lit. disease) "has a lean form, red eyes and a pale complexion and holds a pike and a skull. . . ." Four deities standing outside the corners of the square who are sometimes added to the assemblage also hold pikes and skulls, are dressed in red clothes, and have large fangs, terrible eyes and dishevelled red hair on their heads (51).

The detailed imagery is reminiscent of that recommended in Western memory treatises that were first produced in classical times and later revived in the Renaissance. The Latin work the *Ad Herrenium*, for example, showed how complex, imaginary landscapes such as palaces could be mentally constructed as visual images having many places or loci onto which information could be layered and from which it could then be easily recalled (Yates 1946). The *Ad Herrenium* recommended setting

⁵ Translations of these works are now often accompanied by drawings that have been produced in the twentieth century. The *Manasara*, for example, is illustrated with over 100 drawings that were executed by architects and engineers trained in the Western tradition of representation (cf. Acharya 1934:xv-xvii).

up images of a kind that would linger in memory, that is those that, as Yates put it, would be “singularly beautiful, hideous, comic or obscene” (10).

... if we ornament some of them, as with crowns or purple cloaks, so that the similitude may be more distinct to us; or if we somehow disfigure them, as by introducing one stained with blood or soiled with mud or smeared with red paint, so that its form is more striking, or by assigning certain comic effects to our images, for that too will ensure our remembering them more readily. The things we easily remember when they are real we likewise remember without difficulty when they are figments (*Ad Herrenium*, III, xxii, in Yates (ibid)).

In the Western classical tradition, there was never a completely formulated system of images propounded; the instructor in mnemonics was to encourage the students to create their own. Nor did this mnemonotechnic system apply to any particular body of material; it could be used for any worthy purpose. In the medieval Indian system, the images were standardized within the culture, and precise recall of their normative structure may have been considered important because of its relationship to temple sculptural programs. In addition, the use of formal imagery was ostensibly tied in the architectural tradition to design problems and practices that had nothing to do with the replication of the images. For example, this is the manner in which the *Mayamata* describes the location of village gates, sewage outlets and bazaars:

The gateways are established on the squares of Bhallata, Mahendra, Raksasa and Puspadanta. The four sewage outlets are on the squares of Vitatha, Jayanta, Sugriva and Mukhya; the eight secondary gates are on the square of Bharsa, Pusan, Bhrngaraja, Dauvarika, Sosa, Naga, Dita and Jalada (Dagens 1985:31).

A street encircles the place of Brahma, and it is there that the bazaar for betel and similar produce, for fruits and for articles of value should be installed. Between the square of Isa and the Mahendra gate is the bazaar for meat, fish, (dried) products and for vegetables; between the Mahendra gate and the square of Agni is the bazaar for solid and liquid foods; the ironmongers are between the Agni square and that of Grhaksata; between this last and that of Nirrti are the coppersmiths; between the square of Pitṛ and that of Puspadanta is the clothing bazaar ... (Dagens, 44).

In more casual practice in the popular tradition, the individual identities of the deities within the ritual assemblage apparently receded in time, or may never have been fully operative across the culture area or for minor building types. They were in any event much less critical as mnemonic devices for the simple forms of the village community. The Vedic deities are not even mentioned in the Sinhala *Mayimataya*, the *Manaiadi Sastiram* or the *Sri Lalitha Manaiadi Sastiram* (part I), and it would be safe to say that Sinhala speakers at least would not even recognize most of the names. The only gods who survive as important in housebuilding rituals in the popular tradition across its full range are the eight who mark the main orients and Brahma located at the center who are salient in all regional traditions.

THE MNEMONOTECHNIC BODY IN THE POPULAR TRADITION

The Site Spirit lies with his feet in the Zodiac sign of the sun. His head lies in the seventh house of the Zodiac from the feet, and he lies with his left hand downward. If any ceremonies are performed at the feet, the master of the house will die. If it is done on his back, the owners will be terrorized by the authorities. *Sri Lalitha Navaratnam Manaiadi Sastiram*.

In the contemporary housebuilding tradition, the motif of a body within the site is also part of a mnemonotechnic system but one that is employed primarily to organize an entirely different set of architecturally relevant particulars derived from astrology. The static anthropomorphic image that arose as a visual clarification of the organization of the entire Vedic pantheon, is transformed in Sinhala, Tamil, Oriya, and other vernacular language manuals into a rotating one resembling a moving dial. Like the figure from the classical manuals, or those in the Malayalam manuals that creatively adapt it, the moving one has body parts. However, it has no constituent deities. Thus, two important transformations take place. First, the astrological and temporal features that are covertly encoded into the fixed figure are overtly produced in the form of the moving one that resembles a clock. Second, the constituent deities that were set forth as essential to the mnemonotechnics of design problems of greater complexity, are eliminated in housebuilding manuals and only the body parts remain as gross locators.

Interpretations of the movements of the moving figure are used to make decisions about the correct placement of architectural features as well as the timing of building operations according to the housebuilding manuals. In some manuals, this body is represented in the image of a man, thereby recalling the prestige and antecedents of the ancient texts and rituals, but in other works the anthropomorphic image is abandoned completely and the Site Spirit takes the form of a snake, sometimes referred to as the Site Snake (*vastu naga*). The historical identity between the two seems self evident, even to modern compilers. At least one manual, the *Jyotishratnamala*, notes that the snake and the Site Spirit are one and the same.⁶ The Orissan materials translated by Bose (1932) are examples of textual sources in which the snake alone is used as an organizational frame; there is no mention whatever of the man in the square, the assemblage of Vedic deities or of the foundation myth describing the felling of the demon. Other published materials from the Orissan area suggest that these traits may be regional ones (Boner and Sharma, eds., 1966). As for the sources examined in this work, the image of the encircling man is the one overtly adopted in the *Sri Lalitha Navaratnam Manaiadi Satiram*,⁷ whereas both serpentine and anthropomorphic imagery are comingled in the Sinhala *Mayimataya* as well as in the *Manaiadi Sastiram*. Further discussion appears below.

THE SITE SPIRIT WHO MOVES

Textual sources cited in passing by Kramrisch (1946) say that there are two types of sites (*vastu*) or site spirits, fixed and moving. The former is said to be essential for all enduring work such as temple building, and the latter is applied to work on less permanent work such as houses and images (62-63). The moving Spirit is compared to a time-piece by the author. Nevertheless, classical materials such as the Sanskrit *Mayamata* omit all mention of the moving figure even for the 'less permanent' structures. Moreover, other texts such as the *Vastu Vidya* and the *Jyotishratnamala* apply the moving image to houses, watercourses and temples as well, providing separate annual courses and stations for each.

⁶ In some North Indian architectural manuals, the naga or snake is depicted with a human head and a serpentine body, as nagas frequently are in the sculptural programs of Hindu temples.

⁷ A snake motif is introduced in this text as a divinatory tool for locating disturbances underground, but this is not the same thing as the rotating figure referred to here. Further clarification appears below.

In the popular traditions of Tamil Nadu, the Site Spirit takes on the characteristics of a deity who rotates in accordance with temporal cycles as if he were a celestial body. He is associated most closely with the solar cycle. According to the *Sri Lalitha Navaratnam Manaiadi Sastiram*, the Site Spirit's legs lie in the prevailing sign of the Zodiac, that is the one in which the sun lies. Thus, in August-September, the legs are in Virgo, in January-February, they are in Aquarius and so forth. The head of the Spirit is placed in the seventh sign opposite each Zodiac, that is, in the one directly opposite his feet, which is said in the *Manaiadi Sastiram* to be the station of the moon. Thus, when the feet are in Pisces, for example, the head is in Virgo and vice-versa. Since each of the twelve signs of the Zodiac is associated with a particular direction in the sun's course, the Site Spirit likewise has an orientation. According to the texts, during specified months of the year accounting for 270° of the sun's 360° annual cycle, the Site Spirit is perceived to be up and about or awake; in others, accounting for the remaining 90°, he is said to be sleeping. The months when the Site Spirit is sleeping are not suitable for building or entering a house, presumably because he cannot be invoked to protect it. The texts provide two versions of the months involved. The *Sri Lalitha Navaratnam Manaiadi Sastiram* says they are the three months in which the head is in the south and the feet in the north, that is those between the winter solstice and the vernal equinox. According to these passages, then, the Site Spirit sleeps in winter and rises on the last day of Pisces, that is at the vernal equinox. In this manner, the Site Spirit is associated directly with the annual rebirth of the sun, and hence, very broadly with the process of cosmic renewal.

This version of his annual course is contradicted in the same text, in the *Manaiadi Sastiram*, and tangentially in the Sinhala *Mayimataya* by an alternate scheme. According to this one, the Site Spirit is up in the two months prior to each equinox or solstice; in the one marked by the onset of the equinox or the solstice, he sleeps. Thus, every third month beginning with March-April (Aries) and including June-July (Cancer), September-October (Libra) and December-January (Capricorn) is 'down time'. From an astronomical or astrological perspective, he has 'set'. According to the *Manaiadi Sastiram*, major housebuilding activities should not be conducted during these periods. Verses 172-173 of the Sinhala *Mayimataya* which associates these particular months with unmitigated disaster concur. The Tamil text translated by Kearns connects the prohibited months with periods of violence and disorder from Hindu mythology including the great wars of the Hindu epics the Ramayana and

Mahabharata (235).⁸ Whatever the arrangement, the texts concur that housebuilding should not be conducted in 90° of the annual cycle of the sun.⁹

The Tamil materials go on to provide additional particulars about the rising times of the Site Spirit and hence set out more precise information about auspicious and inauspicious times for action. According to them, he rises only during certain hours on specified days in the auspicious months. These details further narrow the general, favorable periods to their most auspicious segments. According to the texts, the Site Spirit rises at the following eight times: the first hour of the tenth day of Taurus, the eighth hour of the twenty-first day of Gemini, the second hour of the eleventh day of Leo, the twenty-first hour of the sixth day of Virgo, the second hour of the eleventh day of Scorpio, the eighth hour of the eighth day of Sagittarius, the eighth hour of the twelfth day of Aquarius and the eighth hour of the twentieth day of Pisces. After waking he stays up for three hours and eighteen minutes during which he engages in the activities of his daily round.

The *Sri Lalitha Navaratnam Manaiadi Sastiram* says the 'day' of the Site Spirit is divided into five parts, each 3/4 of an hour. In the first, the Site Spirit attends to the call of nature, and if housebuilding activities are commenced during these moments, the builders will face the wrath of kings. In the second, he bathes. Housebuilding activities initiated then will bring on misery. In the third, he performs puja. Housebuilding begun at this time will bring on poverty. In the fourth, he takes his meals, and housebuilding begun at these moments will bring forth good sons. During the fifth period, the Site Spirit, here taking on the attributes of a regent, attends to affairs of state! Housebuilding begun then will bring prosperity to the owners. The *Manaiadi Sastiram* gives a similar list of activities which omits the first period of attending to bodily functions and inserts a segment for chewing betel between eating and ruling.¹⁰ At the end of his 'day',

⁸ The text specifies four months, then with the usual scribal inconsistencies elaborates them into five as follows: "On a Monday in the month Adi, Ravana lost his head; in the month Margali, the Bharata war and other wickedness took place; in the month Purattasi, Hyrania died; in Punguni, Siva drank the poison; in the month Auni, Mapelasakiravarthi [=Mahabalichakravarti, a great Titan who once ruled the earth] fled from his town" (Kearns, 235).

⁹ The Bengali *Vastu Gopal* advises that the Site Snake which corresponds to the Site Spirit in many texts (see Figure 15 below) sleeps in the three months beginning with the autumnal equinox, that is in Libra, Scorpio and Sagittarius. At this time, his head is said to be in the east.

¹⁰ Since activity specific spaces and rooms have preferred orientations, it is tempting to look for a map of the ideal dwelling as an underlying system in the daily round of the Site Spirit. However, no clear picture emerges.

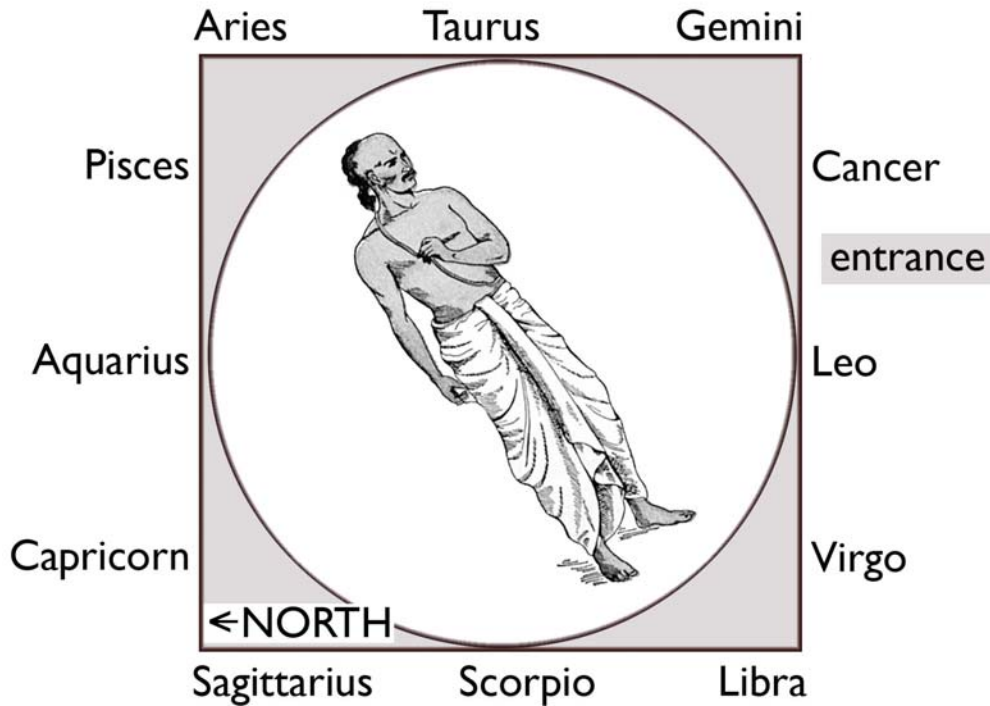


Figure 19. The location of the house entrance as determined by the position of the Site Spirit.

the Site Spirit sleeps. Further calculations are used to narrow down the auspicious hours to minutes.¹¹

Passages elsewhere in the *Manaiadi Sastiram* deal with the position of the Site Spirit with respect to other housebuilding operations such as orienting the entrance. According to the manual, the entrance to the house should be placed 90° clockwise in advance of the head of the Site Spirit. In Tamil manuals this is sometimes described as the direction he faces. In Aries, Taurus and Gemini, the head lies in the west, and the entrance should therefore be made in the north. In Cancer, Leo and Virgo, he lies with his head to the north, so the entrance should

¹¹ These appear only in the *Sri Lalitha Navaratnam Manaiadi Sastiram*.

be in the east. In Libra, Scorpio and Sagittarius, the head lies in the east, and the entrance is placed in the south. In Capricorn, Aquarius and Pisces, the head is in the south, and the entrance should be in the west. A back to front orientation with respect to the directions is implied by the prescription that the entrance should be fixed in the area of the stomach, a body part which according to the foregoing, lies at a 90° rotation from the head in a clockwise direction. Figure 19 attempts to capture this imagery. This description therefore contradicts the geometry of the figure as presented in Figure 14 which is prone and has no back to front alignment. All other body parts are said to be improper areas for the entrance. When the head is in the east and the north, it is said that the right hand or side is 'up' and the left 'down', and when the head is in the west and the south, the reverse. According to the geometry of Figure 19, they are perpendicular to the head and the main axis of the body. 'Up' and 'down' as descriptors of the position of the arms or sides are thus consistent with the overall geometry of Figure 14; the Site Spirit becomes a rotating wheel with two main axes, one marked by the head to foot alignment and the other a perpendicular one delineated by the arms. This supposition, however, places the stomach and the arms in the same position with respect to the axis of the trunk (at a 90°) rotation. One arm, therefore could be construed as pointing to the direction in which the entrance should be located, although since the figure is not depicted in the texts, this is merely an inference.

THE SITE SPIRIT AS SERPENT IN THE VERNACULAR TRADITION

When the sun passes through Scorpio, Sagittarius and Capricorn, the snake's head will be in the southwest, its body in the southeast and its tail in the northwest. During these times it is auspicious and beneficial to install a deity in a newly built house. If the ceremony is conducted on the head of the snake, it may cause death. If on the back, it can bring destruction. If on the tail, it will lead to anxiety and trouble. *Manaiadi Sastiram*.

It is a matter of interest that the cover pages of the popularly produced Sinhala *Mayimataya* manual depict a cobra either with or without an accompanying line drawing of a dwelling, as shown in Figures 6 and 7. In verses 56-60 of the Sinhala *Mayimataya*, a section of the text that deals with placing the first post for the house, the significance of this figure is clarified in terms of annual movements of the Bhumanaga (Earth Serpent), also hailed as

Bhumanaga Raja (Earth Serpent King). In Aries, Taurus and Gemini, it is said that the serpent lies with its tail to the west, its head in the east, its back to the north and its belly to the south. As it advances 90° with each successive quarter of the year, its course and stations with respect to the directions differ from those described for the Site Spirit in the Tamil *Manaiadi Sastiram* above by 180°. That is, in Cancer, Leo and Virgo, the head is in the south; in Libra, Scorpio and Sagittarius, in the east and in Capricorn, Aquarius and Pisces in the north. Both the snake of the *Mayimataya* and the Site Spirit of the *Manaiadi Sastiram* move in a east-south-west-north course or clockwise around the dial. Figures moving in a clockwise direction from other texts, whether in the form of man or snake, concur, as a general rule, with the course outlined in the *Manaiadi Sastiram* as shown in Table 1 below.¹²

In the *Manaiadi Sastiram*, the position of the snake is described independently of that of the Site Spirit (note that there are three columns in Table 1 pertaining to this text) and the starting point of its motion is advanced one month to Taurus at which point the head is said to reside in the northeast. Since the head has moved from east to northeast with the space of a month this suggests an east-north-west-south or counterclockwise movement around the

¹² There are maddening discrepancies within texts and between them with respect to moving figures. The *Manaiadi Sastiram* introduces three schemes. One which appears in fragmentary form (shown above as the second clockwise figure from the text) shows the annual movements of the Site Spirit beginning in Pisces rather than in Aries. Since the names of the months given are the Sanskrit ones, this supplemental information seems likely to have been incorporated from a classical source, such as the *Rajavallabha* which describes the same progression and configurations for a clockwise moving snake. The *Vastu Vidya* introduces a similar scheme, also for the serpent. It appears as an aside at the end of a chapter and contradicts the main, and more fully explored framework given within. Its source is unknown. At that point, the Sinhala commentary in the *Vastu Vidya* incorrectly translates and hence contradicts the preceding Sanskrit verses. The scheme given in Sanskrit in the *Vastu Vidya* coincides with the those outlined in the *Manaiadi Sastiram* as well as in the *Rajavallabha* as shown here. The *Sri Lalitha Navaratnam Manaiadi Sastiram* appended below introduces two schemes for the Site Spirit which do not seem to be compatible since one is moving clockwise and the other counterclockwise.

¹³ The terms clockwise and counterclockwise refer here only to movements around the oriented square whose upper border lies in the east and whose southern border lies to the right as shown in Figure 12. In figures in South Indian astrological manuals, the twelve houses of the Zodiac are laid out in an unoriented left to right sequence within a rectangle, or clockwise, whereas in North Indian manuals, they are left branching, or arranged counterclockwise. These conventions are unrelated to the present discussion, although over time and once superimposed on the 'site square', they may have played a part in the variation found in the popular traditions in clockwise and counterclockwise moving figures.

Table 1. Annual course of the site spirit or site serpent showing the position of the head and Zodiac sign and direction of movement according to the *Sinhala Mayimataya* (MMText), *Canons of Orissan Architecture* (Bose), *Silpa Prakasa* (Boner), the *Sri Lalitha Navaratnam Manaiadi Sastiram* (SLMS), the *Manaiadi Sastiram* (MS), and the *Vastu Vidya*

Zodiac Sign	MMText (Bose snake	Boner)	Figures Moving Clockwise				Counter-Clockwise			
				SLMS (MS man	MS)	MS (man2)	Vastu Vidya (snake)	Vastu Vidya house	(snake) temple	well
Aries	E	W	W	W	W	W	W	SE	SW	NE	NW
Taurus	E	W	W	W	W	W	W	NE	SE	NE	NW
Gemini	E	W	W	W	W	W	N	NE	SE	NW	NW
Cancer	S	N	N	N	N	N	N	NE	SE	NW	SW
Leo	S	N	N	N	N	N	N	NW	NE	NW	SW
Virgo	S	N	N	N	N	N	E	NW	NE	SW	SW
Libra	W	E	E	E	E	E	E	NW	NE	SW	SE
Scorpio	W	E	E	E	E	E	E	SW	NW	SW	SE
Sagittarius	W	E	E	E	E	E	S	SW	NW	SE	SE
Capricorn	N	S	S	S	S	S	S	SW	NW	SE	NE
Aquarius	N	S	S	S	S	S	S	SE	SW	SE	NE
Pisces	N	S	S	S	S	S	W	SE	SW	NE	NE

dial.¹³ In three following months, the snake continues to move around the dial: in Leo, Virgo and Libra, the head passes through the northwest, and in Scorpio, Sagittarius and Capricorn, the head passes through the southwest. At all times, the body and the tail occupy the two angles directly in advance of the head on the diagonal of the square, with the arc subtending an angle of another 90° which is empty. As a general rule, it is this empty spot, often described as being behind or opposite the head for a counterclockwise moving figure, which is an auspicious one for placing the first post, the entrance or other important elements. In the *Manaiadi Sastiram*, the course and stations of the snake are linked specifically to locations on the site for conducting ceremonies for installing images in a newly built house. The owner is advised to avoid the head, back and tail of the serpent.

The annual course of the serpent is unfortunately not depicted graphically in the *Manaiadi Sastiram* or the *Mayimataya*. Figures in manuals from other language areas show differences in detail. In some the serpent is outstretched, in others arched through the occupied angles and in still others looped across the site as shown in Figures 20-22 below.

Descriptions of the course of the counterclockwise moving serpent that introduce additional inconsistencies and greater detail appear in the *Vastu Vidya* as well as in the *Jyotishratnamala*. According to these sources, the serpent has unique courses within temple sites, house sites, and sites for watercourses. These movements as outlined in the *Vastu Vidya* appear in Table 1. Texts that comment on the matter (Appuhamy 1937; Bose 1932) say that the snake is lying on its left side. This is an additional mnemonic device for locating the empty spot which would then lie facing the snake's navel or belly. When the *Mayimataya* advises the reader to place the first house post in harmony with the position of the snake, placing it in the 'stomach' area appears to be what is meant. This general exhortation is confirmed in subsequent verses that identify the stomach specifically.

There is an identity to a degree, therefore, between the serpent and the Site Spirit as metaphors for the solar cycle. The serpent, however, is the one used exclusively as an independent organizational motif for the lunar cycle, and in the vernacular manuals, it is also developed in some detail as a divinatory tool. Verses 178-179 of the Sinhala *Mayimataya* text describe the body of the snake as an organizational frame for the lunar asterisms or constellations which constitute a path transited by the heavenly bodies complementing the houses of the Zodiac. The asterisms are described as forming segments of the serpent's body and must

be considered in commencing housebuilding activities of importance. The asterisms are assigned to the houses of the Zodiac as shown below in Table 2.¹⁴ The twenty-seven asterisms aligned with the twelve houses of the Zodiac as shown below are sometimes augmented by one, Abhijit, to achieve certain symmetries, for example in the arrangement within a square with seven disposed in each major direction.

Taking the asterism in which the sun is located at the moment as the ‘mouth’ or point of origin, the housebuilder is to count forward through the ordered list arranged in the body of the snake (see Figure 23 below). The *Mayimataya* identifies significant asterisms both by ordinal number and by the body part of the serpent in which they are located. It states, for example, that the fourth and thirteenth asterisms forward bring destruction. It goes on to assert that the “four asterisms in the feet” will bring long life, and the “four in the stomach” poverty without further comment. Presumably, someone familiar with the anatomical organization of the snake will be able to identify them unambiguously. Similar prognostications are provided for the right side, back and tail. The objective of this exercise is to locate a direction on the site plan that will be suitable for excavation or penetration. The exercise also yields information about inauspicious sectors of the site that might harbor remains of bones or other materials generating potential or actual difficulties for the owners. This debris is referred to collectively in the Tamil manuals as *sallium*. In fact, the snake motif as a template for the asterisms is primarily a divinatory tool that clumsily merges the reading of temporal data with a system of omens that seems to have preceded the rise of astrology. A discussion of this process is developed more fully below in Chapter 3.

The *Vastu Vidya* helps clarify the disposition of the puzzling array of serpent body parts with a useful diagram of the configuration of the snake as shown in Figure 23.

As Figure 23 shows, 28 asterisms are ordered within the body of a coiled snake in a *cakra* ‘wheel’ or template four squares by seven. The template includes all apparent body parts of the serpent except the head which stands outside it. This is the ‘starting point’ of the wheel and, I infer from supporting verses, contains either the name of the asterism in which the sun is located or, in another important calculation, the one under which the owner of the prospective house was born. In the case of the wheel presented in Figure 23, the asterism of origin, although

¹⁴ There is some variation in the English spellings of the asterisms and the houses of the Zodiac across language boundaries in Indian works. The spellings adopted here are merely my own preferences.

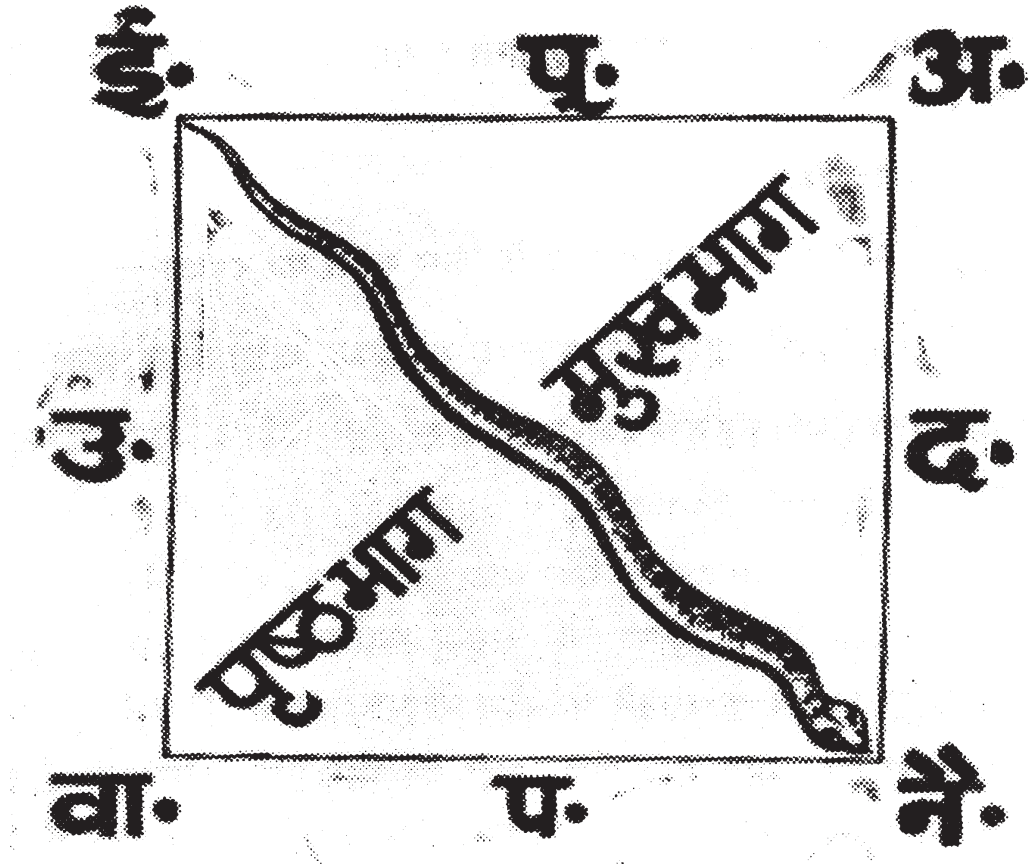


Figure 20. The Site Snake as depicted in the *Jyotishratnamala*.

unmarked, is Bharani, the second, since the succession of asterisms laid out below it begins in the neck with Krittika, the third. (The 'original' asterism Bharani is coincidentally seen as being in the shape of a pudendum.) The text tells us to divide the wheel into eight parts. Since the head stands outside and is effectively an empty spot which does not participate in the ordering of asterisms, the remaining seven can now be clearly divided into segments of four asterisms each. Extrapolating from the text, the first four segments beginning in the neck belong to the 'heart', and, moving round the snake's body, the segments of four each belong successively to the belly, the navel, the genitals, the knee and the calf until we arrive at the final four which are called the tail.

Figure 21. The Site Snake as depicted in the *Rajavallabha*.

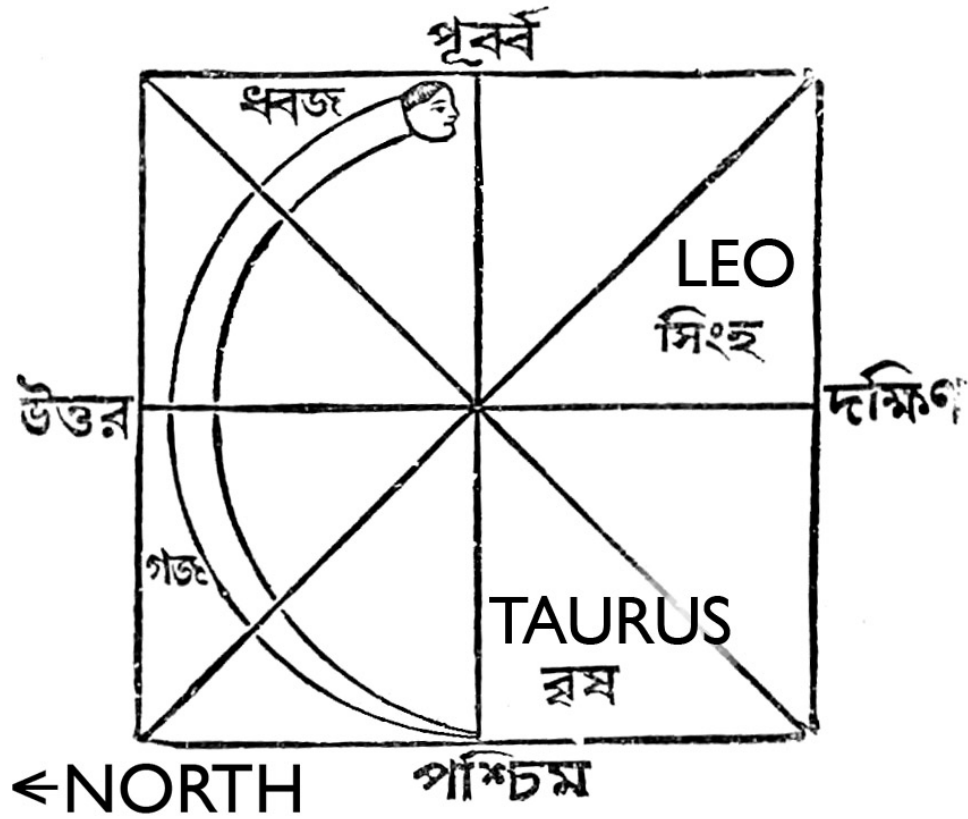


Figure 22. The Site Snake shown as 'sleeping' in the months of Libra, Scorpio and Sagittarius. After the Bengali *Vastu Gopal*.

The Sinhala *Mayimataya*, the *Vastu Vidya* and the *Manaiadi Sastiram* which also mentions the snake, are unanimous in enjoining the tail as a placement, and the latter two specify the head as well. The anatomical imagery is thus used to develop two distinct pieces of information: a location where excavation is to be begun on the site and an auspicious time in which to do it. The orientation for excavation is identified by placing the asterism where the sun is located in the starting box, and the time is developed by placing the birth sign of the owner there. These calculations lead logically to prohibitions on the asterism of origin and its associated direction as starting points in time or in space. Since the birth sign of the owner as the starting point outside the template necessarily reappears as the final segment in the sequence as the tail, and both the head and the tail are enjoined, we can infer that work under the birth asterism of the owner is inauspicious. Similarly, if the asterism in which the sun is located is the one of

Table 2. Correspondence between houses of the Zodiac (*rasi*) and the 27 asterisms (*nakshatra*)

Zodiac	Sanskrit Name	Asterism	Extent of Asterism
Aries	Mesha	1 Asvini	0°-13°20' Aries
		2 Bharani	13°20'-26°40' Aries
		3 Krittika	26°40' Aries-10° Taurus
Taurus	Vrshaba	4 Rohini	10°-23°20' Taurus
		5 Mrigasiras	23°20' Taurus-5°40' Gemini
Gemini		6 Ardra	5°40'-20° Gemini
		7 Punarvasu	20° Gemini-3°20' Cancer
Cancer	Kataka	8 Pushya	3°20'-16°40' Cancer
		9 Aslesha	16°40'-30° Cancer
Leo	Sinha	10 Magha	0°-13°20' Leo
		11 Purvaphalguni	13°20'-26°40' Leo
Virgo	Kanya	12 Uttaraphalguni	26°40' Leo-10° Virgo
		13 Hasta	10°-23°20' Virgo
Libra	Tula	14 Chitra	23°20' Virgo-5°40' Libra
		15 Svati	5°40'-20° Libra
Scorpio	Vrschika	16 Vishaka	20° Libra-3°20'-Scorpio
		17 Anuradha	3°20'-16°40' Scorpio
Sagittarius	Dhanu	18 Jyestha	16°40'-30° Scorpio
		19 Mula	0°-13°20' Sagittarius
Capricorn	Makara	20 Purvashada	13°20'-26°40' Sagittarius
		21 Uttarashada	26°40' Sagittarius-10° Capricorn
Aquarius	Kumbha	22 Sravana	10°-23°20' Capricorn
		23 Dhanishtha	23°20' Capricorn-5°40' Aquarius
Pisces	Mina	24 Satabhishak	5°40'-20° Aquarius
		25 Purvabhadra	20° Aquarius-3°20' Pisces
		26 Uttarabhadra	3°20'-16°40' Pisces
		27 Revati	16°40'-30° Pisces

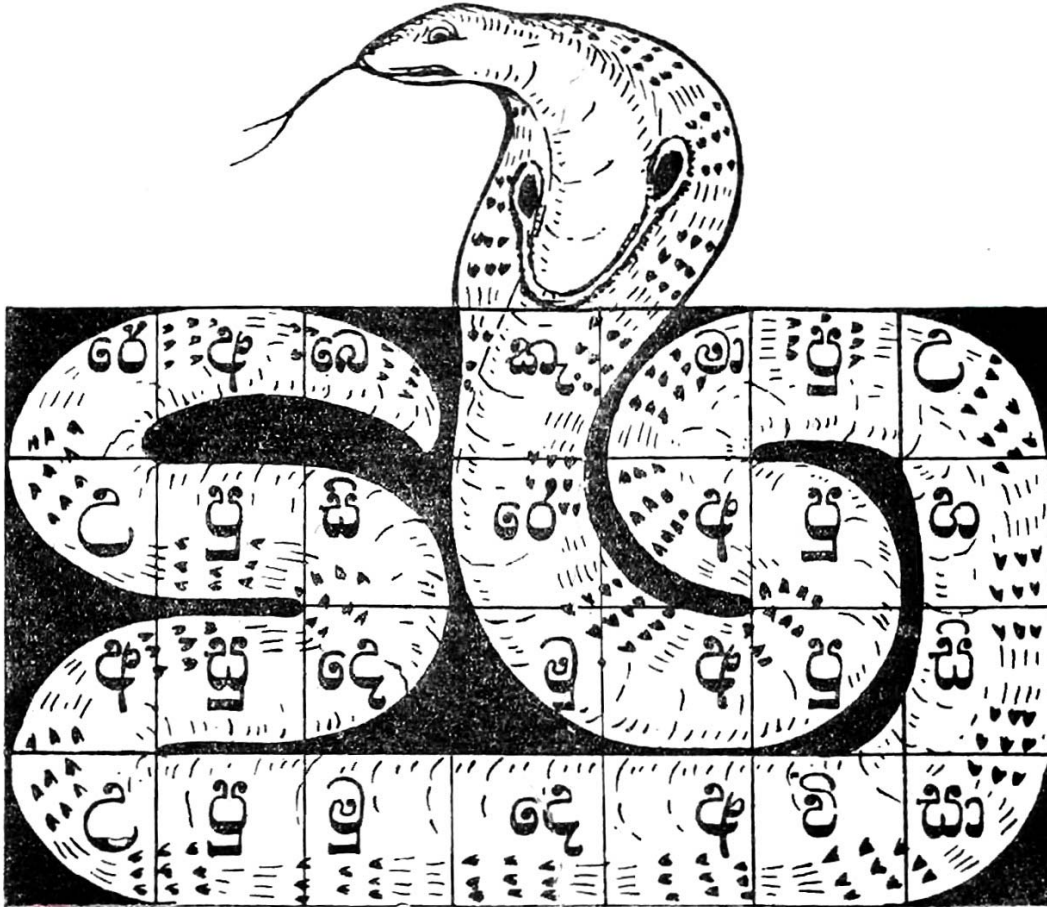


Figure 23. The Bhumanaga with the 28 asterisms disposed in his body, from the *Vastu Vidya*.

origin, then we can infer that the direction associated with the sun (now appearing in both head and tail) is not an appropriate one.

This figure is also described, but not depicted, in the *Sri Lalitha Navaratnam Manaiadi Sastiram* where the lunar asterisms are assigned to a 'dirurnal' cycle—in this case the 'day' is the course of the moon or some other celestial body that is viewed as waking, active, and sleeping on the analogy of the human daily round. An entire chapter of this manual is devoted to the use of the diagram of the snake in predicting negative influences which the encircling body discloses in two ways: first through the location in topographical space of injurious substances such as bones, potsherds, and metal lying at various depths in the ground in specific locations in the major and minor directions, and second through inauspicious astrological conjunctions that can be read by using the diagram (as shown in Figure 23) as a template and a stimulus to memory.

THE HUMAN BODY, THE SERPENTINE BODY AND THE SACRIFICE

In the elaborate rites focused on the fragmented body of the Site Spirit described in the classical texts, a narrative structure connects the origin myth (the felling of the demon and the birth of the ordered world) with the production of an architectural form. The architect replicates the original sacrifice when he propitiates the Site Spirit, and the emergent building reproduces the ordered universe in microcosm.

In the popular tradition, the same themes of sacrifice and cosmic renewal are reproduced, but they are expressed through other metaphors reorganized in new narratives. The *Sri Lalitha Navaratnam Manaiadi Sastiram*, for example, explicitly identifies the moving Site Spirit, with the annual rebirth of the sun at the time of the vernal equinox. The Site Spirit sleeps through the winter, then rises anew. His sleep can be compared to the 'death' of the demon in the classical narrative. His waking in Spring is likewise parallel to the rebirth of the demon as the Site Spirit. Elsewhere, the same text extends the scope of ritual activity associated with the Site Spirit to non-architectural rites. He is to be propitiated not only during the period of architectural production, but on other occasions that are brought into association with it through the metaphor of regeneration. According to the manual, the Site Spirit should be propitiated on an annual basis (that is, in accordance with the cycle of the sun) and also when a child is born. A second text, the *Manaiadi Sastiram*, identifies the Site Spirit with the annual cycle segmentally rather than holistically. In this case the regenerative

metaphor is associated with the onset of the quarters of the year. According to the manual, the Site Spirit is awake for two months until the onset of the equinox or solstice, then he retires and a month later rises again. Thus, when the equinox or solstice is born or regenerated, the Site Spirit is metaphorically extinguished in sleep.

It is of interest that the South Indian manuals represent the Site Spirit as a king (he attends to affairs of state). In the South Asia tradition of kingship, the rites of cosmic renewal were frequently dramatized as the rituals of state, and kings frequently compared themselves to the sun. The regent produced himself ceremonially as the worldly counterpart of the cosmic king who ritually regenerated and controlled time (MacDougall, 1996). The moving Site Spirit is a 'regent' who likewise measures out the year but is visualized as enmeshed corporeally in the time he controls. In the Vedic rites, the man-in-the-square was the substance of the sacrifice, whereas in the vernacular tradition, he takes on some attributes of the paramount sacrificer, the regent who controls time. In the ancient Vedic rites of sacrifice, oblations were poured into the sacrificial fire over the form of a chariot wheel, a metaphor for the sun, cyclic renewal and sovereignty. It is of interest as well that the body of the Site Spirit takes the form of a wheel, for the wheel as an emblem of cosmic renewal is intimately associated with the sacrifice.

The image of the serpent (sometimes also referred to as a 'king') that supplants the man-in-the-square elsewhere in the vernacular tradition is likewise associated with cosmic renewal, sacrifice and the control of time. In South Asia, the serpent is broadly identified with cycles of death and rebirth which are manifest in nature by the sloughing of his skin. South Indian myths that present the serpent as the object of sacrifice who triumphs over death to regenerate himself have been explored carefully by Shulman (1980). The image of the serpent that is depicted in Figure 23 is suggestive of sacrificial imagery. The head, or starting point lies outside the wheel, suggesting that it has been severed. As Shulman has written, in its regenerative meanings, the sacrifice first severs the head of the victim and then restores it marking the shattering of an original unity and its subsequent reintegration (130). Figure 23 explicitly identifies the decapitated serpent with the quintessential cycle of regeneration that of the sun, and inferentially through its 28 segments, that of the moon. In South Asian mythology, the association of the serpent with the enduring stability of the cosmos is also expressed in the image of the serpent Sesa (the residue), also known as Ananta, the Endless or Infinite, on whose hooded head the world is said to be balanced. The wheel in Figure 23, which is described but not depicted in the *Sri Lalitha*

Navaratnam Manaiadi Sastiram, is called the wheel of Sesa. The serpentine imagery is also manifest in the person of Rahu, the eclipse, and hence with other solar and lunar events that are metaphors for death and rebirth. The close association between regeneration and the biographies of disparate mythic serpents is perhaps what has led Appuhamy (1937) to link them. He writes that Sesa is another name for Ananta who is also known as Kala Naga (the serpent of time) and also as Rahu, the eclipse. In our country (Sri Lanka), he writes, the customary usage is Bhumanaga (146).¹⁵

THE INCORPOREAL BODY AND THE BODY OF THE BUILDING

As we have seen, in both the Sanskrit texts and those of the modern, housebuilding tradition, the cosmic body is a central metaphor for the organization of social and architectural space. In the popular literature, the body is further explored at its most intimate scale so as to align the form of the dwelling with that of the incorporeal builder or owner.

As we follow the would-be housebuilder through the building process in the *Mayimataya* verses, for example, we find him digging, chopping, drawing diagrams on the ground, setting out offerings and laying out the site with proportions drawn from the measures of his own body. At all times he is concerned with one small scale project. His bodily involvement in social and topographical space is drawn out through alignment imagery that is a mimesis of the architectonic deployment of the emerging building. Both the disposition of the human body and the disposition of the building or its constituent elements can be 'read' as evil producing or auspicious suggesting that one is modelled allegorically on the form of the other.

The builder's first step is to go out in search of the materials or the site itself. As he does so, he encounters other individuals who are seen as aligned or misaligned with him in terms of their bodily posture, especially the position of their hands. Persons carrying weapons, postured with hands on their shoulders, carrying grass on their heads or poised in anger are set forth as visual images that can be read as incongruities in the social world (evil omens in the language of the *Mayimataya*) and call for the project to be abandoned. The *Sri Lalitha*

¹⁵ The association between sacrifice and a regenerated order which is maintain or expressed architecturally is not a theme that is uniquely South Asian. Hersey (1988) has interpreted Western classical forms as sacrificial tropes. Similar themes have been explored by Carrasco (1988) for the Aztec world.

Navaratnam Manaiadi Sastiram gives parallel details, warning in one place that those who go to solicit the services of the architect should never stand on one leg and scratch the opposite one, or scratch their heads or approach him with their hands folded. The architectonic parallel is the congruence of the dwelling with other existing structures in socially constructed space. The *Mayimataya* rejects diagonal alignments between the dwelling and barns, wells, temples or other structures, for example, on the same grounds that it takes exception to the anomalous body postures of individuals in the social world of the builder. Both are culturally constructed as evil producing.

The site itself is imagined as a body with constituent parts: extremities, a mouth and a navel. A symmetrical as well as a sympathetic relationship is drawn between the mortal and vulnerable body of the builder and the sensitive body of the site through the metaphor of injury. A view widely held among craftsmen in Sri Lanka and elsewhere in South Asia is that the construction of the building leaves their bodies particularly liable to injury. Injuries are often ascribed to the 'evil eye' of onlookers, and for this reason screens are sometimes erected or talismans put in place to block or redirect the maleficent energies of the envious. The site itself is likewise sensitive to injury, especially at key vital points, and most particularly from sharp objects. The natural sensitivity of the site and its intimate sympathetic connection with the body of the builder is expressed by a specific injunction that appears in the *Sri Lalitha Navaratnam Manaiadi Sastiram*. According to this manual, the builder should never draw out the first lines on the site with an instrument of any kind. The lines must be drawn with the sensitive fingers of his hand, so as in effect, to generate one body, that of the site, through the direct and unmediated medium of another.¹⁶ The sympathetic relationship between the bodily state of the site and that of the builder is further explored in the Sinhala *Mayimataya* and in most other manuals in passages that align

¹⁶ This is the full passage from the text which appears in Part 2: "At the time of starting the puja [at the time of laying out the site] the owner, if he is a Brahmin, must touch his head, a Ksatriya, his chest, a Vaisya, his thighs, and a Sudra, his legs. Then he must draw the lines on the site. If the owner has gold, silver, pear, gems, curd, fruit, flowers or grain in his hand as he draws the lines with his middle finger, forefinger or thumb, the site will be prosperous. But if he draws the lines with any tools, death will come to him through the instruments. If by metal, he will be jailed, if by ash, the house will burn down, if by a piece of straw, the house will be looted, and if by wood, the house will be terrorized by kings. If the lines are crooked or drawn by his foot, the house will be attacked with weapons. The owner will suffer if the lines are drawn by charcoal, tooth or bone."

¹⁷ At all critical points of transition in the building process that are marked by ritual performances, the disposition of the body of the owner, ritualist or builder is frequently

irritations on the body of the ritualist who places the first post with injuries to the site. Injury, or the lack of it, is forecast by observing the body parts he scratches. If he scratches the areas of his own body that correspond to the auspicious places on the site where the post has been placed, all is well. However, if he scratches body parts that do not correspond, it is an indication that the site has been violated in these areas by objects unknown, and it predicts misfortune and death.¹⁷

In another set of parallel structures, the body of the strong and able woodsman is compared to the tree he seeks to fell. In both the Sinhala and Tamil traditions, the tree to be cut for the first post is aligned in space through a ritually demarcated area laid out by the builder at its foot. As a vertical axis in a set of directional alignments in plane, it mirrors the builder who stands before it to petition any deities living therein to vacate the premises. The form of a good tree is in fact implicitly compared with the body of the ideal builder. According to the Sinhala *Mayimataya*, the best tree is said to be smooth (no extraneous vines) tall, erect, virile or male, symmetrical and adorned with flowers and leaves. The builder should in like manner have clear, fair and smooth skin, straight and erect posture, flowing locks, a hairy chest and whiskers on his cheeks. When the tree is being prepared, the *Sri Lalitha Navaratnam Manaiadi Sastiram* recommends draping it in male clothing and binding it with a sacred thread.¹⁸ After the builder fells the tree, the portents are scrutinized in terms of the common conventions of bodily alignments in ritual. According to the *Mayimataya*, if it falls to the east, the most auspicious of all the cardinal directions and the one in which the body should face in all undertakings of consequence, the portents are

explored as a divinatory tool. Scratching a particular body part is always suggestive at these times of misalignments within the site. The *Sri Lalitha Navaratnam Manaiadi Sastiram* advises the builder/ritualist to carefully observe the direction in which the owner faces, the place in which he stands and the posture he assumes at these times.

¹⁸ The *Sri Lalitha Navaratnam Manaiadi Sastiram* compares a badly design dwelling with an ugly woman! A house with defects that brings bad luck to its owners is said to be like a wife with thick lips and black hair on the sides of her forehead who kills her husband.

¹⁹ In Sinhala society as elsewhere in South Asia and indeed throughout the Indo-European world there is essentially a right and wrong side to the body. The right hand is the pure one and used for eating. The left hand is used for cleaning the body after toilet. In proffering gifts and offerings, the sidedness of the body is neutralized. Both hands must be used so as to eliminate any ambiguous intent suggested by a free or idle hand. In Rangama, a considerable amount of adult attention was devoted to ensuring that children got these matters straight. In that community, building orientations to the north (that is to the left hand side) were considered to be particularly inauspicious which was a matter of interest inasmuch as the north is generally presented as an auspicious direction in the Indian architectural manuals.

said to be good. If it falls to the south, the right hand side for a east facing body, it is also good. But if it falls to the north, that is to the inauspicious left hand side, or to the west, the dark side that cannot be visually apprehended because it is 'behind', then the portents by contrast are poor.¹⁹

In the Sinhala *Mayimataya* approximately one tenth of the manual is devoted to the cutting and ceremonial installation of the first post which is implicitly compared with the standing body of the builder. It is of interest, that with the exception of one verse dealing with the dimensions of the top and bottom bars of the door, all considerations of the vertical dimension are essentially focused on this single element. In the Sanskrit treatises, by contrast, the vertical dimension of the building is explored in detail so as to align it symmetrically with the idealized vertical organization of the society and the state.

CHAPTER 3

ARCHITECTONIC VALUES IN DWELLING AND SITE ORGANIZATION

The central questions that initiated this investigation into the traditional literature on domestic architecture were comparative ones about its content and structure. To what extent are the housebuilding manuals, which are largely untranslated and hence uncomparated, based on the classical 'canon' and to what extent do they offer up a different construction and interpretation of social and architectural experience? These are questions of a documentary nature that will now be addressed. In each regional tradition in which the treatises have been composed, the prescriptions within are considered not only to be matters of fact, but of divinely ordained truth. However, even a cursory glance at works composed in different languages areas of the region, or even sometimes within them, shows that there is a great deal of variation in detail, as the discussion of the body as a motif and organizational frame in Chapter 2 suggests.

The common assumption within the culture area is that the material in the popular manuals is factually derived from the great Sanskritic tradition, and this is in part true. Compilers invariably consult, or claim to have consulted manuscripts regarded as authoritative, and often many works are cited as sources. But it is equally true that vernacular formulations serves as vehicles for cultural transmission in another important way. They have textualized emerging practices and precepts, especially from the field of astrology, that have been transmitted outside of the core tradition by redefining them as part of it. They also selectively textualize locally constituted practices that have not been previously legitimated in writing. The manuals are thus vehicles that disseminate materials from the architectural canon into the popular culture as well as ones that potentially revitalize the canon with content that flows not only from the opposite direction but from other bodies of literature.

In the following sections of this chapter, the materials contained in the treatises, especially the popular works, are drawn together in an overall pattern and analyzed as a coherent theory about order and placement. The architectural work, that is, the building, is interpreted as a projection of this order and simultaneously as a metaphor through which other experience is given a spatial reading. Architectonically derived order is projected and experienced in ritual paradigms, cosmographic motifs, landscape organization and the ideal social world each of which stimulate memories of the others. The structures of rite, building, cosmos, and the social order are broken down here into six architectonic principles or 'values' for descriptive convenience.

THE FIRST VALUE: CENTERING AND THE CENTER

The first stake on the house site should be driven in the stomach of the Site Spirit. Next, stakes should be driven in the southwest, southeast, northeast and northwest corners. Once you have anchored them, never pull them out and drive them in again. Never use broken stakes and do not drive them in upside down. These things will bring trouble to the householder. . . . At the site consecration ceremony, the householder should cut the stomach area of the Site Spirit with an iron rod. The deeper the cut, the longer the Site Spirit will remain in the house. *Sri Lalitha Navaratnam Manaiadi Sastiram.*

The value of centering has formal, ritual and cosmological referents. In the design process, all treatises agree that the center is important as a literal organizational focus since the cardinal points and thus the main axes of the site or building are measured out from this point. Most treatises devote considerable attention to this process. Two methods for finding the directions from the center are presented in the traditional texts.

SHADOW RECKONING AND THE GNOMON

Now I give the method of determining the cardinal points with the help of a gnomon. (One should proceed) at sunrise during a month when the solar path is towards the north during a bright fortnight when sunrise is beautiful, when there are no spots on the solar disc and when the sun is in the asterism of the appropriate fortnight. When the gnomon has been made it is set up in the chosen place at sunrise, then a circle is drawn of which the gnomon is the center . . . the line which joins the two points where the shadow (of the

gnomon) has touched the circle, in the morning and in the evening, gives the east-west direction. (Sanskrit *Mayamata*, Dagens 1985:11)

Traditionally, the main instrument utilized for locating the cardinal points was a gnomon or peg used for shadow reckoning. Although this procedure seems to have fallen into disuse or disfavor over time, architectonically, correspondences at various levels of meaning are formally related to it as noted below. The gnomon was set up on a plot of ground which had been leveled, smoothed and ritually consecrated. In the center of the plot a circle was inscribed with a radial string or rope. The gnomon was erected in the center of the circle and the direction of the shadow charted. In the morning, when the tip of the shadow touched the westernmost point of the circle, that point was marked, and in the afternoon the easternmost point was marked. The line drawn between the two points was taken as the tentative east west line.

True east-west was recognized to vary somewhat from the points given by the shadow, and thus laying out east-west by this method was regarded as a computational problem not easy to resolve precisely. Textual materials such as the *Manasara* and the Sanskrit *Mayamata* therefore provide factors or mathematical corrections for the seasonal declination of the shadow that supposedly permit the drawing of a true east-west axis. Once east-west was established, it remained only to construct its perpendicular axis with inscribed arcs in order to identify north-south, and thence to bisect the right angles in order to establish the minor directions.

In this manner, proceeding from a center, traditional craftsmen provided indeterminate space with a fixed orientation, and finally, by providing the major and minor directions with connecting named lines, with boundaries.

The central position of the gnomon in site organization has its own material archetype. It is expressed cosmographically by Mount Meru which stands at the center of the world. The known worlds surround it in concentric rings, recalling the inscribed circle drawn on the site plan. The *Mayimataya* manual mentions this central mountain and likens its stability and illuminative properties to the Holy Order that stands at the center of the Buddhist faith. The meanings attached to the center also embody creative and procreative metaphors since the world was born from a cosmographic focus. According to Buddhist cosmology, in the center of Jambudvīpa, the most sacred of all continents because it is the only one in which a supreme Buddha is ever born, there is an area called the bodhi tree circle which is considered to be the navel of the world. The circle contains the bodhi tree under which Gautama became a Buddha (Hardy, 4). The image of the procreative center as a navel appears once again in the image

of the fixed Site Spirit (Figure 14) whose umbilicus or stomach lies at the geographic center of the site.

In housebuilding, the allusion to the center as the place from which creation takes place is given literal expression in the organization of the site from the center outwards. The generative center is often identified with the geographic center of the site, although the framework of the moving Site Snake displaces it to the periphery in an interesting way. The first house post is to be placed in the stomach, an area of the site that is sometimes set forth as one that lies one quarter rotation away from the 'head.' The standing Hindu social body is likewise quartered from the head downward, with the central area of the body adjacent to that of the head. The loins and feet follow. In the prone body, the navel lies in the middle, but within the framework of the encircling one, its relationship to the other body parts is stated as a position along the circumference of a circle contained within the borders of a square. The navel in this case is located at whatever point of the compass lies at a 90° rotation from the head, not in the middle of the site.

TRUE NORTH AND THE POLE STAR AS CENTER

In order to find the south, north, east and west directions for the house, stand in the center of the site and face in the direction of the pole star and Mount Meru. Face the pole star and mark the point on the ground where you are standing. Keep on facing the pole star and move back a few steps and mark the point where you are standing. Now draw a line through these two points. This will give you the north-south line. A line drawn at right angles to this line will give the east-west direction. *Sri Lalitha Navaratnam Manaiadi Sastiram.*

In light of the importance attached to shadow reckoning in the classical materials in general and the Sanskrit *Mayamata* in particular, it is noteworthy that no mention is made of the gnomon in the popular Sinhala text in the brief treatment of laying out the main axes (beginning with verse 110) and that its importance is similarly diminished in the materials from the Tamil area. Here its ritual meaning is subtly altered and another method of measuring out from the center—one that seems to be mirrored in a confusing passage in the Sinhala *Mayimataya* (verses 192-195), appears in its stead. According to the *Sri Lalitha Navaratnam Manaiadi Sastiram*, after a properly proportioned gnomon has been hewn from a material appropriate to the caste or station of the petitioner, it should be grounded in a pit four cubits square and adorned with sandalwood, colored

paste and flowers. In other words, the fixture at the center is presented as an object of veneration, one that can be construed as representing the creative energies of the site, as well as an instrument of orientation. The use of the gnomon in orientation is paired with a simplified alternative to the complicated shadow reckoning procedure that does not involve it at all. To ascertain the directions, the householder should stand at the center of the site facing Mount Meru and the pole star, according to the manual. That direction is north. Behind him is the south and the sides are east and west.

It would thus appear that the east-west line can be derived from the north-south orientation as well as the other way around. The direction in which Mount Meru lies can be identified in the following manner according to the manual: "the pole star lies in the extreme north. It does not move. So you can always fix the north by means of this star. In the line of that star lies a constellation called the Seven Sages (=sapta risi), i.e., the Big Dipper. The two stars at the front of the constellation will always face the pole star, and the distance between them multiplied by seven will be the distance between the constellation and the pole star itself." This discussion is followed by a diagram of the Big Dipper, which is the lone graphic in the book.

The pole star participates in the cosmography of the center because, according to tradition, it lies directly above Mount Meru and is therefore fixed in the center of the world. It is interesting that in the *Sri Lalitha Navaratnam Manaiadi Sastiram*, it becomes a literal substitute for the gnomon itself. In the traditional literature, the pole star is imagined as the hub of a wheel. Meru lies below in the center of the continents and the ocean, and as an axis links the world below with those above. The pole star is stationary above it with all the heavenly bodies encircling it. In the perspective of the supporting literature, the oblique reference to the seven sir (ostensibly "lines" but possibly "sages") in verses 192-195 of the Sinhala *Mayimataya* can now be interpreted in a different light. One of the seven is *duva* < Skt. *dhrvya* "pole star," a mistake, of course, if we take the seven as "sages" because the pole star lies outside the seven member constellation. Since there is no appropriate set of seven lines, evil or otherwise, that can be discovered in the literature or retrieved from Sinhala customary belief, this obscure passage may have originated in materials pertaining to orienting the site from the north, the constellation of the Seven Sages and the pole star itself.

CENTERING AND HIERARCHY

The geographic center of a dwelling, site or town plan is closely associated with another value, that of ascension, which is discussed in greater detail as a

cosmographic motif in a subsequent section. Here we might take brief note of the geographic center as the social high ground, that is, as the location in which political and ritual authority is marked. The *Mayimataya* notes that a person who locates his dwelling in the center of a village will become the leader of his people and also that he will become very rich. It might be more accurate to say that in the South Asian tradition, authority is expressed by such a placement. As noted previously elsewhere in this work, the center of a village or town is associated with the higher strata in the ritual order, and the residential areas for lower castes are distanced progressively from it. In the *Sri Lalitha Navaratnam Manaiadi Sastiram*, the wastelands that lie at the defensive perimeter of the kingdom are the ones considered most suitable for Sudras, hermits and others at the social margins.

By contrast, the Sanskrit *Mayamata* recommend centralizing a palace in the town plan, or alternatively, if no king is resident there, a temple. In the palace of a king, the ritual center is to be enclosed within the political one and the altar of Brahma is to be located at the dead center of the plan (Dagens 1985:261). The plan of the ideal house, reproduces the plan of the palace on a reduced scale. The centralized courtyard is laid out first, and for twice born Hindus it is to contain a platform where offerings are made three time a day (238). In the domestic setting, the social descent from the center outward is marked by the placement of quarters for animals and refuse on the periphery, as shown below in Figure 38.

THE SECOND VALUE: QUADRATURE

You should know the proper directions for fixing the entrance to the house in the given months. If the house is built in Cancer or Leo, the entrance should face east. In Libra and Scorpio, it should face south. In Capricorn and Aquarius, it should face west. Do not build an entrance to the house in Virgo, Pisces, Gemini or Sagittarius. *Manaiadi Sasitiram*.

QUADRATURE AND THE AXES IN PLANE

According to Hindu tradition, the earth was floating and unoriented until the cardinal points became fixed and then fixed the earth in space (Kramrisch, 29). As an oriented space it is characterized as four-cornered. One is reminded of LeCorbusier's dictum that the right angle is the "sum of the forces which keep the world in equilibrium" (1971:27), which is reflected in similar propositions

from other cultures and times. In South Asian design theory, proper sites, dwelling and ancillary structures as likenesses of the earth are oriented in plane to the major directions in space, that is to the points that mark the sun's daily course through the heavens (E-W), their coordinates (N-S), as well as to the points intermediate between the main axes (the minor directions).

In architectural design, the alignment of the building or site in space is a literal exercise that establishes a relationship between the structure and the space that immediately surrounds it. It is simultaneously a metaphorical statement in which the building becomes an approximation of world order—a replication of a wider harmonic system, that is recalled both in the formal organization of its plan and through ritual. The value of quadrature in South Asian theory, however, is more than a set of propositions about building orientation. Design decisions with respect to water sources, slopes, timber selection and other matters that are independent of building orientation are referenced to quadrature as an ordering principle.

QUADRATURE AND WORLD STRUCTURE

According to Buddhist and Hindu tradition, the earth has a symmetrical and concentric configuration with Mount Meru rising from its center. To its south lies the most important of four major continents, Jambudvīpa (Roseapple Island), so named because of a great, life giving jamba tree (*Eugenia jambos*) bearing golden fruit that lies in its northern reaches. This continent is considered to be coextensive with South Asia and more particularly with India. These central configurations are encircled by other lands bounded by rock walls and separated by oceans containing different liquids. Thus, as a geographical space in plane experienced by mortals here below, the earth is essentially circular, and it is frequently so represented in art. The conception of the earth as four cornered or square is a statement of its relationship of the cosmological or celestial forces in the wider field to which it is subordinated, most particularly to the solar ecliptic and its coordinates. Thus, as Kramrisch has written "whereas the earth as the surface of this world which supports the movements and eight of our bodies is round, the earth held in the embrace of the sky and subject to its laws is represented as fixed four fold" (29).

The relationship of the earth to this broader field is represented architectonically by Mount Meru which sits on a square base oriented to the major directions. Hindus say it has four sides, each of a different color and each associated with one of the four castes. In Buddhist cosmology, it is often represented as eight sided and eight colored. Its power as a metaphor for relating

the experiential world to some more general scheme is grounded not only in its quadrature which connects it to the four directions of space but also in its upward rising axis which connects the earth to other realms. In traditional Hindu cosmology, at the summit of Mount Meru there is a celestial city which is the abode of the Hindu trinity, Brahma, Siva and Visnu.

In Buddhist cosmology, it is the abode of Sakra (Indra) alone, the regent or chief of the world who resides in Tawutisa and has taken the Buddhist religion and the land of Sri Lanka under his special protection.¹ It was from this realm, according to the Sinhala chronicle the *Mahavamsa*, that the ancient king Dutthagamani obtained the design for his famous brazen palace at Anuradhapura. Thus, with Meru at the center, the earth becomes grounded in a wider set of relationships that subordinate it to four major axes delimiting the eight cardinal points of the compass. The latter are represented in the Sinhala texts with multiple metaphors drawn from historically diverse traditions.

THE CARDINAL POINTS AND THE DIRECTIONAL GUARDIANS

In Hindu cosmology, the directions, like the center at Meru itself, are represented anthropomorphically and architectonically: each of the major and minor directions is governed by a guardian deity (*dikapala*) who resides in a city at his station. The directional guardians bear the names of the ancient titular gods of the Vedas. According to the *Sri Lalitha Navaratnam Manaiadi Sastiram*, they must be venerated at properly organized dwelling consecration ceremonies, although they are only enumerated by name as a complete set in proportional formulas (see Chapter 10 in Appendix III). The ritual paradigms refer to them only as a class. They are mentioned by name in the *Uluwahu Paenima*, however, and invoked in the course of the consecration service pertaining to the offerings at the eight directions.² They appear once again in the Sanskrit passages that

¹ Hardy (1967) notes that Sri Lankan Tamils believe the island of Sri Lanka to have been formed from a piece broken from the peak of Mount Meru which landed at Trincomalee (58).

² The directional guardians of doctrinal Buddhism are nonetheless different. The four guardian deities according to Buddhist tradition are Drtarastra (E), Virudha (S), Virupaksa (W), and Vaisrawana (N) who live in palaces in their respective directions in the realm of the gods. The robes and mounts of their attendants are of different colors: white in the east, blue in the south, red in the west and gold in the north (Hardy, 24). The quadripartite directional symbolism is maintained in Sinhala Buddhism as the Gods of the Four Warrants, who are the guardians of Sri Lanka (cf. Obeyesekere 1984:38). In many modern languages of the region, the memory of the directional guardians is stimulated by the common names of the directions themselves, although usually as a defective set encompassing only the minor directions.



Figure 24. Nirutti, the guardian of the southwest, and Varuna, the guardian of the west, Rajarani Temple, Bhubaneswar, Orissa.

propitiate the Alutnuwara God (Visnu) following the main text. These deities and the directions they govern are as follows: Indra (E), the chief god; Agni (SE), the god of fire; Yama (S), the god of death; Nirutti (SW), a goddess of the earth; Varuna (W), the god of the waters; Vayu, (NW), the god of wind; Kubera or Soma, the god of wealth, the lunar god; and Isana (NE) the upward facing god, a manifestation of Siva.

In the Vedic period, Indra as the chief of the gods and the wielder of the thunderbolt was a central and important figure. Agni as the lord of the fire was the medium through which the other gods received offerings through sacrifice. Yama was the first man to have died and, as the regent of the world of the dead, subsequently led others to the region. In later Hinduism, he became a judge of the dead and a punisher of sins in which capacity he is known as Dharmaraja. Nirutti is a lesser deity of Vedic origin, actually a relatively obscure one, who is associated with death and decomposition. This deity is sometimes represented in sculptural programs and described as a goddess, and as such is the only female image in the directional pantheon. Varuna was associated with the sky, with the rain that emanated from it, and by extension, with the waters and the seas. Vayu, also a deity of the elements, though a minor figure in the Vedic pantheon, was the personification of the wind. The northern guardian is called Kubera, Soma or Soma Kubera. Sometimes he is called Chanda (moon). Soma was the lord of stars and planets, of plants and elixirs and associated with the moon. Kubera was the guardian of divine riches and the lord of the demons.

As anthropomorphized representations of the directions, these deities figure in ordered arrangements on Hindu temple sculptural programs. Texts on the arts describe the correct composition of the figures. In the Rajarani temple at Bhubanesvar, for example, the dikapalas are represented in their respective directions on the lower sections of the curvilinear spire that surmounts the sanctum. The Ananta Vasudeva temple in the same city provides a more elaborate directional array and displays the female counterparts of the dikapalas above them. At the great Sri Nataraja temple at Chidambaram in Tamil Nadu, there are four great gateways oriented to the major directions. In the niches of each of the massive gates, the guardians are depicted facing outward in their directions of orientation (cf. Harle 1963).

THE CARDINAL POINTS AND THE EMBLEMS OF THE DIRECTIONAL GUARDIANS

Ritual space is built up on the square. In Sinhala housebuilding ritual, as the *Mayimataya* notes (verse 21), ideally the ritual ground is laid out as a figure

with eight orients (the *aTa magula*, hereafter 'Diagram of Eight') which is an indigenized and highly stylized form of the Site Spirit square. A schematic diagram of the Diagram of Eight adapted from Coomaraswamy (272) appears as Figure 25.

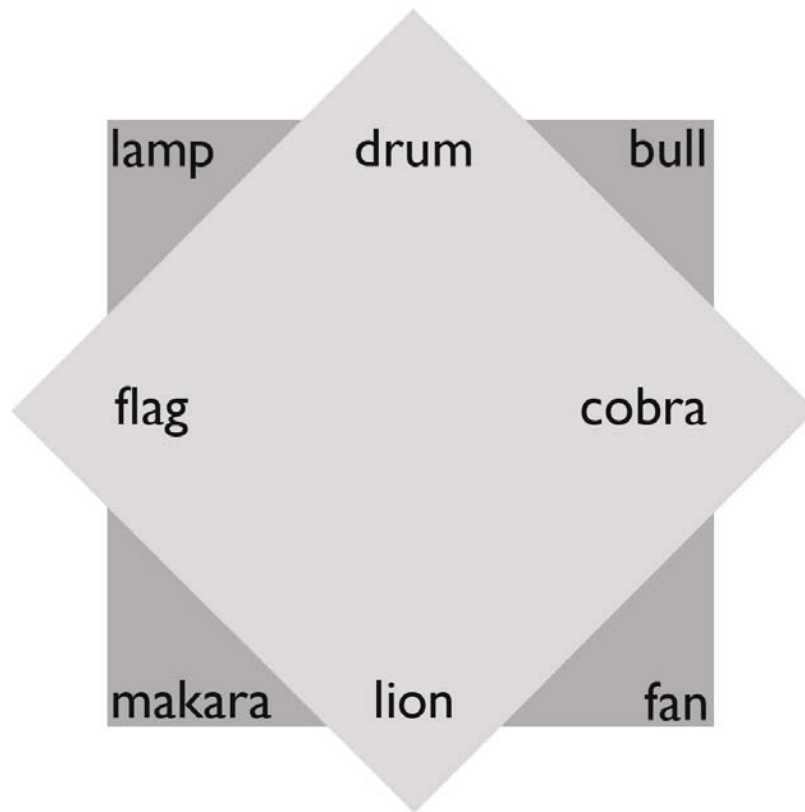


Figure 25. The Diagram of Eight from the *Uluwahu Paenima*, after Coomaraswamy 1908.

It shows the eight sided figure as consisting of a square superimposed on a square with the angles rotated 45°. According to Coomaraswamy, each of the angles of the Diagram of Eight is associated with an auspicious emblem or object, although since he does not orient the diagram, it is at first difficult to connect it with any standard paradigm. The names of the emblems appear in the *Uluwahu Paenima* in a verse (also quoted by Coomaraswamy, perhaps from the same source) and are listed in an order beginning with the drum that lies at the top of Coomaraswamy's diagram. Although the iconographic programs associated with directional guardians and deities in general are elaborate and moreover,

subject to regional variation,³ the emblems above refer to well-established and widely diffused elements in directional iconography and can tentatively be assigned to the major directional guardians as noted below.

The 'drum' at the top in position 1, I take to represent the northeast since the drum is associated unambiguously with Siva as the cosmic dancer Nataraja. The bull in position 2, represents Indra and the east. The bull is the mount of Indra. What is sequentially the southeast, position 3, the direction of Agni, the fire god, is represented by a cobra which is not part of Agni's iconography, as far as I can determine. I shall return to this problem below. The four representations that follow are consistent with standard iconographic conventions. The fan or fly-whisk in position 4, is conventionally associated with Yama, the lord of the south. Nirutti in the southwest (position 5) is represented by a lion which is her mount. Varuna in the west, the god of waters (position 6) is represented by his mount, the crocodile or *makara*. Vayu, the god of wind in the northwest (position 7) is represented by the banner he conventionally holds. At position 8, we return to the north and the god of treasure Kubera represented by a lamp, perhaps representing his glittering cache, although this interpretation seems a bit far-fetched. Neither Kubera nor any of his substitutes (Soma or Chanda) carries a lamp, and the north is not associated with fire. Since Kubera is one directional guardian who is represented carrying a serpent in his hand, it may be the emblems of position 3 and 8 have been reversed.

Verse 21 of the Sinhala *Mayimataya* connects the drawing of the Diagram of Eight with the delineation of the ritual space beneath the tree to be cut for the first house post. During the sketchily described rite, a spirit is to be coaxed from the tree. Four pots are to be placed at the four corners, presumably the four minor directions. In its basic outlines, therefore, the Diagram of Eight resembles the one in which the Site Spirit lies, and the two are no doubt related historically.⁴

³ The directional guardians are identified through numerous iconographic elements in addition to their emblems. Each rides a mount. They are generally multi-armed (the number may vary depending on the regional tradition or period) and in each hand there is an object such as a noose, club, bow, drum or axe. Other objects identified with them may be draped round their necks or over their bodies. They are often flanked by attendants carrying additional ones.

⁴ Wirz (1954) provides the Diagram of Eight with architectural extensions as the ground plan for a booth or pavilion constructed of banana stems and coconut leaves for a particular type of exorcism rite in southern Sri Lanka. Variations on the Diagram of Eight for this particular rite contain more superimposed squares (four, six, or twelve) and hence comparable increases in angles. The most elaborate structures have several floors and numerous 'windows' and 'doors' (75). Wirz notes that similar rites are performed in Kerala and may have originated there (70).

THE CARDINAL POINTS AND THE DEMONESSSES

In the Sinhala portions of the service pertaining to offerings at the major and minor directions presented in the *Uluwahu Pænima*, the traditional guardians of direction are supplanted by a cosmographically analogous though morally inverted set of actors. The eight directions are marked by ritually dangerous demonesses who are entreated to quit the building site. The array of demonesses is shown in Figure 26. According to the text, these demonesses took up their stations on an ancient and archtypical site, and refused to leave unless they were propitiated in a prescribed manner by the divine craftsman Visvakarma. The craftsman or householder is instructed to emulate the example of Visvakarma and to appease them with cooked foods, honey and oils in order to secure the site. In two cases, the names of the demonesses are derived directly from those of the standard guardians, i.e., Indrakami (E) and Varunakami (W). The name of the demoness of the northeast, Astabrandi (=the eight (forms of) Siva, vis., sky, air, fire, water, earth, sacrifice, sun and moon), also conforms in its meaning to its analogue in the traditional set. In addition, there is an identity between the demoness Bhumapali = 'of the earth' and Nirutti in the southwest. In other cases, there is an apparent breakdown of the internal organization of the model contained in the 'Sanskrit' passages in the same work. The direction of the fire god Agni (SE) is the station of the demoness Vatakami representing wind ('flatulence' in the Sinhala medical idiom). The direction of the wind god (NW), also associated traditionally with misfortune and more specifically with disease, is occupied, according to the *Uluwahu Pænima*, by a demoness named Yami, a name generally associated with the mythologically minor sister of the god of death. In addition, the association of the demoness of the south (Jalakami) with water (=jala) is a puzzle, as is the location in the north of Yama (death) who would never in any standard account be placed there.

In examining these assignments more closely, it seems that there are two reversals, north with south, and northwest with southeast. A reassignment, although still posing some problems in interpretation, yields an array more consistent with those given in the Sanskrit portions of the text. Even though the directional guardian paradigm has been maintained to a degree in the Sinhala tradition, it is obviously a rarified and remote one that is so poorly apprehended that critical transpositions can be made, even when the normative model appears side by side. In the broader popular literature, directional affiliations are expressed through other assemblages that are divorced completely from the dikapala paradigm. Two of them are discussed below.

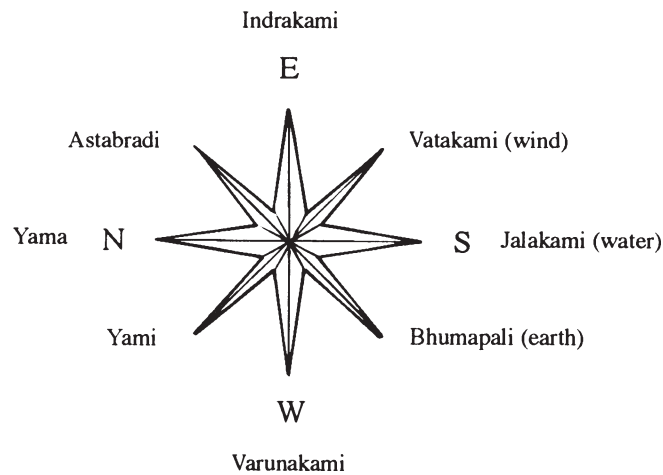


Figure 26. Demonesses of the directions according to the *Uluwahu Paenima*.

THE CARDINAL POINTS: DEMONS AND SNAKES

In the Sinhala *Mayimataya*, the cardinal points are personified with still other arrays. The directions are represented both by a set of serpent kings (verse 73-81) and also by a set of demons (verses 62-71). The former suggest the order of the world maintained by the traditional guardians, and the latter suggest the energies generated by unordered space. These arrays are shown in Figures 27 and 28.

Both ensembles must be propitiated with personalized offerings. As for the serpents, they are the eight of the netherworld which is known in Hindu cosmology as Patala. In the Sinhala *Mayimataya* as well as in the *Sri Lalitha Navaratnam Manaiadi Sastiram*, they are to be propitiated in rites as the regents or lords of the directions, although in the latter text they are not named. In South Asia mythology, these serpents are said to support the earth from below at its critical points. According to the *Mayimataya* manual, the serpents are Ananta (E), Basuki (SE), Ahiraja (S) Arohana and Karkota (SW) Paduma (W), Patma (NW), Sanka (N) and Gulika (NE).⁵ As for the demons, they are all unnamed

⁵ Winslow (1987) lists the directional serpents as follows: Vasuki, Ananta, Tashaka, Sanka, Gulika, Padma, Mahapadma, and Karkota. Their directional affiliations are not given. To these he adds Ahisesa (Sesa) who supports the earth at the center (658). N.K. Bose (1932) gives the following numbered list of serpents who preside over house sites: (1) Ananta, (2) Basuki, (3) Takshaka, (4) Karkota, (5) Sanka, (6) Kulika (7) Padma, and (8) Mahapadma. Although they may be ordered beginning with the east (as suggested by the list in the *Mayimataya*), no definite information is given (51-52). On the whole, the literature on this set is scanty, its

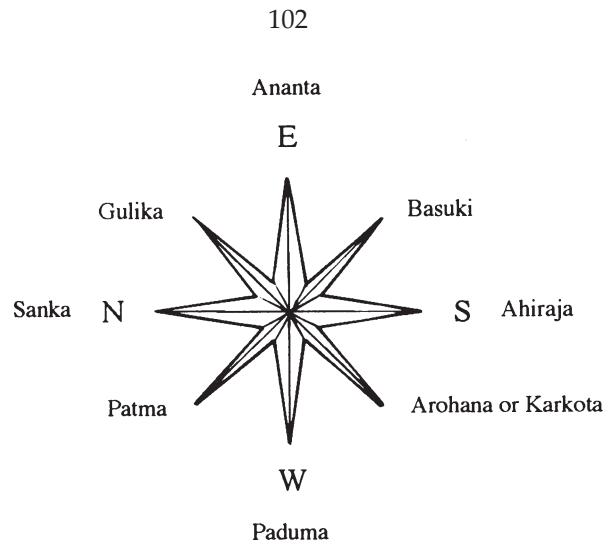


Figure 27. The serpents of the directions according to the Sinhala *Mayimataya*.

except for Manimekala (SW), the protectress of the sea, who is stationed in the most inauspicious direction, generally taken to be the one that opens to the direction of the ancestors and death. Each is associated with a specific misfortune emanating from its cardinal point.

QUADRATURE AS AN ORDERING PRINCIPLE IN THE BUILDING AND DESIGN PROCESS

Tables 3, 4, 5 and 6 show some of the ways in which four manuals invoke quadrature as a basis for evaluating decisions at various stages in the building process. As an ordering principle, quadrature is pervasive. It provides a basis for evaluating the suitability of timber, the quality of soil brought to the site, the timing of selected activities, the orientation of dwellings according to caste, the placement or orientation of outbuildings, the placement of rooms, doors and beds, the desirability of water sources, the selection of trees in landscaping, slopes, and even the meaning of sounds in the night.

members are not well differentiated individually, and the names of some are used interchangeably, vis. Ananta for Sesa, the serpent on which Visnu is depicted asleep in the cosmic ocean. The directions are also associated with named elephants, each having a named mate, Airavata (E), the mount of Indra; Pundarika (SE); Vamana (S); Kumuda (SW); Anjana (W); Puspadanta (NW); Sarvabhauma (N); and Supratika (NE); (Stutley and Stutley 1977:165).

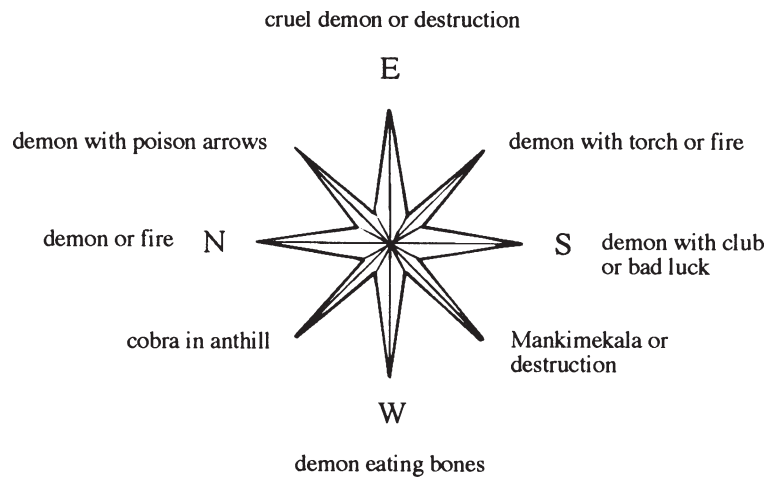


Figure 28. The demons of the directions according to the Sinhala *Mayimataya*.

The hierarchical organization of the directions previously explored, that is with the easternmost directions being most auspicious, and the western lying directions being less so, are reflected in the overall ordering, although as the figures show, the associations are neither rigid nor entirely congruent from text to text. All sources seem to agree on the primacy of the northeast and east. The latter is the only dwelling orientation even addressed in the Sinhala *Mayimataya*.⁶ Overall, it is associated with wealth and good luck. It is the preferred direction or orientation for higher caste dwellings, although the Sinhala *Mayimataya* places the dwellings of potters in that quarter of a village, and only one source says it is suitable for Brahmins. The rest of the texts associate Brahmins with the north. The northeast is also a most auspicious direction and is the point intermediate between the major directions, east and north, generally associated with the two highest castes. It is identified with the upward rising axis and is the direction commonly mentioned in connection with household shrines. Its meanings also involve an important axial inversion, since it is the preferred location, and according to some texts, the only proper one, for the sinking of wells.

A general rule that restricts the use of the minor directions so as to exclude them as principal alignments for the building or its major apertures also applies to the northeast. Despite its association with Yama, the judge of the dead, the

⁶ In the Sinhala community in which I conducted fieldwork (cf. MacDougall and MacDougall, 1977) most dwellings in fact faced east which was the preferred orientation.

Table 3. Quadrature as a design principle according to the Sinhala *Mayimataya*

	NE	E	SE	S	SW	W	NW	N
FELLED TREE		WISDOM		LONG LIFE		MOODS		DEATH
SOIL FROM	LONG LIFE	TERMITES		DEATH		ILLNESS	DEATH	ANGUISH
WELL	BLESSINGS		FEVER		FIRE	WOES	CONFLICT	
BUILDING TYPE	GANESH T. TEMPLE					TEMPLE		SIVA T.
CASTE	WASHERMEN	POTTERS	BLACKSMITHS	SMITHS		COPPERSMITHS		FLORISTS
FUNCTION	COWPEN	WEDDING			KITCHEN			STABLES DUNGHILLS
FACES		WEALTH FAME						WEALTH PEACE
SLOPES TO	ILLNESS	MERCHANTS GOYIGAMA	BARBERS	POVERTY	DRUMMERS			KINGS BRAHMINS

Table 4. Quadrature as a design principle according to the Sinhala *Vastu Vidya*

	NE	E	SE	S	SW	W	NW	N
REGENT	RUDRA	INDRA	AGNI	YAMA	NIRUTTI	VARUNA	VAYU	CHANDRA
CASTE		RULERS		MERCHANTS		SUDRAS		BRAHMINS
FELLED TREE	EXALTATION	WEALTH	FIRE	DEATH	DISRUPTION	LIVESTOCK	THEFT	WEALTH
MAIN DOOR		MERCHANTS		SUDRAS		BRAHMINS		RULERS
MAIN DOOR		FALL		WINTER		SPRING		SUMMER
MAIN DOOR		CANCER LEO		LIBRA SCORPIO		CAPRICORN AQUARIUS		ARIES TAURUS
MAIN DOOR		1-8 DAY WANING MOON		9-14 DAY WAXING MOON		1-8 DAY WANING MOON		9-14 DAY WAXING MOON
MAIN ROOMS	SHRINE	BATH	KITCHEN	BEDROOM	TOOLS	STORAGE	GRANARY	VALUABLES
NEARBY WELLS	FERTILITY	LOSS OF SONS	FIRE	ENEMIES	STRIFE	BAD LUCK	POVERTY	WEALTH
WATER SOURCE	BAD LUCK	GOOD LUCK	BAD LUCK	GOOD LUCK	BAD LUCK	GOOD LUCK	BAD LUCK	GOOD LUCK
OWN WELL	COMFORT	WEALTH	SONS DIE	WOMEN DIE	DEATH	PROSPERITY	ENEMIES	COMFORT
WATER TYPE	HARD	LITTLE	GOOD	NONE	SWEET	GOOD	LEAKAGE	SWEET
GOOD TREES		BANYAN		WOODAPPLE		FICUS TSELA		FICUS ARNOT.
BAD TREES		BO TREE		FICUS SPECIES		BANYAN		FICUS GLOMERATA
NIGHT SOUNDS	DEATH	QUARRELS	FEAR	GOOD	BAD	JOY	FEAR	FORTUNE
SLOPES	GAIN	GAIN	LOSS	DEATH	HARM	FAME	SORROW	WEALTH

Table 5. Quadrature as a design principle according to the Tamil *Sri Lalitha Navaratnam Manaiadi Sasitram*

	NE	E	SE	S	SW	W	NW	N
CASTE (ORIGIN)		2 HIGH CASTES		2 HIGH CASTES		4 HIGH/LOW		2 LOW CASTES
FELLED TREE	GOODNESS	WEALTH	FIRE	DEATH	QUARRELS	CATTLE	LOSS	TREASURE
FUNCTION	STORAGE SHRINE BEDROOM WELL	GRANARY SHRINE BEDROOM COWSHEDS	KITCHEN DINING ROOM COWSHEDS	SHRINE DINING ROOM RUBBISH	STUDY STORAGE GARDEN TOOLS	SHRINE CONCEPTION BUFFALOES	GRANARY SHRINE	TREASURE DINING COWSHEDS BEDROOM
DOOR		SUMMER		FALL		WINTER		SPRING
THRESHOLD		MERCHANTS		SUDRAS		RULERS		BRAHMINS
BEDSTEAD	LOSS	GAIN	LOSS	LONG LIFE	LOSS	DISTRESS	LOSS	DEATH
WELL	GAIN	WEALTH	DEATH	INAUSPICIOUS	LOSS	GAIN	ENEMIES	GLORY

Table 6. Quadrature as a design principle according to the Tamil *Manaiadi Sasitram*

	NE	E	SE	S	SW	W	NW	N
CASTE		RULERS		TRADERS		SUDRAS		BRAHMINS
"ORIGIN"		2 HIGH CASTES		2 HIGH CASTES		ALL CASTES		2 LOW CASTES
FUNCTION	KITCHEN SHRINE	GOATSHED BATH	TREASURE KITCHEN	REFUSE BEDROOMS	LIBRARY HAYSTACK	DINING BUFFALO PEN	GRANARY COWSHED	GRANARY COWSHED
DOOR		SUMMER		FALL		WINTER		SPRING
WORK		CANCER LEO		LIBRA SCORPIO		CAPRICORN AQUARIUS		
OWNER		SCORPIO PISCES CANCER		TAURUS CAPRICORN		LIBRA GEMINI AQUARIUS		SAGITTARIUS ARIES LEO
POSTS	LIGHT THIN				HEAVY THICK			

south is not regarded as particularly inauspicious. Houses of the Vaisyas are generally placed in that quarter of a village and according to the *Sri Lalitha Navaratnam Manaiadi Sastiram*, persons can sleep with their heads in that direction without ill effects. The west is associated with many more negative consequences, often with death itself, and also more particularly with lower castes. However, good things come from that direction, the waters for example, and according to the *Sri Lalitha Navaratnam Manaiadi Sastiram*, healthy children. The northwest, a liminal area separating the social extremes of traditional Hindu society, that is the Brahmin north from the Sudra west, seems to be the least valued direction for all purposes in all texts.⁷ None proposes it as a preferred dwelling area for any caste, for example, and it is otherwise associated with loss, death, fear, misery and conflict. According to three of the texts, the granary may be placed in this direction, and according to one, a lying in room and a shrine. Otherwise, it seems to be a direction that is carefully avoided in the organization of the activity-specific zones within the house. It is of interest that in the organization of towns, the *Manasara* recommends placing the dwellings of the craftsmen on the periphery in this inauspicious location.

QUADRATURE AND THE PLACEMENT OF ROOMS

The *Vastu Vidya* gives the most elaborate version of the division of the house into functional zones according to preferred orientation. The eight major activity specific spaces appearing in Table 4 are extensions of meanings, to some degree, attached to the divinities that rule them. For example, according to the text, the kitchen should be in the southeast (the direction of Agni and fire) and the place for valuables in the north (the direction of Kubera, the god of wealth). The *Vastu Vidya* actually divides the areas inside the verandah of the house into sixteen oriented zones as follows: bath (east), curd making (between east and south east), kitchen (southeast), ghee making (between southeast and south), sleeping room (south), toilet (between south and southwest), tool storage (southwest), library (between southwest and west), food stores (west), mourning room (between west and northwest), granary (northwest), room for procreation (between northwest and north), treasury (north), room for medicines (between north and northeast), shrine (northeast) and additional storage (between northeast and east). A number of additional functions including the storage of pestles and mortars and the construction of ovens are added for the south.

⁷ If a human figure is drawn around an oriented square with the respective body parts ordered from north (Brahmins) to west (Sudras), it is only the northwest corner that is left unoccupied.

The Sinhala *Mayimataya* is the least elaborate of the available versions, offering little about the organization of the dwelling into functional zones except to note that the kitchen should be placed in the southwest. Neither of the two Tamil texts offers a set of rigid prescriptions. Both permit a variety of functions in given directions. Both are loosely congruent with the *Vastu Vidya* in the sense that in most cases the functions assigned unambiguously to given directions in that text are, with certain exceptions, also named as acceptable ones by both Tamil texts. However, the Tamil texts provide a more flexible frame with a wider range of activities permitted in given directions. The texts summarized by Kearns (1876) and Chelvadurai-Proctor (1927) introduce additional inconsistencies into the materials, agreeing with each other only on the north (treasure), east (bedroom for the owners) and southeast (kitchen or eating room). In addition to the placement of rooms according to function, the *Sri Lalitha Navaratnam Manaiadi Sastiram* evidences a special concern with orientations within the house that are good for the conception of children. The west is the preferred direction. It is said that sons conceived there will be wise and daughters, chaste and virtuous. The southeast is enjoined. It is said that a child conceived in that portion of the house will become a thief. According to the manual, handicapped children will be borne out of the south, and impoverished ones conceived in the northwest. The latter is considered appropriate for birthing, but not for conception.

QUADRATURE AND CENTERING AS INTEGRATED BY THE TESTS OF TIME AND SPACE

These are the calculations for the house of nine cubits. The income is twelve. The expenditure is five. The origin is that of the cobra. The asterism is Aslesha, the ninth. The angle is Venus in Cancer. Sinhala *Mayimataya*.

As the foregoing passage from the *Mayimataya* suggests, the proposed measurements of a building are tested according to a set of formulas or rules that supposedly weld them into a holistic proportional system. Since one of the most important rules is related to the principle of quadrature, it is necessary to deal with the entire enigmatic system, however briefly. Writers generally mention six traditional tests for measurement, called as a group *ayadisadvarga* (the six rules of proportion), although most texts add others to these 'central' ones. The authoritative *Manasara*, for example, mentions ten. The six are known by the following names: *aya* (gain), *vyaya* (loss), *yoni* (origin), *vara* (weekday), *naksatra* (lunar asterism), and *tithi* (lunar day). According to the *Manasara* whose contents

have been described exhaustively in numerous volumes by Acharya, the formulas are as follows:

1. aya (gain) is the remainder of $\text{length} \times 8 \div 12$.
2. vyaya (loss) is the remainder of $\text{breadth} \times 9 \div 10$.
3. naksastra (or riksa) (lunar asterism) is the remainder of $\text{length} \times 8 \div 27$.
4. yoni (origin/direction) is the remainder of $\text{breadth (many sources say perimeter)} \times 3 \div 8$.
5. vara (day/weekday) is the remainder of $\text{circumference} \times 9 \div 7$.
6. tithi (lunar day) is the remainder of $\text{circumference} \times 9 \div 30$.

Other formulas also appear (cf. Acharya 1946:501).

Suffice it to say that although all manuals refer to these cryptic formulas, there are contradictions between manuals in every area of detail. The multiplicands and the divisors of the same formulas sometimes differ from work to work as do the proportions to which the rules are to apply. There are also differing understandings about how their results are to be used. A few generalizations are nevertheless possible. First, the remainders, not the dividends, indicate whether the proportion is acceptable or not. The remainders that result from applying the rules (or at least most of the rules) are indexed mnemonically to certain well-known ordered astrological series, although in their strict interpretation as a proportional system they do not, in general, generate any information on the timing of building operations. The operations are fundamentally numerological. The number of entries in the series is indicated by the divisor in the rule. For example, there are 27 lunar asterisms (see rule 3 above), 7 days of the week (see rule 5) and 30 lunar days (see rule 6), all occurring in well-known ordered lists. Rule 4, which has a divisor of 8, refers to the eight major and minor directions out of which a dwelling may be discovered to be borne after applying the rule. In this case, the list begins with the east. Thus, a remainder of 1 is associated with the east, 2 with the southeast, 3 with the south and so on as shown below in Figure 29. Hence, the term yoni (origin), here meaning direction of origin. The indexed entry in the series corresponding to the remainder is marked as auspicious or inauspicious and therefore tests the proportion in question for 'good luck.' A horoscope of sorts is thus generated for the house through its proportions.

Very few details appear anywhere in the classical literature about what is to be inferred from the indexed item in the series once it has been identified. The *Mayamata* as translated by Dagens says nothing; the *Manasara* is only slightly

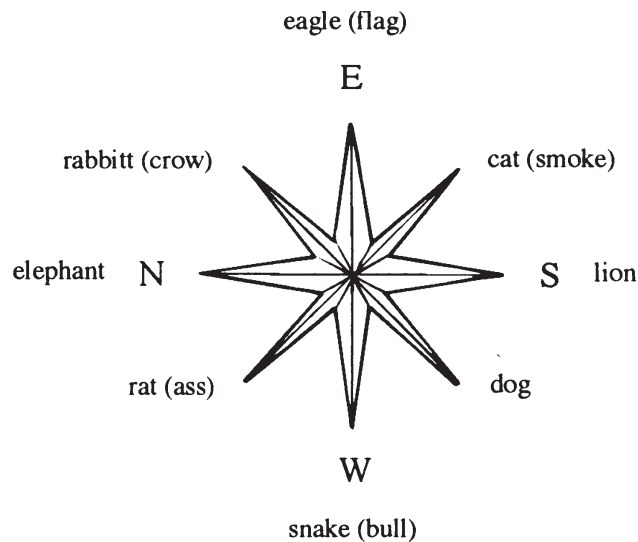


Figure 29. The eight *yonis*.

more informative. The Tamil popular manuals give more complete details that contradict those of the *Manasara*. For example, the *Manasara* says that all even number lunar asterisms (even numbered remainders in Rule 3 above) are inauspicious (Acharya 1934:66). The *Sri Lalitha Navaratnam Manaiadi Sastiram* indexes them as follows: (1) success, (2) death, (3) fear from fire, (4) success, (5) good luck, (6) good luck, (7) good luck, (8) children, (9) death of wife, (10) neutral, (11) neutral, (12) wealth, (13) children, (14) illness, (15) good luck, (16) loss, (17) good luck, (18) disruption, (19) illness, (20) ruin of house, (21) benefits, (22) children, (23) wealth will go to others, (24) wealth, (25) ruin of house, (26) benefits and (27) illness.

As for days (Rule 5), according to the *Manasara*, remainders indicating Monday (2), Wednesday (4), Thursday (5) and Friday (6) are inauspicious as a general rule (Acharya 1934: 67). According to the *Sri Lalitha Navaratnam Manaiadi Sastiram*, however, these are precisely the remainders that are auspicious; it is the other three that are to be avoided. As for lunar days (Rule 6), remainders indicating the full moon day (1), the eighth day after the new moon (8), and the ninth day after (9) are inauspicious, according to the *Manasara*. All other choices are good ones (66.). Again, the Tamil text gives a somewhat different account. As for the yoni formula, “the auspicious one is ascertained by the countings (i.e., as they are arranged in accordance with their natural superiority” (66). The superiority of some numbers in the yoni series will be discussed below after the discussion of ‘gain’ and ‘loss.’

The first two rules above ('gain' and 'loss') differ from the others in two respects: first, the ordered astrological series to which they are presumably related for mnemonic purposes seem to have been forgotten and second, these tests of measure are not independent of each other. According to the *Manasara*, Rule 1 and Rule 2 belong to ordered astrological series as follows: 'gain' refers to the group of twelve beginning with *siddhi*; 'loss' refers to the group of ten beginning with *sikhara* (Acharya 1946:501-2). Acharya, who devoted virtually his entire life to the exposition of the *Manasara* seems to have been unable to discover out of what elements these two series were constituted, and the text offers no further details other than the cryptic references to the group of twelve and of ten (ibid).⁸ The Sanskrit *Mayamata* mentions these two formulas but offers no details on the constituent elements of the gain and loss series or for any others.

In any event, as interpreted in the classical manuals, the 'gain' and 'loss' rules refer to each other, not to independent series. The convention is that gain (a test of length, see Rule 1 above) can be zero and loss (a test of breadth, see Rule 2 above) can be zero, and gain can equal loss, but loss cannot exceed gain. The following is an example of the application of the conjoined rules: if the length is 19, the remainder or gain is 8. If the length is 20 the remainder or gain is 4. A width of 12 yields a remainder or loss of 8, meaning that a house or room with dimensions of 19 x 12 is auspicious and one of 20 x 12 unlucky.

The *Vastu Vidya* as well as popular Tamil materials such as the *Sri Lalitha Navaratnam Manaiadi Sastiram* (see Chapter 10 of that work) provide schemes that differ from the classical materials in general and the *Manasara* in particular in two important ways. First, they cite eleven or more (in fact, up to seventeen) such tests and second, in a profound simplification, they present them as ones that are performed only on the area rather than on the length, breadth or some other measure. The emphasis is thus shifted from a system that is essentially proportional to one that is flatly numerological and divinatory. The gain and loss formulas, for example, are not tested against each other; they are merely indexed to numbers indicating various kinds of good luck or bad.

Popular materials often relieve the astrologer or householder completely of the burden of making the calculations. Many handbooks contain elaborate tables specifying the characteristics of structures whose areas have presumably passed the tests so as to permit the reader to determine the properties of a suitable

⁸ Different versions, and other divisors suggest series of eight and seven instead of twelve and ten. In this case, I would guess that the eight are the spiritual states attained by the mythic Siddhas whose austerities made them immortal. They have no meaning in astrology that I can determine. The seven might be the seven planets (although there are often nine by count) and *sikhara* might be a scribal error for the Sanskrit word that means Venus.

dwelling or room of a given size at a glance. The *Sri Lalitha Navaratnam Manaiadi Sastiram*, for example, gives the properties of structures with areas from 11 to 1229, with many possible combinations omitted.⁹ Between 1 and 100, only 22 numbers appear to be admissible areas; moving upwards, the number varies. Between 100 and 200, there are only five; between 200 and 300, eleven, and between 300 and 400, twelve, for example.

THE YONI OR ORIENTATION FORMULA

The yoni formula is the one that links the proportions of the dwelling with their orientation in cosmic space and thus with the value of quadrature. There are eight yonis (called matrices by Dagens), each associated with an index number and a direction. According to the South Indian tradition, which is reflected in the Sinhala *Mayimataya* and the Tamil texts discussed herein, each is marked by an animal as follows: (1) The eagle (east), (2) cat (southeast), (3) lion (south), (4) dog (southwest), (5) snake (west), (6) rat (northwest), (7) elephant (north), and (8) rabbit (northeast). This particular scheme places animals viewed as natural enemies at opposing points on an oriented square (see Figure 29).

In some other sources such as the Sanskrit *Mayamata*, there are variations in names that disturb the symmetry of predation. The east, for example, is commonly represented as a flag (the banner of Indra) and the southeast, the abode of Agni, the fire god, as 'smoke' or fire (cf. Dagens, 1985 and Bose 1932, for example). A related ordered series connected with orientation in the Tamil tradition, that of *kerpam*, introduces other names into the series (the reader is referred to Chapter 10 in the appended *Sri Lalitha Navaratnam Manaiadi Sastiram*) and although presented as distinct from yoni, seems to be one and the same historically. Both the words *kerpam* (Skt. *garbha* = womb) and yoni embody the same general meaning of 'origin'. Both refer to the direction in the cosmos from which a structure of given dimensions is born and thus from which it is governed.

The *kerpam* formula which is placed first in the list of rules to be applied to the measurements in the Tamil manuals simply divides the area by 8 to generate the remainder that becomes an index number identifying the direction of origin. The yoni formula, on the other hand, which generally appears as the fourth rule in a longer list, is the remainder of the perimeter multiplied by 3 and divided by 8. Yoni and *kerpam* thus yield different index numbers in the popular

⁹ This information appears in a chart at the back of the text which has not been translated as part of this work.

Tamil tradition, although the symmetry in their meanings suggests that originally they generated the same one and were variations on the same formula. It seems likely that they simply found their way into the popular materials under different names from independent sources. In the Sinhala *Mayimataya*, the names of the yonis are provided for houses of certain dimensions. The rules that generated them are not given. Indeed, it seems that no single rule could have generated all of them. In addition, the Sinhala manual does not tell the reader how to use the yoni and does not connect it with directional alignments in cosmic space.

CALCULATING THE YONI

Suppose the area is 9. The yoni would then equal the remainder of $(3 \times 9) \div 8$ or 3. This would indicate a southern cosmic origin, since the index number 3 identifies the south. In general, only odd numbered yonis are suitable remainders. Thus, only major directions appropriate points of origin. Further, according to tradition, each of the four castes is associated with a particular direction or quarter of the ideal town and thus with a directional affiliation of its own. One arrangement is for Brahmin houses to be placed in the east or to face in that direction. The warriors are then associated with the south, the Sudras with the west and the Vaisya with the north.¹⁰ Through the metaphor of directional affiliation, the proportions of the house acquire a cosmic identity that parallels the social identity of an individual in the quadripartite varna system. The *Manushalaya Chandrika*, which provides the most lucid discussion of the yoni, draws out the caste affiliation of the yonis in characterizing their attributes:

The first yoni will yield good things. It stands in the east. The deity is Jupiter and it is Brahmin. The third yoni stands in the south, and its deity is Mars. Wealth will accumulate. It is Ksatriya. The seventh yoni stands in the north. Its deity is Mercury, and it is Vaisya. The fifth yoni stands in the west. Its deity is Saturn. It will produce grains, and it is Sudra.

¹⁰ The Tamil housebuilding manuals generally do not agree. The *Sarasothimalai* provides the following scheme: the Brahmins should have their residences in the south and their houses should face north; the rulers should occupy the western quarter of the site and their houses should face east; the agricultural and trading classes should occupy the northern quarter and their houses should face the south; the working classes should occupy the eastern quarter and their houses should face the west (Chelvadurai-Proctor, 346). The *Sri Lalitha Navaratnam Manaiadi Sastiram* recommends that the doorways for Brahmins face the north, those for warriors, the west, those for Sudras, the south, and those for Vaisyas, the north. In another section of the text dealing with reading the portents of flames, the following identifications are made: Brahmins (east), warriors (west), Sudras (north).

Given yonis are acceptable under varying conditions, depending on who uses them and to which proportions they apply. According to the *Manushalaya Chandrika*, the first yoni, normally associated with an eastern 'origin', is universally auspicious. A house whose area yields the remainder 1 can therefore be placed in any quarter. Since the hypothetical town that has a complete complement of the castes assigns each to a specific quarter, the inference is that the overall dimensions of a house built in any location are auspicious if they yield the index number 1. The logic seems to be that proportions that are suitable for Brahmins must be suitable for everyone else. In like manner, 3 (associated with the Ksatriyas) is also auspicious for Vaisyas and Sudras (but not for Brahmins). The corollary is that 3 is an acceptable remainder for houses built in the south, west and north of the ideal town. Seven (associated with the Vaisyas) is otherwise suitable only for Sudras, and thus a proper remainder only for houses built in the north and west. Five is suitable for Sudras alone and thus can be taken only for dwellings in the west.

In the numerological calculations pertaining to caste and orientation in the Tamil literature, these distinctions are frequently elided, confounded, or ignored. In fact, when contrasted with the obsessive pursuit of hierarchy in the classical manuals, it is remarkable how few of the prescriptions are disaggregated on the basis of caste. In the *Manaiadi Sastiram*, the discussion of building placement and caste is given in the section on kerpam, not in the one on yoni. In an initial simplified scheme, which essentially collapses the quadripartite caste structure into two broad bands, the remainders indicating the east (1), south (3) and west (5) are said to be good for the two highest castes and those for the west (5) and north (7) for the two lowest ones. The *Sri Lalitha Navaratnam Manaiadi Sastiram* alludes to the same scheme, although not under this rule. (See Appendix III, Chapter 10, verse 17.)

In addition, according to the *Manaiadi Sastiram*, structures of dimensions yielding remainders associated with one cosmic direction can also be placed in a compatible or auspicious one in actual space. For example, houses with dimensions indicating that they are borne out of the east can also be placed in the north. By contrast, some transpositions are not possible. For example, houses borne out of the south or north should not be placed in the west. The discussion of the yoni that follows the one on kerpam and two other intervening criteria, mysteriously mentions nothing about considerations of caste or about actually orienting the building. In fact, in the Tamil corpus a redundant formula, $\text{area} \times 9 \div 4$, is introduced to test the proportions for caste. The yoni rules as presented in both the *Manaiadi Sastiram* and the *Sri Lalitha Navaratnam Manaiadi Sastiram* are thus essentially reduced to divinatory calculations that relate good luck with

odd numbered remainders. The yonis and their respective directions are said to be associated with the following consequences in life: east (plenty), southeast (conflict), west (good results), southwest (illness), west (wealth), northwest (poverty), north (prosperity) and northeast (loss).

The preceding discussion of the yoni refers to its use as a test of the overall perimeter or area. The *Manushalaya Chandrika* indicates that it is also used to test the proportions of the rooms of the house block surrounding the central courtyard. If the compound has corner buildings, their areas are to yield the remainders associated with the next right branching major direction. Rooms in the east and northeast have to be in yoni 1, for example. This text describes house compounds of differing internal arrangements and presents certain proportions within them—the area of the courtyard, for example, as ones that must be tested. In general, the proportions mentioned must be in yoni 1. In fact, as a general rule, yoni 1 can apparently be used for anything.

In another section of the *Manushalaya Chandrika*, the yoni is treated in an entirely different way that is worth noting for the sake of completeness. It is given as a constant in a formula for deriving the perimeter from the length, or conversely, the length from the perimeter. This information, that is the use of the yoni as a constant, does not appear in any of the Tamil manuals. This is what the Malayalam manual says about the use of the yoni as a constant:

The desired length should be multiplied by 8, and the number of the yoni should be added to the product and divided by 3. The result is the house perimeter. Conversely, the desired perimeter is multiplied by 3, the yoni number is deducted and the balance is divided by 8, giving the length.

In this case, the constant would appear to be derived from the direction of origin associated with the caste of the occupant.

In the Orissan materials examined by Bose, the formula $\text{area} \div 8$ (here called *bandha*) is extended to test the proportions of individual rooms with preferred orientations (1932:46). In this body of materials, the prescriptions pertain specifically to the measurements of spaces for a royal household. Even numbered remainders are permitted since some functional zones of the dwelling have preferred locations in the minor directions. According to the text, the proportions of the shrine room of the house which lies in the east must yield a remainder of 1 and the kitchen (SE) one of 2. The following additional assignments are made: a remainder of 3 for the state apartment (S), one of 4 for the place for husking corn (SW), one of 5 for the inner apartments (W), one of 6 for stables (NW), one of 7 for store rooms (N) and one of 8 for soldiers' barracks

(NE). According to the text, the door of each one of the rooms should face in the direction opposite from the area of the compound in which it is located. The kitchen door, for example, faces northwest. Each distinct activity specific space thus has a unique placement and orientation within the whole and no two are of the same size.

QUADRATURE AND THE SLOPE

According to the *Manaiadi Sastiram*, the ideal house that brings prosperity and happiness to its occupants is sited on land on which the eastern and northern sides are lower in elevation than the western and southern sides. In other words, the site can be viewed as inclined in the directions of light, wealth and renewal and away from those that are associated with death and destruction. The *Vastu Vidya* concurs and associates slopes to the east with prosperity and to the north with wealth. Slopes away from these directions are associated with loss of wealth (to the west) and death (to the south). The worst slope of all, according to the text is one to the center (Appuhamy, 131). In general, most works concur that the best slopes are to the north, east and northeast, and that others are less auspicious or to be avoided. The *Manushalaya Chandrika* hierarchically organizes slopes as shown below in Figure 30.

Both the *Vastu Vidya* and the Sinhala *Mayimataya* modify this general scheme with prescriptions for various castes, assigning the least auspicious slopes to the lowest and the most auspicious to the highest. In the *Mayimataya*, a slope to the north, for example, is said to be good for Brahmins and kings. A slope to the east is good for the Goyigama (farmers), the highest of the Kandyan Sinhala castes, as well as for merchants who are grouped in the culture area with agriculturalists in a single ritual band. A slope to the southeast, however, is deemed appropriate for barbers and smiths who lie near the bottom of the social hierarchy, and the one to the southwest for two low-ranking Sinhala service castes, drummers and tom-tom beaters. A slope to the south is proscribed for all groups according to the text because it brings on poverty, and the northeast sloping site is said to result in illness, an opinion that is not shared by writers of most other manuals.¹¹ As for the *Vastu Vidya*, it specifies that sites for Brahmins should slope to the north; those for warriors to the east, for Vaisyas to the south and Sudras to the west (Appuhamy, 132). It goes on to note that sites for each of the four castes may also slope in other directions as follows: the Brahmins, any major direction;

¹¹ According to Dagens, the Sanskrit *Mayamata* characterizes the ideal site as sloping to the south and west (1985:6).

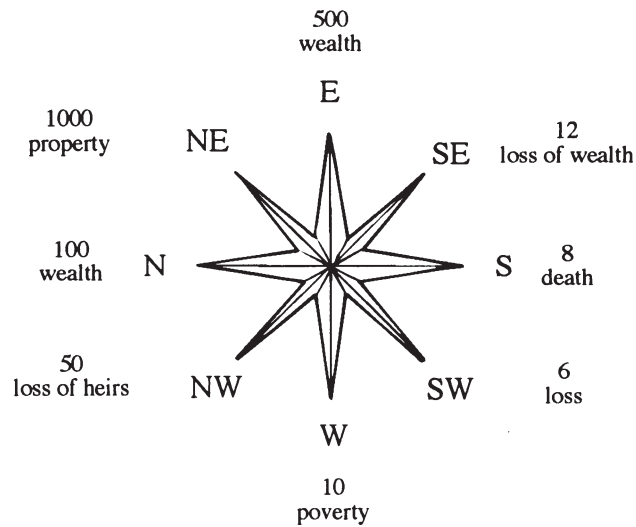


Figure 30. Slopes and their portents

the Ksatriyas, all major directions except north; the Vaisyas, only the south and west; and the Sudras, only the west (132-133).

According to the Tamil manuals, the importance of the slope derives from the flow of water towards or away from the house site. As a general rule, according to the *Manaiadi Sastiram*, the house should be sited so that no water flows from a neighboring dwelling towards one's own. As for the outward flow, north, east and northeast are the good directions for domestic drainage according to both Tamil manuals. The *Sri Lalitha Navaratnam Manaiadi Sastiram* has a neutral opinion on the west and enjoins the south. Both Tamil manuals outline divinatory procedures for assessing the auspicious qualities of water currents. A pit is dug in the center of the site that is exactly one cubit in dimension. It is filled with water, and a flower is dropped into the pit. If the flower begins to move clockwise, the portents are said to be good, whereas if it moves in the opposite direction, it foretells bad luck. The direction in which the flower comes to rest is also given a divinatory reading. Both manuals agree that the auspicious directions (north, east and northeast) are the same ones associated in the general literature with good slopes, but they also give the southwest and west favorable readings in the case of the flower test.

THE THIRD VALUE: ASCENSION

THE RISING AXIS: SURFACE TO REGIONS ABOVE

Space in South Asian cosmology is three dimensional with links proposed between the worlds above and the hells below. Mount Meru is the composite representation of the upward facing axis that links the world of mortals with the world of the gods. It is recreated materially in the form of the spire of the Hindu temple and recalled in the form of the Buddhist stupa which is surmounted by a finial resembling a tree. The link between the surface of the earth and the worlds above is expressed ritually in the installation of the gnomon and also with the first installation of an auspicious post. According to the Sanskrit *Mayamata*, the latter is a pillar set atop a foundation deposit of auspicious and valued items that have come from the earth and are ritually restored to it.

Whereas the auspicious post of the Sanskrit text seems ritually secondary to the gnomon and also ritually marginal in the foundation deposit rites that are also described in that text, in the Sinhala and Tamil manuals the emphasis is different. Fully one tenth of the Sinhala *Mayimataya* text is devoted to the preparation and installation of the auspicious post, the first post placed. The emphasis no doubt arises from Sinhala customary practices. The auspicious post is an important fixture in Sinhala ritual more generally, and thus activities associated with its placement are broadly supported in practices that are not specifically associated with housebuilding. Obeyesekere, who describes its function in Sinhala ritual as a symbol of auspiciousness, treats it as a recreation of the *kapruka*, the wish-fulfilling trees of the Hindus and Buddhists (1984:78). According to Buddhist mythology, this immense tree grows on the continent to the north of Mount Meru where it grants all wishes. The tree simply extends its branches and bestows whatever is desired, and hence the inhabitants have no need to work and are never sick or hungry (Hardy, 14).¹²

Whether it is imagined as a tree, world mountain or ritual post, the axis is an ordering metaphor both in the area of worldly fortune and in the composition of the material world. As the expressed axis mundi in initial site organization, the auspicious post is assimilated to the meanings expressed by other symbols of ascension, especially by Mount Meru. Its reclamation from nature and its installation as a icon of order is infused with the now well explored directional

¹² The *Aparajitpracha*, a 13th century work on architecture, coincidentally speaks of the science of architecture as a gift of this tree (Bhat 1981:450).

imagery. While still firmly rooted as a tree in the forest, it becomes an axis within consecrated ground drawn as The Diagram of Eight by the ritualist. This figure recalls the form of the Site Spirit square and the numerology, its orientation to the major directions.

The link forged geometrically between quadrature and well being is given further expression through the medium of the post. According to both the Sinhala and Sanskrit texts, the best trees for the post are unblemished, erect, strong, symmetrical and male (like the ideal builder). The *Manaiadi Sastiram* agrees that 'female and 'neuter' trees are unsuitable for the post, but adds that they are acceptable for other purposes. Female trees (those whose asymmetry derives from being too narrow at the top) can be used for beam and cross beams according to the text, whereas neuter ones (those that are too broad at the top) can be used for framing, planking and roofing.

The direction in which the tree falls (and to which it presumably lists in nature) has meaning and so does the direction in which it is placed. According to the texts, an appropriate tree for the post must fall in an auspicious direction, although there are different opinions on what they are. According to the Sinhala text, these directions are east and south; the Sanskrit *Mayamata* mentions north and east and says that all other directions are inauspicious. The *Vastu Vidya* agrees with the latter as a general rule in the felling of timber, whereas the *Sri Lalitha Navaratnam Manaiadi Sastiram* certifies east, west, north and northeast as potentially auspicious directions. When cut and implanted, the post is oriented to the directions within the cosmically engineered site plan, and it may be planed or dressed as four sided or eight sided. The Sanskrit *Mayamata* says that the post must be "squared off." In some contemporary Sinhala rituals, the post is apparently shaved to make it eight sided (cf. Obeyesekere 1984:101).

According to one narrative tradition associated with the auspicious post in Sinhala ritual, the great Sinhala king Duttagamini built four temples (again, the directional imagery, but some say it is seven!) at the sacred city of Kataragama in Sri Lanka in thanksgiving to Lord Skanda who helped him defeat the Tamils (Obeyesekere 1984:101). He cut the first post at that time and planted it there to commemorate his victory. This legendary account links the Sinhala king (an actual historical personage) with the god Indra/Sakra and the story of his victory banner. The latter is included in Sanskrit treatises on astrology or in works indebted to them in which the banner is represented as an archetype for the vertical members of the dwelling. It is also linked to the form of the centralized courtyard house, the ideal dwelling organization in Sri Lanka and South India, which will be described below.

THE STORY OF THE VICTORY BANNER

According to an account from the *Brhat Samhita* adapted for a Sinhala audience in the *Vastu Vidya*, in the days of the wars between the Titans and the gods, the gods led by Sakra approached Lord Brahma for help. Brahma advised them to find Visnu in the Milky Ocean and to go into battle with a banner Visnu would supply. Sakra conveyed this message to Visnu who was flattered, and took the banner from his eight wheeled chariot and handed it over. The banner was adorned with precious stones which shone like the autumn sunlight and the sun itself. Sakra hoisted the banner adorned with jewels, bells and garlands, took it into battle and destroyed the enemy. Then Sakra presented the banner to King Vasu who was strolling in the worlds of the gods. He raised it in his kingdom and venerated it. Sakra proclaimed that any king who raised the banner in his kingdom in like manner would dominate the earth. Since favorable signs or omens are revealed through the banner, to this day, according to the text, it is venerated here on earth (Appuhamy, 191-192).

All of the omens pertaining to vertical members of a work of architecture, for example, the alighting of bees or birds thereon and whether columns and doorways shake, list, or fall are archtypically related to the banner. For example, if the post collapsed, it foretold drought; if the flag fell, it foretold death for the queen. If the banner split, then death would come to the king, his ministers and his subjects. The stability of the banner secured order in the kingdom. According to the texts, the omens related to it have symmetrical meanings for the doors, posts and vertical members of the house.

The Sinhala *Mayimataya* makes no mention of these omens and otherwise makes little attempt to explore the hierarchical narrative to which they belong. The Tamil manuals touch on them in passing. The *Sri Lalitha Navaratnam Manaiadi Sastiram* says that after the post is placed, the householder should avoid looking up lest he see crows or eagles which are evil omens. It further states the crows and eagles should be prevented from sitting on the implanted post, and that an umbrella should be tied to the top of it, if necessary. This text devotes a certain amount of attention to omens associated with birds of prey more generally, mentioning the horned owl, crows and eagles (vultures, more accurately) repeatedly as disruptive and maleficent influences on the site. Whereas the upward facing axis is associated with life and renewal, birds of prey which arrive from that direction introduce a certain ambiguity into the scheme since they feed on carrion and are associated with death.

THE RISING AXIS AND THE COURTYARD DWELLING

Buddhist stupas and Hindu temples have realized, centralized ascending axes that are characteristically absent in the ordinary dwelling. Traditionally, the ideal dwelling in Sinhala Sri Lanka, as well as in South India, is one that is organized in a centralized courtyard scheme in which the axis is represented by a void. In the central highlands of Sri Lanka, the courtyard dwelling was associated with the rural aristocracy in the days of Kandyan rule. Examples survive in the contemporary countryside.

Today, as in the past, most dwellings in the rural areas have the rooms arranged in other patterns, most commonly in L-shaped ones consisting of two interior rooms and a porch (cf. MacDougall and MacDougall 1977) in which there is a named courtyard space (*mindula*) that is not fully enclosed. The centralized courtyard house, called a *walawwa*, 'manor house', a word that is related to the roots for enclose or bind, was thus the prestige form, but an ideal reserved for the few prosperous and influential families of a community. Coomaraswamy (1908) shows a plan of a "small yeoman's house" organized around a "sunk yard open to the sky" that captures the essential organization of such a dwelling (115).¹³

In my experience, the centralized courtyard was not an activity specific space of the same type of those that surrounded it. Householders conducted their main activities in the verandah or rooms around the space (called a *maenda mindula*). The courtyard was located on the earth rather than on the elevated foundation platform that organized the rest of the house. It provided light in the rooms organized around it, which in accordance with customary building practices, had small shuttered windows or none at all. As a space open to the sun above, the courtyard was sometimes used for drying produce, though it functioned primarily as a nursery for coconut tree seedlings germinated from nuts half buried in the ground. It therefore captured in its conventional use pattern, an identification with the light coming down from above, and the tree as the unifier of the vertically organized spaces.

The central courtyard has been viewed as an architectural space that is quintessentially South Asian. Pillai (1948) traces the origins of the courtyard

¹³ It unfortunately exhibits some oddities and may not have been drawn from an actual example. For one thing, the plan is not rectilinear. The plan shows two enclosed rooms, three if the rice bin is included, whereas the typical arrangement with which I am familiar has as many as eight spaces organized around the central courtyard. Worst of all, the house is oriented to the west.

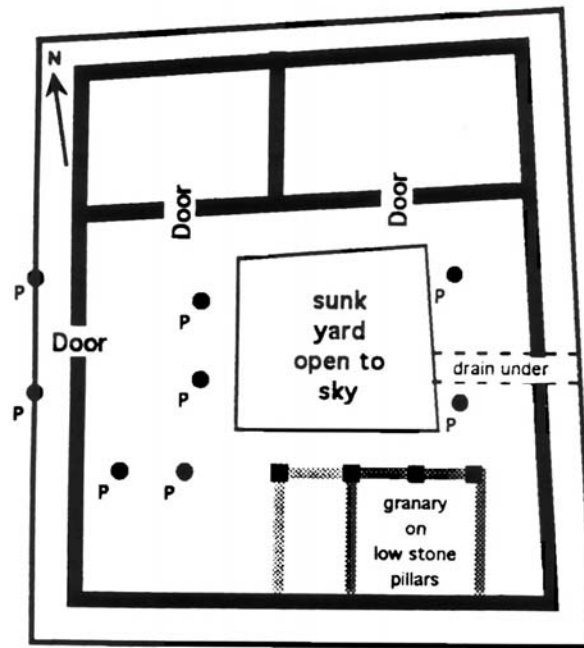


Figure 31. Sinhala courtyard house (after Coomaraswamy 1908).

back to the earliest archaeological remains and notes that it is the main feature of the Hindu layout. He reports that in South India, the *ankana* (courtyard) is not to be occupied by any building and that traditional craftsmen lay out this space first (236). Indeed, the *Manushalaya Chandrika*, from which Pillai drew, centralizes the courtyard as a design problem. The courtyard scheme as an ideal form calls to mind important formal and mythological antecedents. According to Kramrisch, in the palace of a king, the banner of Indra or Sakra was placed in the innermost central square, the place of Brahma, and no buildings could be erected there (41). Indeed, the plans for the ideal towns in the *Mayamata* and the *Manasara* call for the innermost central area to be left open or to be used for a temple.

Thus, an upward rising axis is implied by any central square, as is the idea that this “door” to the world above should be left open. This desideratum can be realized in domestic architecture even if the courtyard is partially bounded. It reflects a more inclusive design principle in domestic architecture, to wit, that a well organized site leaves large areas of it open, that is without structure, and that an important dimension of this openness is vertical. The *Visvakarma Vastusastram* describes the courtyard as essential element in a complete dwelling and compares it to the eye of a living being. A house without one is compared to a blind man (Sastri and Gadre (eds.) 1958:lvii).

ASCENSION: THE QUINCUNX PLAN AND THE NUMBER FIVE

The courtyard dwelling, the temple plan and mythic space are built up on a quincunx plan, that is one with five points, four at the corners and one at the center. The point at the center is generally associated with the ascending axis, whether formally realized as in the temple spire or implied as in the courtyard plan. There are abundant visual reminders across the landscape of the basic quincunx, for it serves not only as a pattern for the Buddhist stupa and the Hindu temple but also in Islamic tradition for the tomb. A memory of the five elemental, architectonic relations expressed in spatial organization is likewise stimulated by a plethora of groups of five that are ritually derived. Siva, for example, has five faces, four of them associated with the directions in plane, and one with the upward facing axis, sometimes associated with the northeast.

The *Sri Lalitha Navaratnam Manaiadi Sastiram* describes a rite for reconsecrating the dwelling in which these basic relations are recalled in the propitiation of female deities in order from the northeast to the northwest and thence to the center. The service is thus a mimesis of the essential quincunx plan. The deity associated with the center is known as Purna (full or complete). Indeed, the essence of the number five is its closure and complete nature. In her work on the cosmography of the city of Benares, Eck has written, coincidentally, of five as "Siva's number" and as one "symbolic of wholeness" (1982:116).

Five is also an important number in the Vaisnavite tradition and is in some measure the Buddha's number as well. In Buddhism, the laity generally observe five moral precepts (including prohibitions on killing, stealing, adultery, lying and drinking intoxicants), there are five barriers to the path to *nirvana* and there are sets of five associated with events in the Buddha's life. Other numbers are marked in the South Asian tradition as sacred or important, but five has a special architectonic salience.

The terse Sinhala *Mayimataya* does not yield a great deal about the number five or sets of five in architectural ritual and production, but the longer, more enumerative texts contain many specifics. The *Sri Lalitha Navaratnam Manaiadi Sastiram* reports that the builder or architect must be garbed in a cloth that is tucked up or folded in five different ways. Five stakes are driven into the site, four at the minor directions and the other at its stomach. The day of the Site Spirit is reported to be divided into five parts. Planetary cycles are likewise divided into five segments. There are five inauspicious periods of time. Ritual offerings are often organized as sets of five,—for example, leaves of the five auspicious trees, the five products of the cow, and the five delicacies. The *Vastu*

Vidya mentions five occasions on which architectural rites must be conducted (clearing the site, setting out the stakes, fixing the doors, laying the foundation and housewarming).

THE FOURTH VALUE: DESCENSION

THE DOWNWARD AXIS: SURFACE TO INTERIOR

According to traditional South Asian cosmography, the remote regions that lie beneath the earth are sources of powerful energies, both procreative and destructive. In the mythic geography of the Buddhists, the hells lie in this direction. The Sinhala *Mayimataya* mentions them in passing as places of torment for irresponsible craftsmen. Thus, the central axis can theoretically be traced downward to regions of negative and violent forces.¹⁴ In post Vedic Hindu cosmography, the picture is subtly altered, with hells given no specific location or definite number (Dimmit and van Buitenen 1978:26). The Patalas or netherworlds, on the other hand, number seven and offer a symmetrical structure with the seven heavens. They are the home of demons and great snakes who are sources of great power and energy, often disruptive or threatening. Nonetheless, their abodes resemble the Buddhist hells very little; they are said to live in places even more delightful than the heavens and in palaces “decorated in choice style” (48). Gems, the bounty of the earth, are frequently mentioned in connection with them.

It is of interest that in the traditional spatial imagination, the axis downward has a directional affiliation, the southwest, and can therefore be imagined in plane as shown in Figure 14. The ‘perpendicular’ axis across the site, that is the diagonal from southwest to northeast, structures a number of coincident oppositions that clarify the interpretation of descension architectonically. The ‘descending’ southwest is conventionally represented by the goddess Nirutti and therefore connected with the female principle, whereas the ‘ascending’ northeast is represented by Siva as the male. Nirutti is in turn

¹⁴ The roof of Awici, the lowest of the eight principal hells, where there is unremitting suffering, lies 1,600 miles directly beneath the bodhi tree that stands at the center of Roseapple Island. Flames from Awici burst from its walls which are nine miles thick and rise to a height of 1,600 miles. Sixteen additional hells, four on each side, flank Awici, each of which is paved with swords. The doors of these flanking hells are continually opening and shutting because of the violent power generated by those suffering in Awici, throwing flames out to the seas where they generate a vacuum which sucks the sea water inward and sometimes ships as well (Hardy, 26-27).

associated with decomposition and death, and Siva with the regenerative forces of the universe. Although the regions that lie below can also theoretically be associated with beneficial forces, — for example, with those that give rise to the agricultural fruits of the earth, or as previously noted to gems, architectonically, descension, especially as the southwest, is linked principally with danger, as Tables 3-6 suggest. Further, in the Site Spirit diagram (Figure 14) the feet of the imaginary figure are placed in the southwest, linking this direction with things lowly and therefore with contamination and contagion. The square marking the ancestral deities is also located there, suggesting an identity not only between descension and death but also with the past.

During the activities associated with site preparation, contamination, pastness and danger as salient traits of the regions below the earth are drawn out with greater clarity within a more proximate frame of reference. Architectural texts are in agreement that malefic influences arise from the remnants of prior habitation that lie concealed underground. According to the texts, the site must be tilled, sifted, raked and ritually purified before it can be considered fit for building. In Sanskrit, the offending materials that potentially contaminate a site and endanger its inhabitants are referred to as *shalya*, a term meaning fragments or remnants that is borrowed into most regional languages (Tamil *sallium*). An entire system of divination has the identification and excision of these substances as its objective. The term *shalya* has other pertinent semantic referents that link it to more general theories of dysfunction and injury. In the traditional South Asian medical sciences, this term is used in combined forms to denote a branch of surgery that deals with the extraction of foreign or injurious objects and, by extension in formal Sinhala, it refers to surgery in general.

In keeping with the medical idiom, the unordered site may be likened to a body that is troubled from within. Pollution ideas that are important organizing principles in social relations in South Asia, are likewise ideationally central to the classification of buried substances as maleficent or toxic. It is of interest that the higher the client stands in the ritual order, the more assiduously the site must be culled. The *Sri Lalitha Navaratnam Manaiadi Sastiram* recommends that for temples, the earth must be excavated to a depth of seven cubits, and for the dwellings of the four castes, to the following depths: Brahmins, six cubits, warriors, five, Vaisyas, four, and Sudras, three. Remains of human beings whose history and ritual status are presumably unknown as well as of substances with which they may have been in contact are regarded as the ultimate contaminants.

The traits of the substances at issue are, in some measure, aesthetic. Artifacts whose symmetries have been despoiled through rotting, burning/cooking or fracturing are regarded as particularly noxious. Hair and bone, rotted

timber, ash, and charcoal are some of the substances cited that are artifacts of decay or the fire. Potential dangers also arise from fractured objects such as potsherds, pieces of metal, and again, bones, that are sharp, jagged or pointed and perhaps call weapons and injury to mind.

The individual texts are somewhat eclectic in the substances that are singled out for special emphasis, but all entwine the imagery of contamination from substances that have decayed or been consumed with that of injury from those that have shattered or broken. The succinct Sinhala *Mayimataya*, for example, ascribes illness in the household to the remnants of slaughter (perhaps rotten meat, butcher knives) in one of its verses. In a subsequent verse, soiled earth containing the bones of a menstruating women (decayed materials) who died from a thunderbolt (pointed object) is said to bring on the death of cattle. The text ascribes rancor in the house to the bones of leopards (sharp and decayed simultaneously) who died violently from a bolt (sharp object) from the heavens. In a later passage, it adds somewhat cavalierly that houses built on graveyards are suitable only for low castes because of the bones.

The Sanskrit *Mayamata* gives somewhat different though parallel details, again emphasizing the maleficent properties of decayed and shattered substances. It warns that the sages reject sites that smell rotten, that is like curd, heated butter, honey or oil, blood, carrion, fish or fowl. Sites near the houses of tanners (those who traffic in dead animals) are also said to be bad. The text recommends clearing the site of potsherds, pebbles, worms and ants (the devourers of carrion), bones, holes, charcoal, sludge, dust and husks.

The Sinhala *Vastu Vidya* provides a more structured account, outlining divinatory methods for identifying the location and nature of disturbances underground (Appuhamy, 157-58). The specifics are virtually duplicated in the *Sri Lalitha Navaratnam Manaiadi Sastiram*. Both texts seem indebted to the authoritative *Brhat Samhita* as their source. According to the *Vastu Vidya*, a person suspecting the presence of disruptive influences in the ground should proceed forthwith to an astrologer who will take special note of the first syllable he utters so as to determine the presence of shalya and its location as shown in Table 7.

The letter test outlined above is merely one of a number of divinatory procedures for identifying troublesome substances that cannot be directly observed. There are other methods. The Tamil manuals, for example, introduce redundancies from the field of astrology. For example, the *Manaiadi Sastiram* explains that if the planets are in the tenth house, it is a sign that granite, stones, bones, alloyed metals, lead or brass are buried beneath the house that will bring about poverty, danger and bad dreams. Similarly, the text states that if the

First Syllable	Type of Injury	Location	Consequence
a	human bones 1-1/2 cubits down	E	death to owner
ka	donkey bones 2 cubits down	SE	terror from authorities
ca	human bones hip deep	S	death, disease
ta	dog bones 1-1/2 cubits down	SW	death to children
ta	infant bones 1-1/2 cubits down	W	change of house
pa	chaff, bones 1-1/2 cubits down	NW	suffering, bad dreams
ya	Brahmin bones hip deep	N	poverty
sa	cattle bones 1-1/2 cubits down	NE	destruction of cattle
ha/pa/ya	skulls, hair, ash, metal, bones	Center	ruin of family

Table 7. Types of shalya and their effects

planets are in the fifth house after sunrise and if the moon is in the first, fourth, seventh or tenth houses of the Zodiac, pieces of black granite, wood chips and charcoal buried beneath will bring terror to those of the lower castes.

The importance of sallium is such that the *Sri Lalitha Navaratnam Manaiadi Sastiram* devotes an entire chapter and twelve of the 80 pages of text to reclassifying prognostications found earlier in the text as the result of the influence of sallium. The reader is referred to Chapter 8 of this document in Appendix III. According to this text, formulas that are applied to the dimensions of the house and the time of construction yield as their result one of sixteen index numbers associated with one of sixteen types of sallium. Since only three types of sallium are auspicious (numbers 10, grain, 11, gold and 14, animal horn = ivory), and only one (number 16, a jar) is said to be neutral, all other remainders require either a recalculation of the dimensions of the house, the time of initiating construction or an exploratory excavation of the earth.

The ultimate objective of the cleansing and ordering of the site to a considerable depth is to divorce it from its past. The excision of substances that are the leftovers from some other system or time provides the site with a reconstructed history, as if it were virgin soil. According to the *Sri Lalitha Navaratnam Manaiadi Sastiram*, once the offending objects have been removed, the site must be ritually reconditioned. An elaborate *vastu puja* in which symmetrical relations are methodically reconstituted is described in detail in the text. A central feature of it is the carving of a stone statue which is to be installed waist deep in a pit at the center of the house. A swastika is to be carved on the top of the statue. The swastika confers a symmetry on the figure and by extension on the site since its composition aligns it with the eight orients. Thus, the fragmented and decayed artifacts that belong to no system because they are the fortuitous relics of another past are replaced with an image whose allusions to a more general system of cosmographic order have been consciously contrived. The statue is said to be a device for meditating on the body of the Site Spirit as well as on five deities imagined in its constituent body parts. The latter are stationed at the minor directions and the center and invoked to bring prosperity to the house. In this way, the ideals of symmetry and ritual purity are merged. The deities, named Nanda, Bhadra, Jaya, Rikta and Purna are said to belong to, and in one case, to be the daughter of, certain great sages. These names are also conventionally applied to groups of lunar days, and spatially projected in the Sinhala *Mayimataya* (verses 215-222) onto divisions of the site.¹⁵ As a set of five

¹⁵ These verses in the *Mayimataya*, which actually make little sense, follow others that deal with clearing the site of inauspicious debris. One possibility then, is that the Sinhala author

they recall the five faced Lord Siva, the symbol of wholeness, who is worshiped successively at the four directions and at the center.

SURFACE TO INTERIOR: THE VITAL POINTS

The Sanskrit *Mayamata* says that the Site Spirit has six bones, a single heart, four vulnerable points and four vessels. The vulnerable points and the heart which is Brahma are found in the center of the site. Wise people are to avoid tormenting the limbs of the body of the Site Spirit with the “limbs” of the house (Dagens 1985: 21). Verses 110-118 of the Sinhala *Mayimataya*, deal with the inauspicious consequences of placing structures along various axes that are drawn across a site laid out in the form of a square. Particular attention is focused on the major diagonals, that is the lines running from southwest to northeast and from southeast to northwest respectively. It is said that death, disease and terror will be generated by structures placed along these lines on a house site plan, and further, that the same general principles apply to the organization of a city.¹⁶ According to the most complete versions of site layout, two diagonals (*vansa*) are drawn on the square site plan each of which connects two of the minor directions. In addition, four sets of parallel lines or minor diagonals called *rajju* trisect the contiguous major directions so as to created the internal geometry shown below in Figure 32. The points at which the 20 lines (*sira*) already drawn on the diagram intersect with each other, and in some cases converge with the diagonals as well, are called vital points (usually, *marma*). There are 100 vital points in a square with 81 divisions and, as a general rule, they should not be obstructed. Four so-called “big marmas,” that is at the corners of the Brahma area where eight lines radiate from a single intersection are to be assiduously avoided. The space to be left unobstructed at these junctures is actually very small. The *Vastu Vidya* says that the vulnerable spot is one-eighth the size of the adjoining squares. Pillai has suggested that in the absence of modern survey instruments the clearances, amounting to “peepholes,” may have been deemed necessary in order to take a line or a string through the intersection “for the

has simply misunderstood materials from an Indian source and given them a garbled, home grown interpretation.

¹⁶ An extension of this principle is that certain lines of vision should remain unobstructed. For example, the *Sarasothimalai* predicts a decline in prosperity if the shadow of a gateway or pinnacle of a temple falls upon the house, or if the houses faces the front of a Siva or Vignasparar temple, the back of one dedicated to Visnu, or holy places in general (Chelvadurai-Proctor, 343).

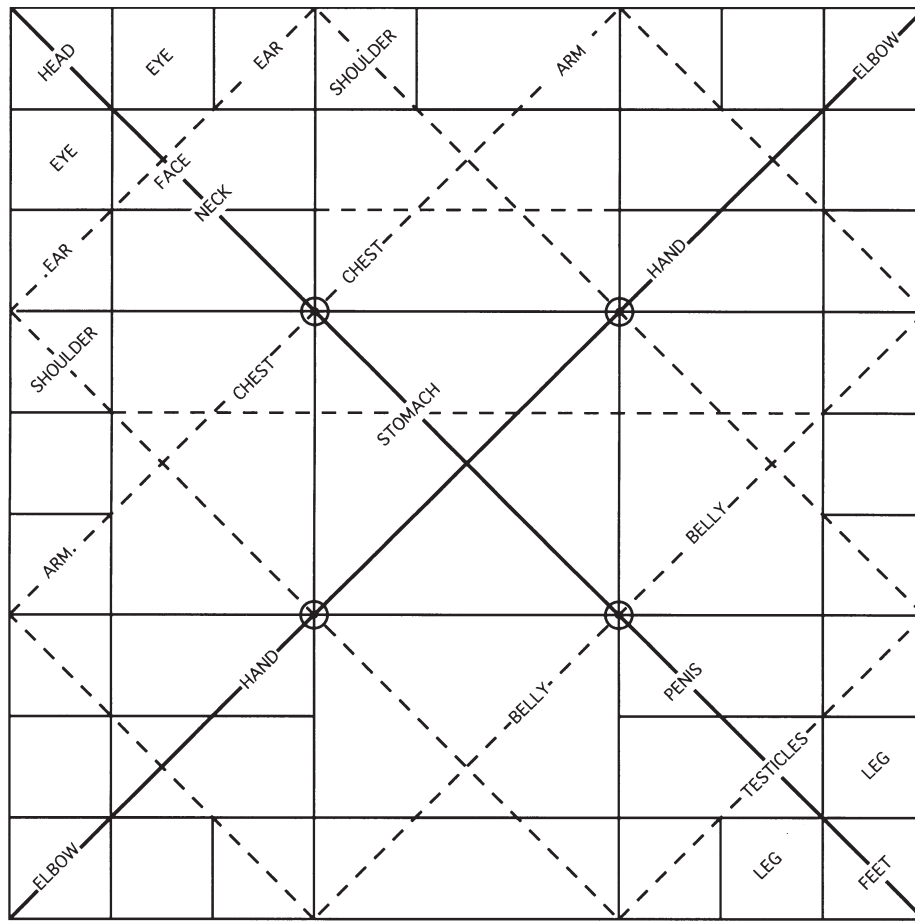


Figure 32. Site Spirit square showing diagonals and *marmas* (after Pillai 1948)

purpose of checking directions or measurements during the process of construction, and afterwards in considering extensions or alterations" (234). Whatever the reason, the underlying principle seems to be that the generating geometry of the site plan must remain manifest and visible.¹⁷

¹⁷ Pillai notes that according to the *Manushalaya Chandrika*, the marmas may be built on in certain instances, for example if the whole site is occupied by the building and there is no possibility of extension (234). In such cases, the Kerala tradition prescribes mounting five heads inscribed with arrow marks outside the obstructed marma. The *Manushalaya Chandrika* say that the heads can be replicas of the tortoise, the ox, the lion, the elephant or the pig and that they should be made in gold. According to Pillai, the arrows are adjusted so as to pick up the angles of the radiating lines emanating from the violated spot. He likens this practice to the one of locating fire hydrants and underground water lines by directions given on roadside walls (235).

The vulnerability of the points at these intersections is linked to the broader propositions about internal injuries to the site. According to the *Brhat Samhita*, if the vital points are injured by dirty materials, nails, pillars, pegs or heavy objects such as stones, the owner of the building can expect sympathetic problems in the corresponding limbs of his body (Bhat 1981:473). As previously noted in the discussion of sallium, the maleficent consequences of obstruction from beneath extend well beyond incidental complaints the owner may have about his health or body. Obstruction may lead to death of householders or livestock, loss of money, fire, and terror from thieves and kings.

An interesting exception to the injunctions pertaining to injury is given in the *Sri Lalitha Navaratnam Manaiadi Sastiram*. This text suggests that it is necessary to injure the Site Spirit in at least one location. According to the manual, at the time of initial site consecration, the stomach of the Site Spirit must be decisively impaled with an iron rod to make sure he remains to protect the house. All popular manuals allude in one way or another to the placing of the first post in this ritually important location, but only the *Sri Lalitha Navaratnam Manaiadi Sastiram* suggests that the efficacy of the procedure is dependent on the depth of the cut.

SURFACE TO INTERIOR: THE SINKING OF WELLS

According to the Sinhala *Mayimataya*, the only auspicious position for the well on a house site is in the northeast. All other minor directions are prohibited as is the west which is said to be associated with misfortune. No specific information is provided on the south, east or north. Chapter 36 of the Sanskrit *Mayamata* quotes from a number of additional sources on wells including the *Brhat Samhita*, not all of which concur, and in general agrees on the proscription of minor directions other than the northeast. The summary rule (verse 14, Chapter 36) is given as follows: "Starting in the northeast, a well in each of the directions, respectively will bring prosperity, wealth, loss of a son, death of the wife, death, success, a wound from weapons and a certain amount of happiness; in the middle of the house, it brings ruin" (Dagens 1985:376). The *Vastu Vidya*, which also owes a debt here to the *Brhat Samhita*, concurs. The *Sri Lalitha Navaratnam Manaiadi Sastiram* agrees that the northeast is the best direction since it confers prosperity, as well as in all other details. Placements in the southeast, northwest and south are prohibited, associated as they are with the death of sons, loss of wealth and enmity. According to the text, placements in the east (wealth), north (glory) and west (prosperity) are also good ones. The overall pattern pertaining to well placement is given below in Figure 33. The placement of wells is thus

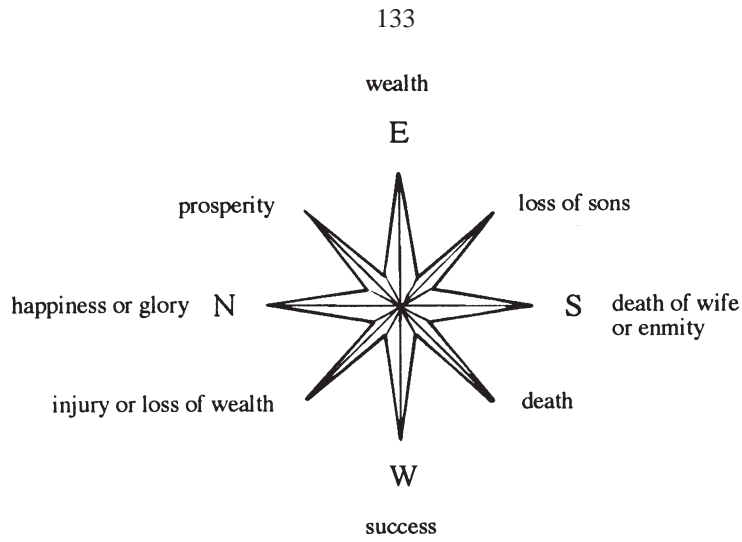


Figure 33. Well sites and their portents.

attached, with some modifications, to more general ideas about auspicious inclines or slopes on the site, the only auspicious ones being those listing to the east, north and northeast which are in fact the preferred directions for wells.¹⁸

INTERIOR TO SURFACE: EMANATIONS OF THE SACRED

In verses 269-271 of the Sinhala *Mayimataya*, the author turns his attention to the portents of sites on which there are anthills. In South Asia, anthills are recognized as manifestations of the sacred and hence as objects of worship. The anthill is an opening to the netherworld, and at Tiruvarur in South India, Siva is worshiped as the lord of it. According to the writer of the Sinhala manual, the Sanskrit *Mayamata* provides contradictory information on anthills, proclaiming in one place that all such sites are inauspicious, especially for womenfolk, and in another that sites with anthills are auspicious as long as the house faces the east, southwest, northwest or northeast. Actually, the Sanskrit *Mayamata* appears to be nearly silent on this matter, prescribing only that the

¹⁸ The major inconsistency among the texts that comment on the siting of wells and preferred slopes seems to lie with the west. A slope to the west, a direction associated with the dwellings of the lowest castes and also with darkness and destruction, is not an auspicious one. On the other hand, it is often added to the three auspicious inclines as an additional direction suitable for wells, perhaps because it is associated with Varuna, the god of the waters. The *Vastu Vidya* advises the householder to venerate Varuna in connection with sinking the well.



Figure 34. Aiyanar Temple, Tamil Nadu, India, showing door guardians.



Figure 35. Makara doorframe, Sri Vishnu Maha Vidyale, Teldeniya, Sri Lanka.

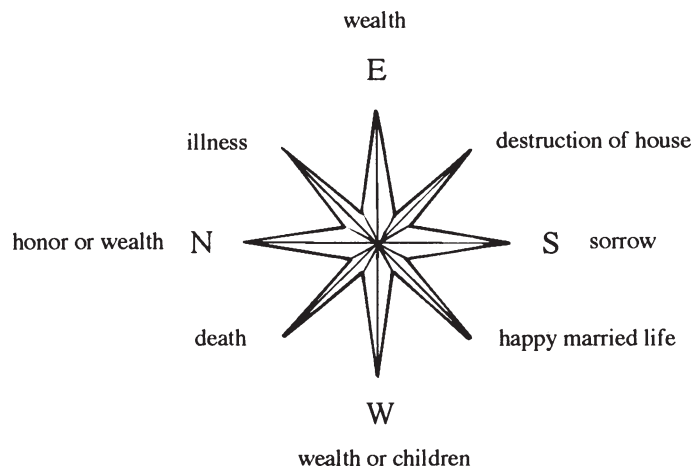


Figure 36. Anthills in the dwelling compound and their portents according to the *Manaiadi Sastiram*.

site be free from potsherds, pebbles, worms, ants and bones (Dagens 1985: 5). The *Sri Lalitha Navaratnam Manaiadi Sastiram* and the *Manaiadi Sastiram* also single out sites with anthills as among those generally unlucky for housebuilding, but indicate elsewhere that this applies only under certain circumstances. When anthills arise in a house compound portents are ascribed to them, according to these texts, and sometimes they are lucky, depending on the direction of emanation, as shown below in Figure 36. According to the *Brhat Samhita*, anthills are part of divinatory evidence for locating water (Bhat 1981: 501 ff.), although this linkage is not explored in the popular housebuilding materials.

THE FIFTH VALUE: PERFORATION

The value of perforation aligns the idea of injury with the vertical frame. The ideal dwelling, royal enclosure or town that is completely insulated from potential injury would theoretically be one without any portals at all. The openings necessary for general traffic and for evacuating the enclosure of unwanted contents such as sewage, are regarded as potentially dangerous breaks in the protective envelope. Only the door stands between the injurious forces without and life within, and it is a liminal, anomalous and dangerous area in that it faces both sides. The danger ascribed to the opening and the necessity of protecting it are expressed dramatically in the Hindu and Buddhist building

tradition through protective imagery on gates and doors. Temple doorways or entrances to these precincts are universally protected by a sculptural program of door guardians (*dvarapalas*). In the Hindu tradition, the door guardians are conventionally placed in the major directions in pairs. The Sanskrit *Mayamata* identifies them as Nandin and Kala (east), Dandin and Mundin (south), Vaijaya and Bhrngiriti (west) and Gopa and Anantaka (north). They are brightly colored and carry weapons such as axes, swords, tridents and thunderbolts. As the *Mayamata* describes them:

They have four arms, three or two eyes and terrifying fangs. Their bodies are decorated with snakes, and they bear a gleaming trident on the side of their headgear. Each has one hand pointed (in a menacing fashion). . . . Their faces constantly provoke fear and absence of fear, even amongst the gods; they are terrifying due to their appearance alone (Dagens 1985:373).

Any portal of a temple or a dwelling is a potential conduit of malevolence from without. Evil influences conducted by the alignments of surrounding natural or man-made features are sometimes mentioned in connection with the door.

The door which opens and closes of itself brings about the ruin of the family and is the cause of the destruction of happiness. Similarly, when there is a door whose axis interferes with a tree, a boundary, a corner, a pillar, a well, a temple, an anthill or a heap of ashes, a 'vein' or 'vulnerable point' or something else of that kind, such a door is a river of excrement or a nest of snakes. A door meant to protect a building must be solid and massive; that is pleasing to the sages (Dagens, 287).

The architectural texts lay great stress on the protective nature of the door and its frame, and consequently on its correct alignment and construction. Widely agreed upon propositions include that the main door should be off center in the facade, that doors within the house should not be on axis with each other, that no doors should open to the minor directions and that the number of openings should be kept to a minimum. The *Sri Lalitha Navaratnam Manaiadi Sastiram* mentions that only a king can risk having portals in all four directions. Proportions for the door and its frame are outlined in all treatises, generally with the admonition that if the rules are not followed exactly, the occupants will be unlucky.

As the material expression of the transition between the uncertainties in the external world, and the protected nature of the world lying within the envelope, the doorframe has a sanctified and spiritually charged nature. In the Sinhala building tradition, the double identity of the doorframe is expressed by

its orientation and embellishment. The ideal building is oriented eastward, its external side. A common sculptural element sometimes forming an arch over the lintel in major building types, is the makara or crocodile, the mount of Varuna that refers to the other direction, the internal one that is protected and secured. It is of interest that the *Sri Lalitha Navaratnam Manaiadi Sastiram* recommends this inward facing and secure direction of the house as the best one for the conception of children. In the *Uluwahu Paenima*, the Sinhala manual that describes the rite of crossing the doorframe, the unconsecrated makara doorframe is presented as an element that participates in the violent energies of the external world it faces. The rite of crossing it draw off the evils of the doorframe onto the shrouded body of the ritualist, descending down through his head and out through his fingers. As the ritualist moves from exterior to interior he effects a reversal in the nature of the doorframe itself. It is transformed from a source of dangerous energies associated with the external world into an element that participates in the other side of experience, the protected world of the interior. In the small Sri Lankan community in which I resided, the doorframe was the only structural element that was ever embellished, and it was otherwise treated with care. No one ever wittingly stepped on it as they crossed it, nor were any objects ever allowed to remain on the sill.

THE SIXTH VALUE: FRAMING

According to Buddhist cosmology, the earth is a flat disk segmented internally into concentric rings. Between the central Mount Meru and the great circle of rock that bounds the perimeter of the earth, lie seven, named concentric circles of rocks. Between the circles of rocks, there are oceans that gradually decrease in depth as one moves outward toward the perimeter (Hardy, 12). The oceans are all composed of equal portions of salt and water. The saltiness is caused by a submarine fire rising from one of the hells that changes their natural sweetness (14). There are four continents flanking Mount Meru in the inner ring. In Hindu cosmology, the concentric imagery is maintained, although with differences in detail. The central continent Jambudvipa lies in the middle of concentric rings of seven continents, and Mount Meru rises from its center. Seven seas, each containing different liquids, namely brine, sugarcane juice, wine, clarified butter, curd, milk and sweet water encircle the continents (Dimmitt and van Buitenen, 52).

This nested model of terrestrial space is expressed in the rectilinear form of the Site Spirit square. In a 9 x 9 square there are five concentric series of inner squares. In an 8 x 8 square, there are four. The nested model is also reflected

three dimensionally in monumental building forms. When exploded outward into three dimensional space, the nested diagram is captured in the stepped pyramidal form of the multi-storeyed South Indian temple, for example. The principle of framing is further reflected in both Buddhist and Hindu practices of venerating sacred objects, buildings or sites by moving around them to the right. The circumambulatory paths around Buddhist stupas and Hindu shrines give architectonic expression to the practice of the sacred trace and hence to the principle of framing that defines the shape of the world.

In the folk tradition of Sri Lanka, the rectilinear house site is perceived to be in the shape of four concentric rims, thus calling to mind the basic organization of the 8 x 8 unit mandala but reorganizing it into a series of successively longer paths proceeding from the center outward. The same organizational scheme appears in the Sanskrit treatises as a model for village organization. In the Sinhala tradition, the central core is referred to as the foot or area of Brahma, and, moving toward the rim, the paths are named successively, the area of the gods (*deva pada*), the area of men or mortals (*manusya pada*), and the area of spirits or ghosts (*preta pada*) as shown in Figure 37. The model therefore has an implied vertical dimension with the 'upper' area represented by Brahma in the center and the 'lower' area represented by the spirits or ghosts on the perimeter. According to this tradition, the house can be built in any of the areas except the outermost one associated with the spirits. The injunction therefore confirms the general principle that a certain area of the site should be left without structure, but violates the usual convention that it is the center of the site that should be left free. Perhaps this is understood, since the courtyard as an architectural element is considered an essential feature of dwelling organization throughout the culture area. In any event, the idea that a unbuilt perimeter should be established around the house is expressed by other prescriptions in the housebuilding literature. For example, the *Sarasothimalai* recommends that every house have a defining street in front and a lane in back (Chelvadurai-Proctor, 351) and that every village or town have a road running round it (353). In addition, the text recommends that the house be set off at a safe distance from other structures and natural features. It suggests that a house should be at least 100 feet from the nearest house, temple, street junction, field, tank or river, for example (ibid: 344). In addition, it prescribes that a house should be at least 17-1/2 feet from its own well and 25 feet from a communal one or a water course (ibid). The *Sri Lalitha Navaratnam Manaiadi Sastiram* generally concurs, advising that sites must be at least 50 feet from rivers, 25 feet from tanks and 17 feet from wells.¹⁹ The safe distances between a

¹⁹ Another section of the text gives these numbers as 100, 50, and 20, respectively.

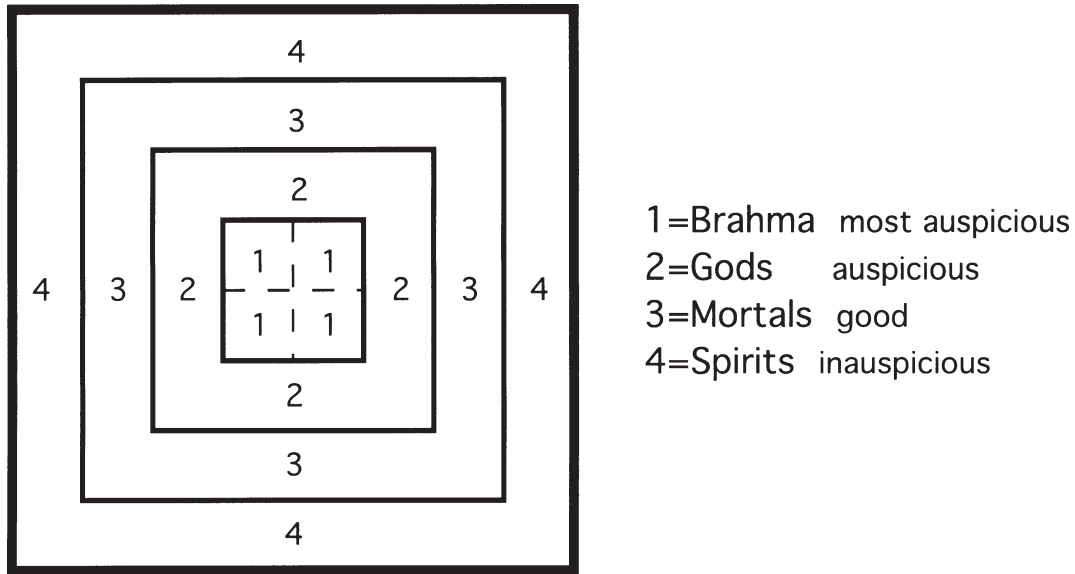


Figure 37. Concentric organization of the site in the Sinhala tradition.

house and the well are also considerations important in the Sinhala *Mayimataya* (verses 142-145) which recommends various auspicious distances from seven to forty cubits. Both the *Vastu Vidya* and the *Sri Lalitha Navaratnam Manaiadi Sastiram* articulate the importance of correct 'setback' within the general framework of the principles of defects arising from obstruction. With reference to doors for example, the *Vastu Vidya* prescribes that certain obstructing features, namely roads, wells, corners of other houses, pillars and watercourses, may be no closer than twice the height of the door. If they lie at closer range, then the door is said to be obstructed by the architectural element or natural feature. The Brahma spot (the center of the site marked by the four vital points) is also said to have such an obstructing effect for ordinary dwellings, and thus doors opening immediately onto the center of the site are proscribed. Doors on axis with the center of the site, according to the text, are appropriate only for town halls and places of worship.

The Sri Lankan practice of organizing the building site into four concentric squares is mirrored, and perhaps derived from, a more elaborate South Indian scheme depicted in the *Manushalaya Chandrika* that organizes the entire site into nine concentric rims or *vithis* (Pillai, 229). In this scheme, the length and breadth are divided into eighteen equal parts which then form the nine *vithis* as

shown in Figure 38. The organization of the site in the vithi scheme shows some similarities in its nomenclature with the simpler Sri Lankan model. The outer rim called Paisacha (demon area) has its counterpart in the Sri Lankan preta pada and is likewise considered unsuitable for building. Similarly, the inner core of four squares, known as Brahma vithi, corresponds to the central area of the same name in the Sri Lankan scheme. In the South Indian model, the inner seven rims are known successively as Ganesh (the elephant god, the remover of obstacles), Agni (the fire god, the southeast), Jala (water, perhaps the west), Naga (snake, perhaps the southwest), Yama (death, the south), Kubera (the god of wealth, the north), and Deva (god). Of these vithis, Agni, the third, Naga, the fifth, Yama, the sixth and the outer rim are not to be used for any building. Of those considered suitable for building, the inner two are to be used for the house. The innermost sector is presumably reserved for the open courtyard. The fourth rim is to be used for subsidiary buildings, and is clearly demarcated from the main house by the prohibited third zone. The seventh and eighth are to be used for outhouses and servants quarters and are separated from the main functional areas of the household by two proscribed bands, the fifth and the sixth. The entire scheme, therefore, segregates the main functional areas of the house compound into clearly defined central, peripheral and outer areas.

SITE SHAPE AND FRAMING

In general, sites of regular and symmetrical outline based on the circle and the square, that is those amenable to the graded and progressive miniaturization of the whole exemplified in the principle of framing, are preferred in the literature. The *Sri Lalitha Navaratnam Manaiadi Sastiram* proscribes crooked sites and many specifically identified irregular shapes. The Sanskrit *Mayamata* describes rectangular sites as suitable for gods and Brahmins; it is said that the shape of the site must be perfect and, in proscribing the circle and all others, it suggests that the rectangle is the only suitable one (Dagens 1985:5). The Sinhala *Mayimataya* recommends sites that are square, rectangular, oval or circular (verse 203). Sites shaped like mountain gorges, from which we can infer an irregular outline, are proscribed (verse 204). The *Vastu Vidya*, which enumerates sixteen different configurations, only four of which are considered acceptable, concurs. Sites that are circular are said to lead to prosperity. Three types of rectilinear sites including the square are said to bring on wealth and general good luck (Appuhamy, 128). Twelve other site outlines that call to mind easily imagined and specific configurations including those that are triangular, shaped like mouths, yokes, rods, eight-sided drums, hoes, tortoise shells, bows

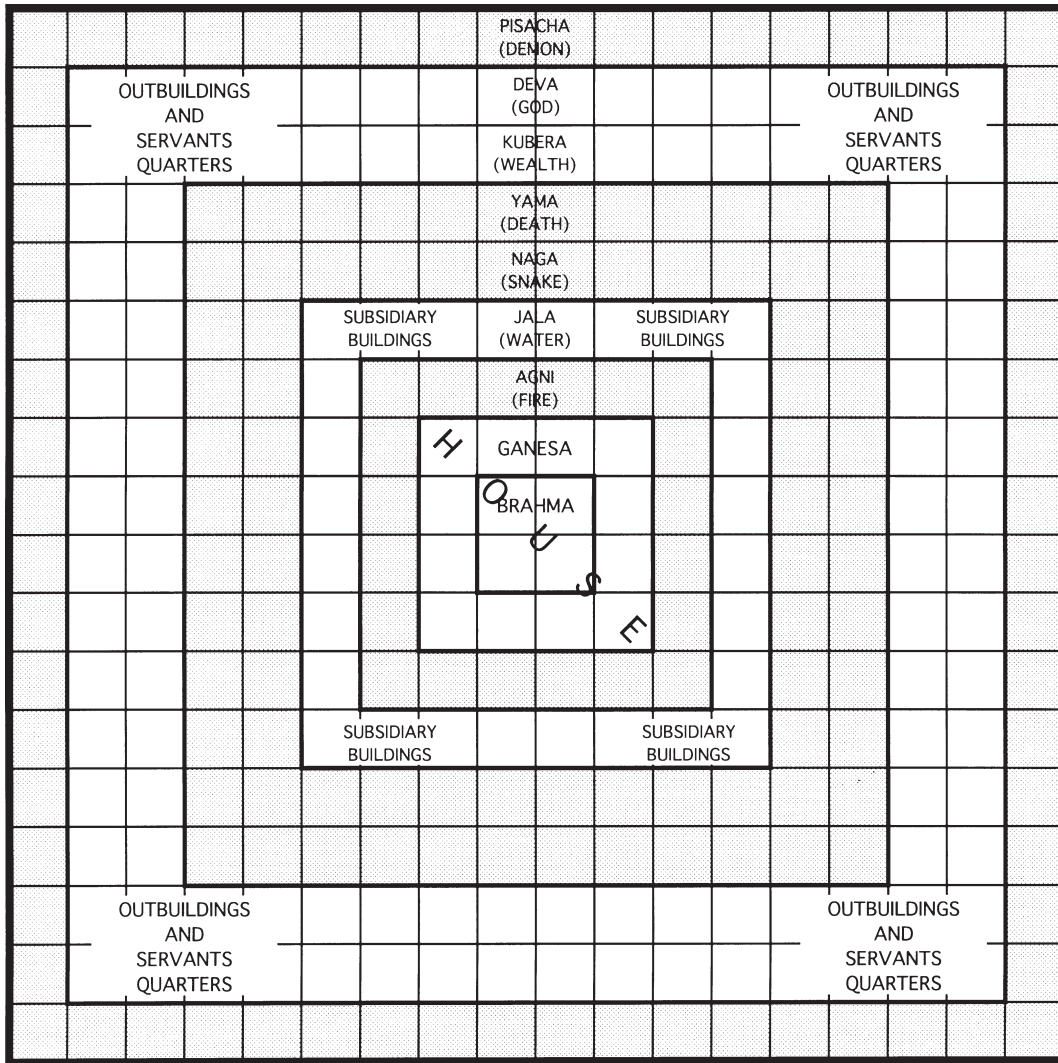


Figure 38. Concentric organization of the site into paths according to the *Manushalaya Chandrika*..

and winnowing baskets, are said to bring on bad luck of various kinds including death, poverty, terror, blindness and imprisonment (ibid). In the Orissan texts examined by Bose, the site types and portents are essentially the same, with small diagrams of the site outlines evidently appearing in one manuscript (7). Many of the common injunctions including the ones on triangular shaped plots and those shaped like winnowing baskets are repeated in the *Sri Lalitha Navaratnam Manaiadi Sastiram*. Sites shaped like animals, demons and plants



Figure 39. Popular image of Visvakarma, from Bengal.

are mentioned in all texts, but call to mind no easily identifiable outline and are evaluated in contradictory ways. For the most part they are proscribed. As noted, the Sanskrit *Mayamata* rejects all site outlines except the rectangle, and mentions specifically that the sages reject those shaped like lizards, birds, cats, fish, porcupines and monkeys (Dagens 1985:5). The *Sarasothimalai* enjoins the site shaped like a lizard, snake, camel or bird (Chelvadurai-Proctor, 343). The *Sri Lalitha Navaratnam Manaiadi Sastiram* advises against those shaped like a lily, elephant, ox, horse, donkey, goat, owl, cat and lion. Elsewhere in the text, lion-shaped land is said to beget happy sons, however, and the lion shape along with that of the elephant and the demon is also recommended in the Sinhala *Mayimataya*. Whether these are simply imaginative embellishments to a core stock of geometric outlines, whether they originally named particular (and now unrecoverable) outlines unambiguously or whether they are additional categories referring to characteristics of the site surface that allow further interpretations within the basic geometries is not clear from the texts.²⁰ Appuhamy (1937) alludes to them in passing as categories that are mentioned by others, but excludes them from the sixteen types of outlines he evaluates as auspicious or inauspicious.

²⁰ Descriptions of sites perceived to be in the shape of animals given to me by housebuilding specialists in Sri Lanka characterized them mainly in terms of slopes, not outlines. For example, a site with a rise in the west and sloping in the three other major directions was said to be like an elephant. Similarly, tortoise shaped sites were those that sloped from the center in all directions. Lion, lizard and numerous other site shapes were not mentioned, and the criteria were often extended to include details pertaining to the surface. Sites that were 'demon-faced' were said to have an irregular surface, full of depressions and outcroppings. Curiously, they were said to be auspicious.

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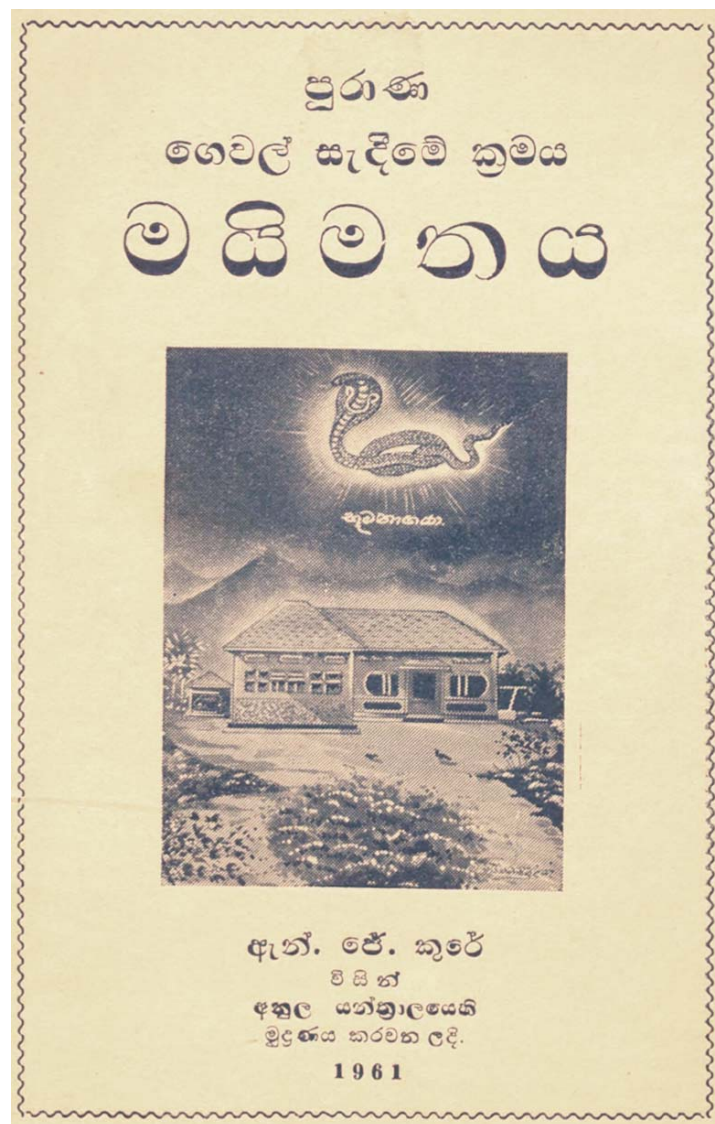
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Appendix I:

The Sinhala *Mayimataya*



Translation by Bonnie G. MacDougall



Figure 41. Standing Buddha, Gal Viharaya, Polonnaruwa, Sri Lanka.
12th century.

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A translation into English of the Sinhala *Mayimataya* by Bonnie G. MacDougall.

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THE SINHALA MAYIMATAYA¹

1. I worship thee with love O *munindu* (The Sage, an appellation of the Buddha). You, like a sun (*divasuru*) transcended the dark side of this life (*bawa duka*), spread your six rays over this world (*sawana sataraes paeturu*), and flooded it with your glorious light.²

2. I worship the teachings (*dahama*) of the Buddha which are like the moon (*nisayuru*) whose light makes the *konda* (*Nymphaea esculenta*) flowers bloom.³ Like moonbeams coming from behind a cloud, his teachings break through the darkness of wrong views (*misadiTu*).

3. With everlasting devotion, I worship the *maha sanga* (the holy order of Buddhist monks) which, like Mount Meru, gave lustre to the four continents.⁴

¹ The translations which appear in the text are based primarily on Carter (1965). For Sanskrit borrowings, I have consulted Monier-Williams (1899). Some botanical information has been taken from Lewis (1902), as noted. As for the transliteration here, I have identified the Sinhala letters with their nearest Romanized equivalents. The sequence ae is intended to represent the vowel sound in English cat. Lower case t and d transliterate dental consonants; upper case T and D, retroflex ones.

² It is said that the Buddha emanated glorious rays of six colors. According to Buddhist legends, whenever the Buddha preached, he dispersed the darkness of a thousand worlds (*sakwala*) with his rays.

³ The *konda* is a species of jasmine that blooms by moonlight.

⁴ In Buddhism, the world has Mount Meru at its center. Meru is said to be more than two million miles high, one half of which is below the Earth. On its top is the heaven of the gods and at its base the abode of the anti-gods, the Asuras. Meru lies in the center of a chakkawala (*sakwala*), which is the complete set or system of worlds including the Earth. The entire system is girded by a rock wall (*sakwalagala*). Between the rock wall and the seven ranges of mountains that surround Mount Meru lie the four continents; the inhabitants of which have faces of the same shape as the continent to which they belong. They are (1) *purvvidehe*, the eastern continent shaped like a half moon and 7,000 yojanas in extent, (2) *aparagoyane*, the western continent, shaped like a round mirror and 7,000 yojanas in extent, (3) *jambudvīpa*, India within the Ganges where Buddha founded Buddhism, triangular in shape and 10,000 yojanas in extent, and, (4) *uturukurudivayina*, the northern continent shaped like a square seat and 8,000 yojanas in extent (cf. Hardy, *passim*).

It is bathed by an ocean (*sayura*) of loving kindness (*met*) and steady in the storm of wrong views (*kudivu*).

4. In devotion, I have thrice invoked the Eminent Sage, His teachings and His holy order. May we all be filled with loving kindness. Herewith are verses I composed according to my own humble understanding.

5. May the following deities always protect us: the god Kataragama or Skanda, that six-faced lord who was the son of Siva; the serpent king Ananta⁵ who graces the Earth; Venus, Mars and Siva, the three-eyed one; Moon who is cooling (*sisara kara*) and Visnu (*narayana*).

6. Mindful of the words of the Sage, I venerate the Four Sublime States of Consciousness (*satara man nandana*),⁶ the Four Requisites (*satara pasa*),⁷ and His blessed goodness.

7. I venerate the Four Sublime States of Consciousness. Herein I present you with four-line poems I got from the ancient sages. Know about sites and build houses for all four of the castes.

8. There are months, days, sites, directions, and asterisms that are suitable for the pursuit of housebuilding by discerning builders.

9. How can one who does not know Sanskrit understand the convoluted meanings in the high flown verses composed by the ancient sages?

10. The language is illustrious, but no one can traverse this thicket. If we had the insight of our own language (*siya basa*), we too could dwell in the forest of poetry.

⁵ The great serpent on whom Visnu is often depicted asleep. Ananta means endless or infinite. At the end of each cosmic age when the universe is destroyed, only Ananta remains (cf. Stutley and Stutley, 12).

⁶ In Buddhism, loving kindness (*metta*), boundless compassion (*karuna*), joy (*mudita*), and equanimity (*upekka*).

⁷ The four requisites for monks are food, robes, lodging, and medicine, all to be obtained through austerities.

11. Verses composed in our own language would be useful since everyone who knew Sinhala could read the verses.
12. In this book there is incomparably valuable instruction for skillful housebuilding that anyone can see in our own language for the welfare of mankind.
13. If you want to be showered with blessings (*savsi*), then learn what has been said by our learned forebears (*peruduru*) and seek beneficial moments and lunar mansions for breaking ground for houses and wells.
14. I shall now tell what I have seen written in the *Mayamata* about proper housebuilding and suitable pieces of land, orientations, months (for construction), and methods of felling timber.
15. When the sun is in Pisces, do not build houses. What kinds of misfortune (*dos*) will ensue? Expect disease, crippling, and illness.
16. As for the month in which the sun enters Sagittarius, thieves will plunder the property and impoverish the owners.
17. When you go to prepare the house site or to cut down the timber, the following are evil omens:
18. Persons carrying swords (*kaDu*), knives (*kaeti*), spades (*udalu*), firewood (*mala danDu*), wood eaten by vermin (*siduru liya*), and persons wearing ropes round their necks or those who come with their hands on their shoulders.⁸
19. Beware of persons carrying grass or those who curse you with profane language. If you see them as you go along, it is an evil omen. Do not build the house.

⁸ All represent death. Firewood is used for funeral pyres, 'hands on the shoulders' suggests the funeral wailing position, for example.

20. Carpenters who cut the first post (*magul kapa*) for the house should proceed in this manner and then go to the foot of tree and clean up the area around the base.
21. Draw the Diagram of Eight (*aTa magula*) and place pots at the four corners. Offer flowers and sprinkle sandalwood milk (*haendun kiri paen*) over the area.
22. Go back on the following day and say, "Will the deity who is living in this tree leave it for the benefit of this house?"⁹
23. When you have petitioned the deity in this manner, cut off a branch from the tree, pull it along the ground and place it under a second tree.
24. Now, clean and sweep the base of the second tree and scatter flowers, betel leaves, and sandalwood over the area. Then say, "O deity, dwell in this tree and be good enough to give me your own."
25. So, you invoke the deity in this manner and cut down the tree of your choosing. Now, how should you take the tree and what kind of fellow should cut it down?
26. His skin should be clear, fair, and smooth. He should be neither lanky nor squat, and the hair flowing from his head should remind you of the tail of a peacock.
27. This work should be undertaken by persons who are straight and erect, who have whiskers on both sides of their cheeks and hair on their chests.

⁹ Buddhist beliefs about tree spirits are detailed sensitively by Coomaraswamy with examples from the Buddhist Jataka tales (122-123). In art, according to Coomaraswamy, "often a face is drawn amidst the branches to suggest rather than to show the indwelling deva, whose life is, in a strange way, the tree's life, or bound up with it, yet is not the tree itself. At other times, the tree deva is represented as dwelling in a mansion . . . which is not ordinarily visible to human beings . . . 'the invisible house'" (122).

28. Now for how this tree is to be felled by such a good specimen. Suppose the trunk is covered with vines and suppose it is bent at the top.
29. If a tree is like that, even if it is adorned with flowers and leaves, and even if you can cut off all the bad parts, it is still not suitable, not even if it is a good Jak (*Artocarpus integrifolia*).¹⁰
30. A tree that is thick near the base is called a female tree by the sages. A tree that is thick in the midsection of the trunk is called neuter.
31. A tree whose trunk is of a single dimension from bottom to top is a male tree.¹¹
32. A tree that is thick at the top and the abode of a wicked and destructive she-demon (*yakiniya*) should not be used for the auspicious post.
33. Timber taken from a tree whose trunk is like a long drum (*bera*) is suitable for the auspicious post.
34. If you use wormy wood (=with holes) for the auspicious post, the occupants will suffer from misery, sorrow, and fear. It will bring harm (*avvæDa*) and more to the house.
35. (Uses a different word for ‘thick’, but otherwise the same as 32.)
36. Our learned forebears have told us that if wood eaten by worms is used for the auspicious post, the owner of the house will suffer from stomach ailments (*udara roga*).

¹⁰ A tree cultivated widely in gardens. Said to be one of the few trees in Sri Lanka in which “no part is lost, or need be” (Lewis, 237). Used as a timber tree in housebuilding. The fruits and seeds are eaten. A dye is made from the wood for coloring the robes of Buddhist priests. Tamil: *pilar*.

¹¹ According to the Tamil texts ascribed to Maya, male trees are good for pillars, female trees for wall plates, beams and capitals and hermaphrodite (=neuter) trees for cross joists, joists and rafters (Kearns, 233).

37. If too thin a tree is used for the auspicious post, the women of the house will have to work in everlasting servitude.
38. The *mi* tree (*Bassia longifolia*)¹² is suitable for the auspicious posts for the following types of structures: Buddhist monasteries, shrines, and the palaces of reigning kings. Those who do good carpentry know it.
39. There are dangers associated with the direction in which the tree for the auspicious post is felled. A good builder must know the portents so he can decide whether to fell it in one direction or another.
40. If the tree falls to the east, the owner will become very wise. If it falls to the south, he will live a long time, and if it falls to the west, he will be moody (*sitivili kara*).
41. If the tree falls to the north, whether Venus is risen or set, illness and death will plague the house. Lives will be lost and swept away.
42. After you cut the auspicious post, this is how you take the measure of the carpenter's cubit (*waDu riyana*). Starting from the right hand side, measure off one cubit (*riyana*), one span, (*viyata*) and four fingers. This is how you measure it.
43. Now, using the carpenter's cubit, measure off a length of five cubits and a breadth of three. If the length of the house is to be six and a half cubits, then make the breadth three and a half.¹³

¹² A large deciduous tree prized for a medicinal oil made from the seeds. The wood of the tree is hard and unusually heavy. Tamil: *iluppai* (Lewis, 191).

¹³ According to Pillai, Hindu artisans applied formulas to derive length and breadth from the perimeter. From the *Silpa Vignana Samgraha* and *Manushalaya Chandrika*, two treatises from the Malabar coast, he reports the following derivational formula: "Take half the perimeter, divide it by any number from 8-32 inclusive, then take four parts of these for the breadth, and the remainder for length" (70). Thus, the divisors yield proportions of 1:1 (if the divisor is 8) up to 1:7 (if the divisor is 32). Although all divisors are theoretically in the field, some (11, 15, 19, 23, and 27) are excluded as inappropriate. The numbers 8, 9, and 10 are said to be appropriate for temples, shrines, audience halls and pleasure halls and the others for general purposes" (72). There is also a formula to derive the perimeter from the length.

44. For a house that is seven cubits long, measure off a breadth of four cubits. For a house that is nine cubits long, take a breadth of five cubits. If you take measurements like this, good fortune will come to the house.
45. For a house with a length of ten and a half cubits, take a breadth of six and a half. For a length of eleven cubits, take one of seven and a half.
46. If the length is too great, the wife of the house will die. If the house is too wide, then the husband. If the house has proper proportions, its occupants will be prosperous and happy. So do not make the dimensions too long or too short.
47. The way in which you set the auspicious post will determine how the people in the house fare ever after. So pay attention to digging the hole.
48. Keep an eye on the places where the man who digs the hole scratches. If he scratches his hands, it foretells death for the owner and his family.
49. If he scratches his head, it foretells death for the owner. If he scratches his back, the house will be plundered by thieves and kings.
50. If he scratches his stomach when he sits down to dig the hole, the women of the house will be happy.
51. So, now you know how to dig the hole and set the auspicious post. You should make offerings of sandalwood, boiled rice, flowers, lamps, and a young coconut.
52. Arrange these offerings near the auspicious post and then put a monetary offering (*panDuru*) in the hole.
53. If this is placed before the feet of the Site Spirit, it is inauspicious for the house and all the wealth in it will be dissipated.¹⁴

¹⁴ In the Sinhala text, this being is referred to as *vasu devi*.

54. If it is done on the mouth¹⁵ or the navel,¹⁶ the occupants will live for a hundred years with all kinds of good fortune.

55. Since the words of our learned forebears uttered for the benefit of mankind are eternal, do not make trouble for yourself. Construct houses in this manner.

56. In the three months in which the sun is in the houses of Aries, Taurus, and Gemini, the Earth Serpent (*bumanaga*) lies with its tail in the west, its head in the east, its back to the north, and its belly to the south.¹⁷

57. In the three months in which the sun is in the houses of Cancer, Leo, and Virgo, the tail is in the north, the head in the south, the back is in the east, and the belly in the west. This is how it lies during these three months.¹⁸

58. In the three months in which the sun is in Libra, Scorpio, and Sagittarius, the tail is to the east, the head to the west, the back to the south, and the belly to the north. This is how the serpent lies during these three months.

59. In the three months in which the sun is in Capricorn, Aquarius, and Pisces, the tail is to the south, the head to the north, the back to the east, and the belly to the west. This is how the serpent spends the twelve months.

60. So when you place the auspicious post consider the direction in which the royal serpent lies and the trouble it can cause. When you have oriented the house site to the cardinal points, make offerings (*balipuda*) at the eight directions that are occupied by demons

¹⁵ The northeast, or according to Dagens (1985), the east, generally auspicious directions.

¹⁶ The center of the site, an area associated with Brahma, the Creator. In an 81 square building site, the inner nine squares are assigned to Brahma, and in a 64 square site, the inner four.

¹⁷ The template for the 27 (sometimes 28 to include an addition made later of Abhijit, the twenty second) lunar asterisms in the heavens is a segmented snake called the Bhumanaga. He is also described as encircling the house site. In a ground plan of 64 squares, 28 are in the outer rim.

¹⁸ The image here is of a being lying on his side across the bowl of the sky and rotating as if on a pivot. Appuhamy (1937) says he is lying on his left side as does Bose (1932).

61. Take the following: ghee, milk rice (*kiri bat*), sugar cane jaggery (*uk sakuru*), Idda flowers (*idda mal*, *Wrightia zeylanica*), oil lamps, sandalwood, red Ixora flowers (*rat mal*, *Ixora coccinea*), betel, and camphor. Make offerings at the cardinal points inside the foundation line.
62. Learn about the demons who are the masters of each direction and make the prescribed offerings for each one. If you get the help of a good carpenter, you can avoid misfortunes associated with the directions in this way.
63. A cruel demon lives in the east. He stays there for an hour and then goes to another place. If he sees a house there, he will destroy it. Now pray to the southeast too.
64. When you look at the southeast, you will see a demon standing there with a flaming torch in his hand. It is said that he will burn a house down. Leave that direction and go to the south.
65. The demon in the south has a club in his hand. He stays there for a while and brings bad luck. A site in the southern direction is not good. Now, look at the site in the southwest.
66. Manimekala who protects the sea, will demolish your house there with her weapon. So how can you construct a house in the southwest? So go look for another direction.
67. So go to the west and examine another house site. Alas, a demon is there. He eats human bones in the evening.
68. Go to the northwest and look at another site. You will see a cobra who lives in an anthill. If you build a house there, you will not be able to drive him away.
69. Leave that spot and go to the north to examine a place for the building. If you build a house there, it will burn down. So leave the spot in the north.

70. So leave the north and go to the northeast. When you look for a site there, you will find a black demon with long arms who shoots poisoned arrows.
71. So the experienced housebuilder knows that from the east, right round to the northeast, there are cruel demons in every direction. So my friend, tell me if you can show me a better site.
72. When you erect the auspicious post, this is what you have to do to get rid of the demons. Appease them by giving them offerings (*dola*) of rice and curries (*batut malu*) on the house site at dusk.
73. They say that the lord of the east is the serpent king Ananta. You can ward off evil from the east by offering him sandalwood and milk rice.
74. My friend, the lord of the southeast is a cobra named Basuki. You can get rid of the evil from this direction by serving up three plates of offerings together with coconut water (*kasa paen*).
75. A cobra named Ahiraja is the lord of the south. Spare yourself troubles from the south and give him an offering of fried rice in sour gruel.
76. Two cobras named Arohana and Karkota are the lords of the southwest. This is what you should prepare for them:
77. Cook rice with meat to give it a red color, place it in a black pot (*koraha*) and cover it. Then, someone with five auspicious marks should face this direction and make the offering.
78. A cobra named Paduma is the lord of the west. Call the cobra by name and make an offering in a white pot.
79. The cobra king Patma is the lord of the northwest. Its offering is fried grain. Mix it with breast milk and honey.

80. My friend, a cobra named Sanka is the lord of the north. The offering for him is rice mixed with ghee. Light lamps and make the offering in a hole in a tree.

81. A cobra king called Gulika is the lord of the northeast. His offering is gruel prepared from *amu sal* (a grain, *paspalum scrobiculatum*). Mix it with a cup of gingelly oil.

82. You should know the sites which are suitable for the ruling caste, Brahmins, traders, and Sudras, i.e., for the four castes. Now I shall describe the characteristics so that you may know them. Build the houses accordingly.

83. Now you ask about the characteristic marks of the sites such as those for the gods. The Lord of the Earth rules from a place with red and white temples (*sudu ratu devolin*).¹⁹ That place is suitable only for places of worship for Lord Buddha.

84. Now you ask me about the characteristics for sites for the Brahmins. A site that is good for village temples and for Brahmins has arrow grass (*itana*, *Andropogon contortus*) growing on it.

85. If the ground slopes to the west and if *kalanduru* grass (*Cyperus rotundus*) grows there, then the site is suitable for the Sudra caste.

86. A site shaped like an elephant with the ichneumon plant growing on it and covered with thick vegetation from one end to the other is suitable for rulers.

87. You can recognize the musical (*gandarva*) site, because a paddy field weed called pig grass (*urutana*, *Oryza fufipogon* or *Oryza derennis moench*) grows there. It is suitable for those of low caste.

¹⁹ Possibly an allusion to the red and white vertical stripes found on the walls of Hindu sacred precincts.

88. The house post placed in the southeast is called king (*bupati*). The one in the southwest is called commander-in-chief (*senadipati*). The one in the northwest is ascetic (*tapas*). The one in the northeast is woman (*gaeni*).

89. The four posts of four colors to be placed at the four minor directions should be placed at exactly the same time. If they are placed under two or three Zodiac signs destruction results. So says the *Mayamata*.

90. Divide the carpenter's cubit (*waDu riyana*) into four equal parts. Each of them is called a foot (*padaya*). Take eight feet for the height of the door and four and a half for the width.

91. Do not take soil from the east for the house. If you do, termites will build their nests there. If you use soil from the south, you will lose your livestock.

92. Do not take soil from the west for the house. If you do, the owner of the house will fall sick. Do not use soil brought from the northwest. If you do, the children will die.

93. My friend, if soil is brought from the north for the house, the owner will suffer mental anguish. If soil is brought from the northeast, the occupants will be blessed with long life and prosperity.

94. When you site the well, examine all eight directions. Do not put a well in the southeast. If you do, there will be fever.

95. If you dig a well in the northwest, there will be children but also arguments. If the well is dug in the southwest, after children are born, fire will destroy the house.

96. Do not dig a well in the west, because it will only bring on misfortune. If you dig the well in the northeast, the house will be blessed.

97. The four months April-May (*bak*) May-June (*vesak*), January-February (*durutu*), and August-September (*nikini*) are good for building a house and

the occupants will be blessed with happiness. As for days, choose a Sunday, Monday, Thursday, or Friday. The following are auspicious lunar asterisms (*naekat*): Hasta,²⁰ the thirteenth, Chitra,²¹ the fourteenth, Svati, the fifteenth,²² Satabhishak, the twenty-fourth,²³ Revati, the twenty-seventh,²⁴ and Rohini, the fourth.²⁵

98. Build houses under the asterisms of Sravana, the twenty-third,²⁶ Svati, the fifteenth, Anuradha, the seventeenth,²⁷ Mrigasiras, the fifth,²⁸ and within the houses of Gemini, Virgo, Sagittarius, Aquarius, Pisces, and Leo. Build on days such as the second, tenth, and the seventh in the lunar cycle.

99. Never have doubts about building a house in the south or the west. These verses are composed according to the *Mayamata*, so do not be skeptical.

100. Take paddy from the hand of a virgin, have pregnant woman pound and cook it, invite Buddhist priests, then take your possessions into the house at an auspicious time.

101. After you move into the house, to build a cattle shed or barn, start it under auspicious asterisms, astrological houses and days.

102. Svati, the fifteenth asterism, Uttaraphalguni, the twelfth,²⁹ the two houses Taurus, and Leo and the two days Thursday and Friday are lucky for cattle sheds.

²⁰ The names of the asterisms here and throughout this translation are given in Sanskrit. The Sinhala terms appear in the footnotes. Hasta (*hata*) is in the shape of a hand and contains five stars.

²¹ The constellation Chitra (*sita*) is shaped like a pearl and contains one star.

²² Svati (*sa*) is the star Arcturus contained in the shape of a sword.

²³ Satabhisak (*siyaswasa*) contains 110 stars and is in the shape of a gem.

²⁴ Revati (*revati*) contains 27 stars and is in the shape of a drum.

²⁵ Rohini (*rehena*) contains four stars at the corners of a carriage.

²⁶ Sravana (*suvana*) contains three stars representing three feet.

²⁷ Anuradha (*anura*) is the equivalent of the constellation Libra. It contains four stars arranged within a triangle.

²⁸ Mrigasiras (*muwahis*) contains two stars representing a goat.

²⁹ Uttaraphalguni (*turapal*) contains two stars in the shape of a bed.

103. These ideas are those of the sage who wrote the *Mayamata*. Another sage says that these things are lies. He says if you use Thursday, Uttaraphalguni and Taurus to build a cattle shed, thieves will steal the cows.

104. The north is good for stables. It is also suitable for dunghills. Use the northeast for cattle and buffalo sheds. Build the kitchen in the southwest.

105. A temple for the gods (*devale*) is good in the west, as is the coppersmith's workshop. The shrine (*kovila*) for the god Siva (*baraDi*) is good in the north. The one for Ganesh should go in the northeast.

106. Now as for the directions suitable for the houses of workers, for the blacksmith's forge, ironworkers, copper and goldsmiths, these are the suitable ones.

107. Build the houses for wedding ceremonies (*manamala getwal*) in the east.³⁰ For the blacksmiths, the southeast is good. Build the house for the goldsmith in the south. Build the house for the tom-tom beater in the south.

108. Northeast is good for the washermen. The east is good for the potters. The flower supplier's house should be in the north. So says the *Mayamata* of the sages.

109. Build a Buddhist vihara in the north. Northeast is good for a temple (*kovila*). Now the following is what the sages have had to say about ordinary houses.

110. From the inside of the fence around the house, measure off a space sixty cubits long and wide. From the house measure it in four directions.

111. From east to west measure off sixty cubits with a string. From north to south do the same.

³⁰ Some Tamil texts say that the east is the proper conjugal abode of the householder (Kearns, 232). Thus, one interpretation of this passage might be that that bedroom should be in the east.

112. From southeast to northwest fix a string on the diagonal, and another from southwest to northeast.³¹

113. If the sheds for cattle, buffalo, goats and sheep, the well or the temples are along these axes, it is inauspicious according to the *Mayamata*.

114. Children and livestock will die. There will be disease and fear. This is the misfortune that will come your way. Believe in the words of the sages.

115. If you build a city, it will be exceedingly prosperous and famous if you follow these instructions. If you do not, misfortune will come to the king and the city.

116. If the line to the south (from the north) falls on wells and cattle sheds, that city will be destroyed. So say the ancient sages.

117. If it is the line draw in the south, someone will certainly die in six months. If it is the one in the west, the mother of the house will die.

118. If the line runs inside, the cattle will die. If the line falls on the ditch, you will die. If the line falls in the northeast, the cattle will die. So says the *Mayamata*.

119. The builder who constructs houses in this way will be reborn as a king. Artisans who make images in the same way will be reborn as nobles.

120. Even though those skillful and clever housebuilders who have become my friends may die, they will be reborn as royalty and nobles. So say the ancient sages.

121. Some housebuilders do not do their work in the proper way. They take money from work that was done wrongly to support their own families while the occupants of the house go through hard times.

³¹ These refer to diagonal lines drawn across the site .

122. When these builders die, they will fall into hell and suffer. So says the *Mayamata*. O housebuilders, what do you think of this?

123. Some people who claim to be artisans make images of Lord Buddha without knowing the proper proportions. They will be reborn dumb and blind.

124. Builders and artists who take money for work without knowing the proportions, grab it and run home.

125. Even if they have a good income, there will be nothing to eat in their houses and nothing to wear. These woes arise from their spiritual nature (*at baev*).

126. These people will die and go to hell. They will suffer there till the end of the world. When they arise from hell, they will be ugly as sin and penniless too.

127. If such a builder is reborn as a man, he will be born poor. Bad artists will have crossed eyes (*aes dekama mula*). What will they be good for then, pray tell?

128. The good builder who knows carpentry will be reborn as a king with bounties aplenty. Good artists will likewise become nobles.

129. Our learned forebears have told us that builders and artists who cheat others and take their money will turn out to be poor.

130. Do not be skeptical of the words of the ancient sages found in the *Mayamata*. O builders and artists, work in good faith and study the *Mayamata*.

131. So the Sanskrit verses have told us of the trouble that can arise in this life and lives that will follow. The way in which the work is done can make the builder and artist suffer right here on earth.

132. O learned and skillful builder, build a Buddhist temple (*buddale*) or a temple for the gods (*devale*) in May-June (*vesak*). Do it as Visvakarma would have.
133. In the same way artist, make images of gods or of the Buddha in January-February (*durutu*). Do it with devotion.
134. Make houses for those of the warrior caste (*kaet kulaya*) in March-April (*maedin*), for the Brahmins (*bamunu kula*) in April May (*bak*) and for the merchants in May-June (*vesak*).
135. June-July (*poson*) is the month for building houses the castes which are not as high as these three. So said our learned forebears.
136. In the opinion of another sage, the images of gods and the Buddha should be made in December-January (*unduwap*) or January-February (*durutu*). The teachings of the *Mayamata* are different.
137. The days from the eighth after the new moon till the seventh after the full moon are good for the construction of balconies. So says the *Mayamata*.
138. The days from the eighth day of the waning moon till the seventh day of the waxing moon belong to the dark half (fortnight) of the lunar cycle.
139. Start putting clay on the walls of the house under the twenty-fifth asterism, Purvabhadra.³² If you do so the house will be blessed and free of woes.
140. Thatch the roof of an image house for a deity or Lord Buddha before noon. It is inauspicious to do it after the sun has passed its zenith. Know this and act accordingly.
141. Thatch the roof under the following asterisms: Hasta, the thirteenth, Magha, the tenth³³ and Anuradha, the seventeenth. Take the five additional

³² Purvabhadra (*puvapuTupe*) contains two stars in the shape of a bed.

³³ Magha (*ma*) contains five stars and is the shape of a gem.

ones up to and including Dhanistha, the twenty-fourth³⁴ and Uttaraphalguni. Add Rohini, the fourth and take these ten asterisms for digging wells.

142. According to the sages, if the well is four cubits away from the house, the earth will yield gems. If the ground is dug at a distance of twelve cubits, the owner will lose his cattle.

143. If the distance is sixty-nine cubits, or thirteen, fifteen, twenty-nine, twenty-two or forty-two, there will be good times and bad.

144. Whoever drinks from a well dug four cubits away from the house will die. If at a distance, of five, eleven or twenty cubits, ones own wife will die. If at a distance of forty-three or forty-eight cubits, the owner will die. If at a distance of twelve or forty-six cubits, the sons will die.

145. You will obtain good results with distances of seven, thirteen, fifteen, twenty-three, twenty-four, twenty seven or forty cubits. Measure the distance and dig the well.

146. If the owner of the house suffers from poor health, dig out a pit one cubit deep under his bed. This may have been a place where meat was cut in the past. If you remove the earth, you can get rid of the malevolent influences.

147. If the beasts of burden are given to dying, measure off an area two paces long in the southwest, make the width the same, then dig a pit that is one cubit and four inches deep.

148. Why should you dig a pit like this in the house? The sages tell us that this was a place a thunderbolt struck a menstrual house and killed a woman. So remove that polluted earth.

149. If there is a house in which there is incessant quarreling, dig a pit in the northwest corner with the same dimensions given above and remove the polluted earth to stop the trouble.

³⁴ In a scheme of 27 asterisms, this is the twenty-third. In one of twenty-eight, the twenty-fourth. Dhanistha contains four stars and is the shape of a drum.

150. If the quarreling keeps up, dig another pit in the center of the house and remove the earth. This should put an end to any evil influence still in the house. Now I'll let you know what the problem is.

151. It seems there were two leopards struck and killed here by a bolt from the heavens while they were in the act, so to speak.

152. The following are the calculations for the house which has dimensions of five cubits. The income (*aya*) is eight.³⁵ The expenditure (*waeya*) is five. The asterism is the first Phalguni. The origin (*yoni*) is that of the lion.³⁶ The regent (*himiya*) is Jupiter. Such are the calculations for the house of five cubits.

153. These are the calculations for the house of nine cubits. The income is twelve. The expenditure is five. The origin is that of the cobra. The asterism is Aslesha, the ninth.³⁷ The angle (*ansaka*) is Venus in Cancer.

154. Now you ask about the dimensions of the house of five cubits. The income is eight and the expenditure is five. The origin is that of the lion. The asterism is Magha, the tenth. The angle is that of the bird Garuda (the vehicle of Visnu).

155. As for the house of eleven cubits, both the income and the expenditure are five. The origin is that of the cobra. The regent is Jupiter. The asterism is Pushya, the eighth.³⁸ According to the angle, the house is Taurus.

156. For the house of thirteen cubits, the income is four. The expenditure is five. The origin is either that of the cobra or that of the lion. The asterism is Punarvasu,³⁹ the seventh, in Cancer. The angle is that of Mercury.

³⁵ These verses and the ones that follow refer to the six (sometimes seven or more) formulas that are applied to dimensions in order to determine whether they are conforming/auspicious or not.

³⁶ The yonis are the hawk Garuda (associated with the east), the lion (south), the serpent (west), the elephant (north), the cat (southeast), the dog (southwest), the rat (northwest) and the rabbit (northeast).

³⁷ Aslesha (*allisa*) contains five stars in the shape of a house.

³⁸ Pushya (*puse*) contains three stars in the shape of an arrow.

³⁹ Punarvasu (*punavasaya*) contains four stars in the shape of a house.

157. For the house of fifteen cubits, the income is twelve. The expenditure is five. The origin is that of the goat. The asterism is that of Ardhra, the sixth.⁴⁰ The house is Pisces. The angle is Mars.

158. For the house of seventeen cubits, the income is eight. The expenditure is five. The origin is that of the bird Garuda. The asterism is Bharani, the second.⁴¹ The moment (*vara mohota*) is that of Venus.

159. For the house of nineteen cubits, the income is seven. The expenditure is five. The asterism is Bharani, the second, in the angle of Aries. The origin is that of the bird Garuda. The regent is Mercury. The moment is called *gaeba*. So say the ancient sages.

160. For the house of twenty-one cubits, the income is twelve. The expenditure is five. The asterism is Kritika, the third.⁴² The origin is that of the lion. The house is Taurus. The moment is of Jupiter. According to the angle, it is neuter. So say the sages.

161. For the house of twenty-three cubits, the income is eight. The expenditure is five. The origin is that of the bird Garuda. The asterism is Bharani, the second. The moment and the angle belong to Venus. Now in the following verse, hear the characteristics of the house of twenty-five cubits.

162. The income is seven. The expenditure is five. The origin is that of the cobra. According to the angle the house is in Cancer and the regent is Mars. The asterism is Aslesha, the ninth. For the house of twenty-seven cubits, the income is twelve. The expenditure is five. The origin is that of the cobra. The asterism is Revati, the twenty-seventh.

163. For that house, the house is in Pisces. It is ruled by the regent the Sun. The moment is within Venus.

⁴⁰ Ardhra (*adaya*) is star shaped and contains one star.

⁴¹ Bharani (*berana*) contains three stars in the shape of a pudendum.

⁴² Kritika (*kaetirika*) is the Pleiades.

164. As for days, take a Sunday, Thursday or Friday. Among houses, Leo and Aquarius are the best. Know Pisces and Virgo as moderate ones. Understand these things when you build a house.

165. Compare the asterism under which you plan to build with that of its owner. If it is compatible, use it. Otherwise, give it up.

166. If the income (*aya*) is reduced or the expenditure (*waeya*) is increased the house will be unlucky. So even if the asterism is suitable, the results will be bad.

167. If you choose any of the three ecliptic asterisms (*gahana naekat*),⁴³ or the four on either hand, the house will not prosper at all. If you take the four on the two feet, all will be well. The four on the left side will bring poverty.⁴⁴

168. Riches come from the four asterisms on the right. The five on the back do the same. The three of the tail bring death to the owner. Take the asterism in which the sun is located as the starting point and count.

169. For the first entering of a house, the following are the good asterisms: Dhanistha, the twenty-third, Satabhisak, the twenty-fourth, Chitra, the fourteenth, Punarvasu, the seventh, Magha, the tenth, Sravana, the twenty-second, Asvini,⁴⁵ the first and Pushya, the eighth.

170. Of the houses, Taurus, Aquarius, Capricorn, Gemini, Virgo and Libra are good, and among the days, Mondays, Wednesdays, Thursdays and Fridays. Enter using one of these houses and one of these days.

171. If the floor bar of the door is two cubits and three inches, and the top bar of the door is two cubits minus three inches, the income and expenditure are both five. If the door fits these specifications, there will be no misfortune caused by dimensions.

⁴³ *gahana naekat* could also mean the 'asterisms on the nose'.

⁴⁴ This verse refers to the placement of the asterisms in the body of the Bhumanaga.

⁴⁵ Asvini contains three stars in the shape of a horse.

172. Illness will befall the house that is built in March-April (*maedin*). The house built in June-July (*poson*) will burn. The one built in September-October (*binara*) will be plagued by poverty. Thieves and enemies will set upon the one built in December-January (*unduwap*).

173. These four are bad months. Do not be disobedient and start building houses then. Do not move into a house at this time. Avoid all work on the four corners.

174. The asterisms from Magha, the tenth up to Sravana the twenty-second are inauspicious (*palinga*) except for the east and north. Those from Dhanistha, the twenty-third, up to Asvini, the first, are inauspicious except for the west and south.

175. Identify the inauspicious asterisms for all the work you do on the house. Reject the inauspicious ones for all construction work. If you go ahead anyway, bad luck will come to the house, and the owner will perish.

176. As for the prospects for a house built in July-August (*aesala*), it will change hands after three years, three months and three days. So says the *Mayamata*.

177. As for the house which is built in October-November (*wap*), it will be inhabited for five years, five months and five days. As for the house built in January-February (*durutu*), after seven days and seven months are out, the house will remain in the same hands for seven years.

178. Beginning from the sun, take the first asterism as the one on the mouth. Know that the thirteenth and the fourth will destroy the house. The four in the feet bring long life. If one of the four in the stomach is used, poverty will result.

179. The four asterisms on the right side make you poor. The asterisms on the back make you rich. The three in the tail will cause three deaths. The wheel of the Earth Serpent should be counted from the starting point.

180. The auspicious post should be fixed in the ascendancy (*hora*) of the moon. The wattle should be woven in the ascendancy of Mercury. The roof should be thatched in the ascendancy of Venus. The clay should be spread in the ascendancy of the sun.

181. Move into the house in the ascendancy of Jupiter. The ten great misfortunes can be avoided by choosing an auspicious moment. If you select asterisms according to these directions, prosperity will come to the owner.

182. The three asterisms called *uturu*, i.e., Uttaraphalguni, the twelfth, Uttarashadha, the twenty-first,⁴⁶ and Uttarabhadra, the twenty-fifth,⁴⁷ as well as Revati, the twenty-seventh, Mrigasiras, the fifth, Hasta, the thirteenth, Magha, the tenth, Rohini, the fourth, Purvaphalguni, the eleventh, Anuradha, the seventeenth, Jyestha, the eighteenth,⁴⁸ and Mula, the nineteenth,⁴⁹ are the twelve asterisms that are suitable for the first entering of the house.

183. Start work on the fence and drains on a Tuesday under the asterism Purvashadha, the twentieth.⁵⁰ So say the ancient sages. If you understand this and act accordingly, you will be blessed.

184. These are the good and bad consequences of starting work on houses, fences and drains in the months of June-July (*poson*), September-October (*binara*), December-January (*unduwap*), and March-April (*maedin*).

185. The house built in June-July will burn. September-October brings poverty. Thieves plunder the house built in December-January. Illness comes to the one built in March-April.

186. East and south are inauspicious directions from Dhanistha, the twenty-second up to Asvini, the first. So says a Sanskrit *sloka*. I have put it into a Sinhala *kavi* to make it easy for you.

⁴⁶ Uttarashadha contains two stars in the shape of a couch.

⁴⁷ Uttarabhadra contains two stars in the shape of conjoined twins.

⁴⁸ Jyestha (*deTa*) contains three stars in the shape of a ring.

⁴⁹ Mula contains eleven stars in the shape of a lion's tail.

⁵⁰ Purvashadha contains two stars and is in the shape of an elephant's tooth.

187. It is better to avoid inauspicious conditions for breaking ground and fixing the first post. You will prosper if you select auspicious ones.
188. If the house is begun in Cancer, it will last three years, three months and three days. If in Libra, it will last five years, five months and five days.
189. If the house is built under Capricorn, after seven months and seven days have passed, it will not change hands for seven years. So say the *slokas* in the *Mayamata*. Should you doubt the words of the sages?
190. The astrologer should determine the conditions for a house entering ceremony in this manner: Mercury, Jupiter and Venus should be in the first house, the sun and Saturn should be in the eighth house, and the eighth house should not contain any maleficent planets.
191. As for the construction of moats, ramparts and reservoirs, use Purvashadha, the twenty-fifth asterism, Virgo and Tuesday. These prescriptions are suitable for houses, wells and cattle sheds too. Believe in them, bless the owners and do some good in this world.
192. Now I shall tell you in Sinhala what the ancient sages had to say about the seven lines (*sira*) and house sites. I shall discuss them separately. Read on and see how I have put it into verse.
193. One (of the lines) is called *girakulaya* and another is called *walamkaya*. *Mahat duwa* is the name of one more, and *mahat siraya* still another.
194. The other names of the lines are *kappa siraya*, *manda siraya* and *uwa siraya*. These are the seven lines.⁵¹
195. Know the evils of the seven lines and avoid them. You should do this for the benefit of towns as well as for houses occupied by all castes.

⁵¹ The term *sira* means line and generally refers to the orthogonal lines drawn on the Site Spirit square. The names of the lines in these verses refer to something else, possibly to the Seven Sages, the Big Dipper.

196. These are the characteristics of the site known as *aiytana*. It is equal in length and breadth. That is how you recognize such a site.⁵²

197. If you see a site that is oriented to the four directions, know that site by the name *sataraes* (four sided).⁵³

198. The site called *tunraes* (three sided) is in the shape of a triangle. That is how you recognize the *tunraes* site.

199. What kinds of traits has *parnika*⁵⁴ land? It is round like a threshing floor (*kalaviTa*). Discerning people recognize it in this way.

200. When you see a plot of land that is oval, it is the *ayitana-parnika* type. If you build a house, you most certainly cannot do it without knowing these signs.

201. Now look at the traits of the site called *ivan*.⁵⁵ It looks like a mountain water course. This is how you will recognize the site called *ivan*.

202. Now consider the good qualities and the bad ones of the various sites, and you will learn which ones have auspicious qualities and which inauspicious ones.

203. If you build the house on the *ayitana* site, you will be prosperous. If on a *sataraes* site, blessed with offspring. The same can be said of the *parnika* site. If you build on *ayitana-parnika*, you will be prosperous and happy.

⁵² In authoritative texts, this name applies to a rectangular site (Appuhamy, 127).

⁵³ In authoritative texts, the 'four sided' site is square (Appuhamy, 127).

⁵⁴ This word from verses 199 and 200 appears also as *paratika*, *paranika* and *parkana* in various printed editions of the text. The shapes of the letters ka, ta, and na are similar in Sinhala, and one guesses that one or more of the letters may have been obliterated in the original manuscript. None of the alternants is entered in Carter 1965. The word for this type of site that appears in *Sanskrit* sources is *vrta* (Appuhamy, 127).

⁵⁵ In the various printed versions of the *Mayimataya*, this type of site appears variously as *ivan*, *ivat* and *ivak*.

204. The house built on a site called *ivan* will be terrorized by kings. The other consequence is destruction by fire. So look into the portents and build houses on suitable pieces of land.

205. If you do not remove the stones and roots from the *ayitana* site, I kid you not, someone will die in five years. If you do not remove the stones and roots from the *sataraes* site, someone will die in forty-seven years.

206. If you do not remove the stones and roots from the butterfly (*samanala*)⁵⁶ site, the owner will either die or go mad in ten years, and the house will go to ruin.

207. If you do not remove the stones and roots from a *parnika* site, the house will be plundered by thieves and enemies. They will rob the house and make you poor. So says a verse in the *Mayamata*.

208. If you do not remove the stones and roots from the site called *ivan*, and go ahead and build a house without heeding the *Mayamata*, someone will up and die in a year.

209. It is said that stones and roots should be removed. Which stones and roots they are, I do not know. From here on I will reveal these things in verse, and present them as eloquently as I can through the power of poetry.

210. Stones and roots should be removed from the soil down to a depth of one carpenter's cubit and one inch. If you clear the site in this manner, happiness and blessings will follow.

211. The word stone here means stones, pebbles and broken earthen utensils, and the word root means the roots of poisonous and evil trees, woods and such.

212. If you build without removing them, life will be hard, and it will be bleak. The occupants will be troubled by illness and suffering, and hardship will lead to the city of death.

⁵⁶ This could be a misprint for *samatala* (flat).

213. If the house is oriented to the east, the husband will be rich and famous. If it faces north, wealthy and serene.

214. If a house is built on a site sloping to the south, there will be poverty unabated by the passage of time. Illness and suffering will afflict the house built on a site to the northeast.

215. There is a site called *nanda* (joyous), one called *bhaddra* (prosperous), one called *jaya* (victorious) and one called *rikta* (empty). Together with the one called *purna* (full), they make five.⁵⁷

216. We divide each one of these five into three parts so that we have fifteen in all. So, with the example of the five divisions of *nanda* in mind, divide up the house site into feet.

217. The Vedas tell us that the first, sixth and eleventh feet belong to the *nanda titi*, and that the second, seventh and twelfth belong to the *bhaddra titi*.

218. The sages say that the second,⁵⁸ eighth and thirteenth feet are the *jaya titi*. The fourth, ninth and fourteenth are the province of the *rikta titi*.

219. The three that belong to the *purna titi* are the fifth, tenth and the fifteenth. So by dividing every one by three, you get fifteen. This is how you divide and get the fifteen *titis*.

220. If the site falls into the *nanda titi*, the owner will be depressed. If the house is sited on the *bhaddra titi*, the owner will be happy and free from cares.

⁵⁷ This section pertains to the *titi* (*tithi*) test on the area of the site. The formula given in the *Vastu Vidya* is $\text{area} \times 8 \div 15$. The remainder yields the *titi*. According to the Sinhala *Mayimataya*, remainders of 4, 9 and 14 fall into the *rikta titi* and are especially inauspicious. Remainders of 1, 6, and 11 fall into the *nanda titi* and also yield undesirable results. The Tamil *Sri Lalitha Navarathnam Manaiadi Sastiram* gives a different formula for testing the area: $\text{area} \times 4 \div 30$, but generally agrees on the inauspicious remainders. Remainders of 2, 3, 5, 7, 10, 12, 13 and 15 are said to be the best. 1, 4, 6, 8, and 11 are said to be not bad. 9 and 14 are said to be inauspicious.

⁵⁸ This seems to be a misprint for 'third'.

221. If it falls into the *jaya titi*, things will be peaceful and the occupants will be rich and have many children just like Bandula.⁵⁹ Thieves and enemies will threaten the house under the *rikta titi*.

222. If you build a house in the area called *purna titi*, you will become rich and famous. As the days pass, life will become fuller and fuller, just like the waxing moon.

223. The ancient sages have told us about these divisions and the characteristics of each site. I have composed verses to tell you in the Sinhala language what I have seen in the Sanskrit verses.

224. If you build a house where arrowgrass (*itana, Andropogon contortus*) grows, there will be no drawbacks and everyone will be happy. The owner will enjoy a life of 120 years, and after death, he will be reborn.

225. If you build a house on a site where *kalanduru* grass (*Cyperus rotundus*) grows, there will be cattle aplenty. If you build a house on land where *iluk* grass (*imperata arundinacea*) grows, expect illness, poverty and misery.

226. If you build a house on a site where the soil is mixed with iron and stones, the result is death for the owner according to the sages. These are the words of the seers who wrote the *Mayamata*. Look at the verses for these eternal truths.

227. On the site called lily-shaped (*uppala kara*), there is danger from wild animals. The sages have also told us about a site that is shaped like a lotus leaf. So, you can identify the site called lotus-shaped (*pokuru kara*) from its form.

⁵⁹ According to Buddhist legend, the powerful warrior Bandula was the commander of the forces of the king of Kosala. He and his wife, a devout Buddhist as strong as five elephants, were blessed with two sons in each of sixteen successive years for a total of thirty-two (Hardy, 282-283)

228. There are seven other such sites including the one called bull-shaped (*nanda kara*), elephant-shaped (*gaja kara*), pot-shaped (*kumba kara*), scale-shaped (*tula kara*), lotus flower-shaped (*patma kara*), wheel-shaped (*cakra kara*), and hoof-shaped (*gokura kara*).

229. This is what the builder should know who builds a house on lion-shaped (*sinha kara*) land. It will yield children, fame and happiness. These are the qualities of lion-shaped land.

230. If you build a house on elephant-shaped land, you will have virtuous sons and daughters and other good luck. Such are the qualities of elephant-shaped land.

231. As for the qualities of the site which is called bull-shaped (*vrasaba kara*), the owner will have a wonderful life and cattle aplenty.

232. If you see a site that looks like the face of a demon, you can expect steady income. Such are the qualities of demon-shaped (*rakusu kara*) land.

233. If you build the house on high land shaped like the back of a tortoise, you will suffer from illness, death and terror, these three. Put your trust in what the sages have said. Even though this site may otherwise seem to be lucky, reject it.

234. If you build a house on a piece of land that looks like a winnowing basket that slopes low on one side, the house will be terrorized by thieves.

235. If you see a site that is round and reminds you of a jug, that site is known as jug-shaped (*kumba kara*). Do not choose this site. It will only bring on misfortune.

236. White soil and yellow soil are good for Brahmins and Buddhist monks. A site with red soil and brown soil is suitable for reigning kings.

237. If the soil is golden or tawny (*kimbulan paTa*=alligator colored), it is suitable for traders. If it is blue (*nilwan*) or black it is good for the workers and the lower castes.
238. If the soil is blue colored (*samatwan*), there will be happiness. Former enemies will be friends. This site is suitable for everyone in the whole world.
239. Suppose a site has lumpy soil resembling the fruit of the yellow myrobalan (*aralu*, *Terminalia chebula*).⁶⁰ It will be blessed by kings and protected from enemies. If you build a house there, the occupants will be very happy.
240. What happens if you build a house on a site where the soil is the color of gold and plumbago? Coins of gold, silver, copper and iron will come your way. So says the sage of the *Mayamata*.
241. If there are no stones on the site you choose for the house, you will have cattle and good health. A site with these qualities is good for everyone. These then, are the characteristics of such a site.
242. If a site has black soil mixed with soil the color of blood, the occupants will suffer from disease. So say the sages.
243. If the soil on the site is wet, and there has been no rain to explain it, that site is not suitable. If you build a house on the site, there will be illness year in year out.
244. If you build a house where the soil is mixed with flint, the occupants will suffer because they have no money. The house will be plundered by thieves and beset by disease.

⁶⁰ The fruits are pendulous like olives with hard stones. They are used in ink manufacture, tanning, and medicine (Lewis, 172).

245. If you take a site where the soil has white stones and gravel, the parents will die after children are born. I am writing this here, because there are some contradictory Sanskrit verses.

246. Gardens will wither on sites where the stones are neither very big nor very small. There are no other drawbacks described for such sites.

247. Suppose there are ditches all over the house site. Such a site is unlucky. The *Mayamata* reports that the site is inauspicious. Know the consequences of choosing this site and abandon it.

248. Let's say you see a site with a rise in the south and a slope to the east whose soil is not mixed with water. Suppose it has round stones and grasses called *itana* (*Andropogon contortus*), *wammutu* (*Cyperus rotundus*), *baelatana* (=dog grass, *elusine indica*) and *karuwatana*. That site is called musical (*gandharva*).

249. One sage says that certain sites are suitable for low caste groups, and the *Mayamata* says that these lands are not suitable. So I got the help of an astrologer to write the following verses.

250. Suppose you see a site with a rise in the south, and with a slope to the north which is weighted in the west and northwest. The site is one on which storks build their nests and which smells like milk. There build a palace for a king.

251. If a site slopes to the north and has soil that smells like pipe clay (*makulu*),⁶¹ then it is suitable for Brahmins. Follow the teachings of the *Mayamata*, and relish your work.

252. If the site slopes to the southwest than it is good for the Oli caste⁶² and the Berawa.⁶³ This was said in good faith in the Sanskrit verse. Now I have put it in a *kavi* and said it in Elu.

⁶¹ Or perhaps, monkeys.

⁶² A Sinhala caste. Drummers and dancers.

⁶³ Also a Sinhala caste. Tom-tom beaters.

253. Suppose a site slopes to the east and northeast and then widens to the southwest, forming a triangle. It has golden soil mixed with gravel. That site is good for merchants.
254. Suppose a site slopes to the east, the northeastern portion is the highest, and the broad southern portion has golden soil. That site is good for the Goyigama (*handuru*) caste.
255. Suppose a site slopes to the southeast and has black soil which is mixed in places with gravel. That site is good for barbers (*karanaebi*). So goes a verse in the *Mayamata*.
256. When you build a house on any site, first remove the trees and creepers. The trees and creepers that are mentioned in the following verses should be taken away from the house site so that the results will be good.
257. They are the *kinihiri* (*Cochlospermum gossypium*), the tamarind (*siyembala*, *Tamarindus indicus*),⁶⁴ *margosa* (*kosamba*, *Azadirachta indica*),⁶⁵ *jamala* (*kolon*, *Garcinia xanthrochymus*), *haedawaka* (*Chaetocarpus castanocarpus*),⁶⁶ *kihiri* (*Acacia sundra*), satinwood (*buruta*, *Chloroxylon swietenia*),⁶⁷ ironwood (*na*, *Mesua ferria*),⁶⁸ *andara* (*Dichrostachys cinerea*),⁶⁹

⁶⁴ The wood is used for furniture. The dried seeds are made into a laxative medicine. Tamil: *puli*. (Lewis, 162-3).

⁶⁵ A cabinet or panel wood. The products of the tree are widely used in Sinhalese and Tamil medicine. The tree is best known for its foul smelling oil (called *veppeni* in Tamil) used medicinally and as an insecticide. Tamil: *vempu* (Lewis, 140).

⁶⁶ A building timber (Lewis, 230).

⁶⁷ A valuable timber used to build the old one arch bridge at Peradeniya. Tamil: *mutirai* (Lewis, 142).

⁶⁸ A favorite tree for flowers offered at Buddhist shrines which is often found near temples. The flowers have large, white petals and a sweet smell. The seeds produce an oil used in the treatment of diseases of the skin. The wood is one of the hardest and most durable. Tamil: *nakka* (Lewis, 111-112).

⁶⁹ A small thorny hardwood. Most notable for its beautiful pale pink or yellow flowers resembling Japanese lanterns. Tamil: *vidattal* (Lewis, 165).

peepul (*bo*, *Ficus religiosa*),⁷⁰ and *nitol* trees. Dig up the ground and excise their roots.

258. After you cut the trees, fill up the holes with soil brought from elsewhere and level the site. After you finish, wait for one year and then build the house.

259. Take note of the following trees: *karanda* (*Pongamia glabra*), wood apple (*beli*, *Feronia elephantum* or *Aegle marmelos*),⁷¹ *midi* (*Premna serratifolia*),⁷² *mahari* (*Albizia lebbek* or *Adenathera paronia*), *palol* (*Stereospermum suaveolens*), *kumbuk* (*Terminalia glabra*),⁷³ *dimbul* (*Ficus glomerata*), *kiriwalla* (*Holarrehena mitis*),⁷⁴ bamboo, yellow myrobalan (*aralu*, *Terminalia chebula*), hog plum (*sarana*, *Spondias magnifera*), *aetteriya* (*Murraya exotica*), *piya* (*Sarcocephalus cordatus*), *kelinda* (*Wrightia zelanica*) and soapberry (*penala*, *Sapindus emarginatus*).⁷⁵

260. If these are on the house site when you start uprooting the trees, dig up the soil and put in soil from elsewhere. Wait until six months are out, and then build the house.

⁷⁰The tree under which the Buddha attained enlightenment, specimens of which grow in every temple compound and are venerated. The tree at Anuradhapura, said to have sprung from a branch of the original from India, is believed to be 2,000 years old.

⁷¹*Aegle marmelos* is a small cultivated tree whose large, smooth fruits and root bark are used in medicine as a remedy for dysentery. This tree is often confused with *feronia elephantum*, also known as *jivul* (Tamil: *vilatti*). The latter grows wild and has a large, round gray fruit with a hard shell of which elephants are said to be particularly fond (Lewis, 134-135). Ganesh, the elephant-headed god, is said to relish the wood apple.

⁷²A small, shrubby tree with yellow-green flowers and small fruits. The wood is used for paneling and the root in medicine for colic. Tamil: *erumaimulli* (Lewis 209-210).

⁷³An immense, water loving tree commonly found along river banks. Tamil: *marutu* (Lewis, 173-174).

⁷⁴A small, elegant and uncommon tree of no great economic importance. Its small, white flowers have a sweet smell. The wood is used for ornamental work, and the bark in medicine to treat fever and dysentery (Lewis, 203).

⁷⁵A large tree with greenish-white flowers with a durable wood used for cart frames. An oil derived from the seeds is made into a soap, and the bark of the root is used in medicine. Tamil: *panalai* (Lewis, 148).

261. He who builds his house in the middle of the village, will become the leader of his people, and he will also become very rich. People who do not put their faith in this have not seen the verses in the *Mayamata*.

262. If a house is built on a site that is lush with vegetation, the occupants will be loved by all of mankind. These people will want for nothing.

263. The verses in the *Mayamata* say that death will come to a house built on land where arrowgrass grows. Verily, these are the words of the ancient sages.

264. Wherever you see a site on which the trees, creepers, stones and flowers are the same color as the soil, the clay called *navanila* can be found under the ground.

265. Wherever there is a site like this, that place pleases everyone like the sweet taste of mangos. What better choice than to build a house here. For rulers, nay everyone, it is most beneficial.

266. On such a site, the following trees and plants that grow around the house and inside the garden are said to be very juicy: jak (*kos*, *Artocarpus integrefolia*), coconut, mango, pear (*damba*, *Eugenia jambos*), plantain (*ramba*, *Musa paradisiaca*), mandarin orange (*jamanaran*, *Citrus nobilis*), and sugarcane.

267. If you build a house on a site with the following trees: *demaTa* (*Gmelina asiatica*),⁷⁶ *andara* (*Dichrostachys cinera*), tulip tree (*suriya*, *Thespesia populnea*),⁷⁷ and *kaeTakaala* (*Bridelia retusa*),⁷⁸ cattle will thrive. You need not fear demons on such a site.

⁷⁶ A bush with large bright yellow flowers cultivated for its medicinal roots and bark. Tamil: *kumil* (Lewis, 211).

⁷⁷ A small hardwood known for its beautiful yellow flowers. Tamil: *puvaravu* (Lewis, 126).

⁷⁸ A small tree suitable for housebuilding whose hard wood is said to resist termites (Lewis, 224).

268. If you get rid of the following trees, you can put misery to flight: silk cotton (*imbul*, *Eriodendron anfractuosum*), may (*mara*, *Albizzia lebbek* or *Adenanthera paronia*), orange, *puvangu* (*Myristica horsfieldia*), wood apple (*beli*, *Feronia elephantum* or *Aegle marmelos*), *aesaTu* (*Ficus tsiela*), *erahaenda* (*Cassia fistula*), and mango. Verily, these are the sayings of our learned forebears.

269. If you build a house on a site where there are anthills, if the house is oriented to the east, southwest, northwest or northeast, it will be a fortunate place. So says the *Mayamata*.

270. The teaching of another sage contradicts the one given above. He says that sites with anthills are inauspicious, and specifically that the wife will be barren. So says a verse in the *Mayamata*.

271. So since various opinions appear in the Sanskrit, and we do not whether we should reject this site or not, avoid sites with anthills and choose others instead.

272. Suppose there is a mound in the center of the site, and you have to cut off the top of the mound and bring soil from elsewhere in order to level it. Do not build a house here. This site is unrewarding and will bring you misfortune aplenty.

273. As for a site that sinks into a depression (*mala*), remove the soil from the high side and level it with soil brought from the northeast. If you do it, blessings will multiply there.

274. If you build a house with stones that have been broken up and discarded, you will lose everything of value. If you build with new stones, you will enjoy happiness, prosperity and peace of mind.

275. If you build on a site where the anthills have been cut out, the wife of the house will up and die. So avoid sites like this.

276. Now as for building a house on a graveyard site, because of the bones, it is only suitable for the lowest caste. So do not build houses in graveyards. So said the sages of the *Mayamata*.

277. If arrowgrass, the *dan* bush (*Eugenia corymbosa*), the satinwood tree (*burata*, *Chloroxylon swietenia*), and the *undupiyali* plant (*Desmondium* or *Hedysarum* spp.) grow on the site, the house will be blessed.

278. This house will bring the owner gold, silver, cattle, buffaloes, a wife and children, servants and land. He will enjoy good health. So build houses on such sites according to the words of the *Mayamata*.

279. Those who live in houses on sites where there are bo trees and mara trees and the grass called *saevaendara* (*Andropogon squarrosus*) will live long. If there are a lot of jak or orange trees, there will be conflict.

280. A site that has *iluk* (*Imperata arundinacea*) and arrowgrass and slopes to the southeast is good for copper and goldsmiths. So say the verses in the *Mayamata*.

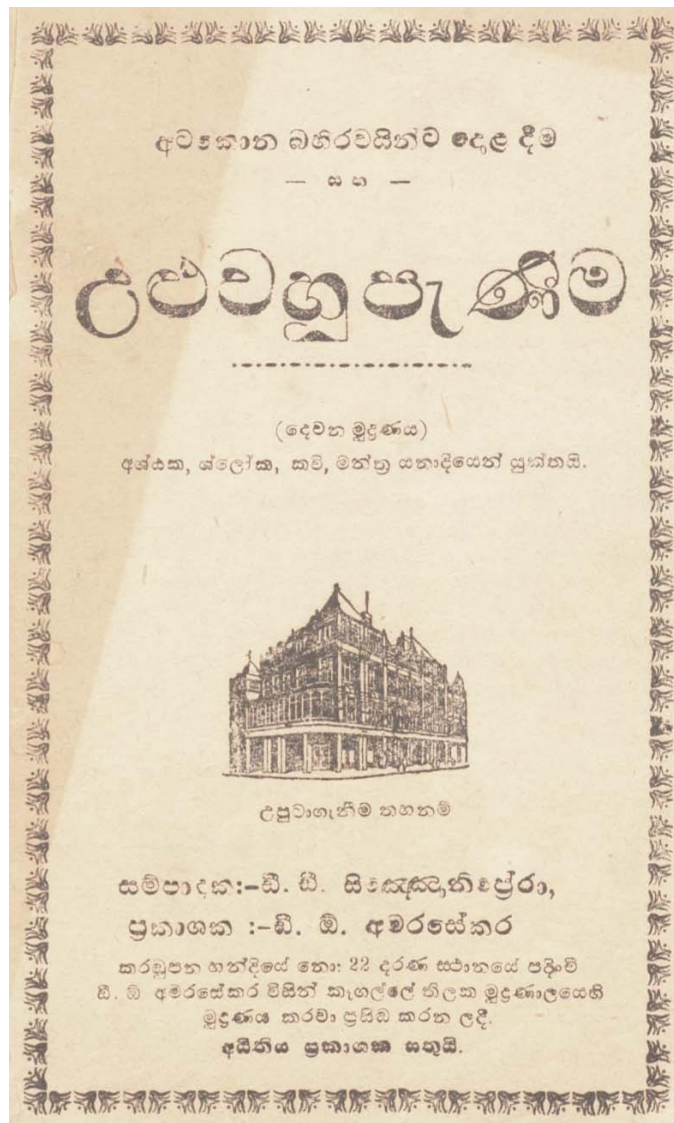
281. So, there are lucky and unlucky sites for houses and temples. Whether high-born or low-born, everyone can build suitably.

282. This day is in the year one thousand seven hundred and fifty-nine (1837 A.D.). The sun is in Libra, and it is the full moon day.

283. So, in this year did I take this Sanskrit book of old. I wrote 283 verses, and now I have finished this book. Amen.

Appendix II:

The *Uluwahu Paenima* (Crossing the Doorframe)



Translation by Bonnie G. MacDougall



Figure 43. Householders at entrance to courtyard, Rangama Sri Lanka.

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A translation into English of the *Uluwahu Paenima* by Bonnie G. MacDougall.

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THE ULUWAHU PAENIMA

PART I: SRI VISNU INVOCATION

I beseech thee, O Resplendent Visnu, Lord of the Gods, who is also renown as Sankasila Deva Narayana,¹ who is an aspirant to Buddhahood,² who has protected Sri Lanka, the 2,000 islands, the four great continents of the world, the whole of the great Jambudvipa including its eighteen provinces, the great Buddhist church, the salt water circle of ocean that surrounds the land, and the four temples (*devale*) at the cardinal points. You who are descendant from Asuras and who dwell in the Vaikunta world³ and who ride the giant bird called Garuda. You who have become renown in this Kali age under such names as Lord Ada Visnu,⁴ Lord Mulu Visnu, Lord Demala Visnu, Lord Maha Visnu, Lord Sri Visnu and who have been manifest in the four Kali Ages in the ten incarnations⁵ including Rama (*ramavatara*)⁶ the Boar (*vaerasara avatara*), the Fish (*mallawa avatara*), Krisna (*kirti avatara*), the Tamil (*demala avatara*),⁷ the Gaja (tortoise) (*gajavatara*),⁸ the snake (*naga avatara*), the Buddha (*bauddha avatara*) and the

¹The name of Visnu as reposing on the bed of the serpent between the creation and dissolution of the world.

²In Hinduism, the Buddha is one of the incarnations of Visnu. In Sinhala Buddhism, Visnu derives his authority from the Buddha and because of his many exemplary deeds on behalf of mankind is viewed as on the path to salvation.

³Vaikunta is the name of Visnu's paradise.

⁴In Buddhist mythology, one of the five titles given to Visnu by the Buddha is Ada Visnu, "the half Visnu." The name was conferred when the Buddha asked him to traverse the universe in three steps and he failed. Later Visnu became whole (Mulu Visnu) when he banished the demons from the city of Visala (Obeyesekere, 1984:104).

⁵In Hindu mythology, Visnu is conventionally associated with ten avatars or descents into animal or human form that permit him to marshal the forces of good for the benefit of mankind.

⁶The manifestation of Visnu most directly linked with Sri Lanka in Hindu mythology. According to Hindu tradition, Rama came to Sri Lanka to rescue his wife Sita from the demon king Ravana.

⁷Possibly Kalkin or The Dwarf (see below).

⁸*Gaja* means elephant (or bull) in Sinhala, not otherwise known as one of the incarnations of Visnu. Here, however, it may be derived from the Tamil *kaccapa* (tortoise), although this is merely a guess. The tortoise is known as one of the ten commonly agreed upon incarnations namely (1) The Fish who killed an Asura who stole the sacred Vedas and hid

Man-Lion (*narasingha avatara*). If it is true that you were victorious in the wars with Ravana, Asura and Mara, and if it is true that you who are known by the name of Dhumuratna Vijaya measured out the world in three and a half steps and offered it in puja to Lord Buddha, O venerable Lord of Gods, who aspires to Buddhahood listen to the invocation on behalf of this petitioner and lend support to his pious efforts while pardoning whatever sins and transgressions he may have committed. May you live five thousand more years.

PART II: OFFERINGS TO THE DEMONESES OF THE EIGHT DIRECTIONS

1. The teachings revealed by the god Visvakarma are known all over the world. Joy and triumph over suffering will come to those who heed the words of the ancient sages.

2. Once upon a time on the day the site for a certain building was laid out, the goddesses (*duti* = female messenger) of the eight directions descended. They divided the ground into eight parts, and each goddess claimed her portion forever.

3. From that day forward, the inhabitants of this world have believed that the goddesses will not leave their appointed places in a building unless they are propitiated with offerings such as rice, flowers and blessed coins (*panDuru*).

4. This is how the offerings should be made: take eight measures of highland rice (*ael sahal*) and cook it with milk undiluted with water. Lay out the boiled rice along with five kinds of honey, the five oils, and sweetmeats (*kaevili*).

them in the sea; (2) The Tortoise who supported the mountain used as a stick in churning the milky ocean in order to make nectar; (3) The Boar who reopened and flattened the earth which had been rolled up and sunk in the ocean; (4) The Man-Lion, the avenger; (5) The Dwarf; (6) Parasurama, the axe bearing Rama; (7) Rama, king of Ayodhya; (8) Balabhadra, half brother of Krisna; (9) Krisna; (10) Kalkin, the horse, the only incarnation yet to come (cf. Winslow, 589 for this and alternate lists). The list given in this text varies from the conventional one in that it cites only nine incarnations and includes the Buddha (a common variant) and the snake (a less common one), as well as an incarnation known as the Tamil.

5. Arrange the offerings on a cloth in a winnowing basket, offer betel, flowers and blessed coins, utter magical words (*mantra*) and those that protect you (*pirit*), then waft incense, and then make the offerings to the eight directions marked with limes on forked sticks.

(At this point in the text, an unnumbered verse and other passages in Sanskritized Sinhala to be recited by the petitioner are inserted. They appear in italics below.)

The mrdanga drum, the bull, the snake, the fan, the king of beasts, the makara (crocodile), the flag and a glowing lamp are the objects (to be placed) in the eight directions. May all the gods bless us.

Hail to the Buddha, the worthy all-knowing one.

Incense and garlands, lighted lamps, the five kinds of sustenance, betel, camphor, the rosary, vermillion,—when these stanzas are recited, the demons will arise—O great god—Demons, take the offerings and move on. You too take them and depart. Indra, Agni, Yama, Nirutti, Varuna, Vayu, Soma, Isana, and you on the vehicle of the bird Garuda (Visnu),—you regents of the eight directions,—Hail. Flowers, lamps, golden adornments, betel, perfumes, camphor and incense. Please accept these offerings O' Indra. Svaha. To the Bhairavas⁹ who are the regents of the directions, I have prepared trays on which I have lighted lamps and made offerings of flowers, betel, incense, camphor, frankincense water (rose water?), kunkum (a saffron used to stain the face) and other pigments. I have prepared the best varieties of food in order to please you venerable spirits. I invite you to partake of the food I am offering you today which is the same food you were treated to in bygone days by the great god Visvakarma. By the power of the god Visvakarma, let these people live safely in this house.

PRESENTING THE OFFERINGS OF RICE

At this point in the text, a few sample verses for invoking the regents of the major and minor directions are given in Sanskritized form for the benefit of

⁹ The Bhairavas are eight fearsome forms of Rudra or Siva. According to Hindu mythology, Siva was desolate after the death of his wife Sati and wandered over the earth carrying her body. To release him from mourning, Visnu cut up Sati's body and scattered it to places which became sacred 'seats of the goddess'. Each of these places is said to be guarded by Siva as a Bhairava (Stutley and Stutley, 41).

the petitioner who must recite them. They are later repeated in part with versified Sinhala commentary in the section that follows (*verses and mantras to offer the offerings*).

O Regent of the east (indra disadhipati) known as Indrakami with your retinue of demons and demonesses. Take this aromatic offering and depart.

O Regent of the southeast (agni disadhipati) known as Vatakami with your retinue of demons and demonesses. Take this aromatic offering and depart.

O Regent of the south (yama disadhipati) known as Jalakami, with your retinue of demons and demonesses. Take this aromatic offering and depart.

VERSES AND MANTRAS TO OFFER THE OFFERINGS

1. O you known as the goddess Indrakami who reside eternally in the east (*indra kon*). Offerings are hereby dedicated to the east. Go away from the east corner of the house.
2. O you known as the goddess Vatakami who reside in the southeast (*agni kon*) corner of the house. Offerings are hereby made to the southeast. Go away from the southeast corner of the house.
3. O you known as the goddess Jalakami who are the regent of the south corner (*yama kon*) of the house. Offerings are hereby dedicated to the south. Go away from the south corner of the house.
4. O you known as the goddess Bhumapali¹⁰ who reside eternally in the southwest (*nirita kon*). Offerings are hereby dedicated to the southwest. Go away from the southwest corner of the house.

¹⁰ Bhumapali, lit., 'goddess of the earth.' In traditional Indian cosmology, Nirruti is also associated with the earth, especially with its dangerous aspects.

5. O you known as the goddess Varunakami who reside in the western corner (*varuna kon*) of the house. Offerings are hereby made to the west. Go away from the western corner of the house.
6. O goddess of the northwest direction (*vayamba diga*) known by the name of Yami. Offerings are hereby made to the northwest. Go away from the northwest corner of the house.
7. O goddess of the southern direction (*savuna diga*) known as Yama. Offerings are hereby dedicated to the south. Go away from the southern quarter of the house.
8. O goddess of the northeast (*isana kon*) known as the demoness Astabrandi. Offerings have been made to the northeast. Go away from the northeast of the house.

RECITATIONS TO BE MADE FROM THE THRESHOLD OF THE DOORFRAME

An introductory section and two verses (numbered 1 and 2) contain salutations to Visvakarma in Sanskritized passages. The commentary translated from the Sinhala portions follows beginning with verse 3.

Lord Buddha master of three worlds, Lord of the celestial realm and the guardian against all terrors, you who are most profoundly wise, and the embodiment of goodness, O divine Buddharaja (Buddha-king). Lord of Gods who has passed through the tribhuva (the three different conditions that precede Nirvana)¹¹ and who has transcended the world of passion. Mindful of these prerequisites to Buddhahood, I venerate you Buddharaja. Embodiment of the qualities of the Creator, Indra, Sakra, assorted lower spirits, the thunderbearer (Indra), Lord of the cattle (Krisna), Lords Visnu and Siva, Shining light of three worlds, chief protector of Sri Lanka, slayer of Mara, I worship three O

¹¹ *Tribhuva* refers to the three different conditions through which an aspirant must pass before attaining Nirvana. They are the *kama*, the *rupa* and the *arupa* stages. *Kama* is a state ruled by passions. *Rupa* is a state in which the passions have been extinguished by asceticism, and only a spiritual body remains. The *arupa* state is the one immediately preceding Nirvana and is one in which only the pure invisible spirit remains.

Dharmaraja (Dharma king). Essence of Brahma, proclaimer of the blessedness of Buddhahood, observer of the holy precepts, denizen of the merit field (sphere for meritorious works), obliterator of sins, I bow down to your radiance, O' Sangaraja (Sanga-king).

1. *You who are adorned with crown and rosary and carrying the noose
The fearless one of ten places who wears the earring
You who are the remover of all things, with the golden thread on your
right side
You who are pure and great in form, Visvakarma I venerate you.*

2. *I venerate you astride the bull, who has ten arms and a thousand eyes,
you who carry the book and the sword; the eternal oneness, vessel of life,
conqueror of death; carrying the fan, cup, the water pot of the ascetic, the rosary
made of the seeds of the Elocarpus, and the cobra, you who are as pure as saffron,
discerning, the master of wisdom, O learned one, great Visvakarma, I venerate
you.*

3. The god Visvakarma carries the adze (*waeya*) in his right hand, a
rosary, and a serpent around his neck. Rejoicing, he takes the carpenter's
marking thread and measures out the carpenter's cubit (*waDu riyana*). Such
is the description of the god Visvakarma.

4. He carries the chisel in the left hand, and the mallet in the right. He
carries the plane and the level and goes on the vehicle of the bull. Such is the
description of the god Visvakarma.

5. O Visvakarma, creator of the world, O Visvakarma teacher of the
world. O mighty Visvakarma we worship you.

6. We invoke the goodness of you great god, the goodness of your name,
the goodness of you great king.

PART III: VERSES TO WARD OFF EVILS

1. A custom begun by Visvakarma to protect the people of the world confers blessings from all the gods and comes down from the time of King Mahasammata.¹²
2. The first teacher of carpentry on earth was a Brahmin who came down from the Brahma world. He applied his work to the suffering in the world. Ever since then, mighty Visvakarma has been the teacher and craftsman.
3. During the time when this Sammata, the supremely virtuous king, was enjoying his life of umpteen years (*asankhya*),¹³ Visvakarma came down to earth to build a palace seven stories high.
4. He measured out the site in cubits and marked its lines or dimensions with threads. He saw what would cause suffering and left it out. He marked off the doors and windows around the house. This is how Visvakarma brought it into existence.
5. The god Visvakarma made the door and window frames and constructed rafters and beams. He bound them, thatched the roof and plastered the walls with mud and lime.
6. From that day forward the people of this earth have cut timber from the forest and constructed houses. They have made doorframes according to the Teacher's instructions by paring the wood cleanly and joining the four posts together.
7. When the house is completely plastered, the doorframes should be embellished with carvings, and the four outer nails should be set firmly.

¹² The first monarch of the world.

¹³ Mahasammata was said to have been very long lived, in fact to have lived for an *asankya*, a quantity which embodies the idea of the vast or innumerable. "If for three years it should rain incessantly over the whole surface of this earth, the number of drops of rain falling in such a space and time, although far exceeding human conception, would only equal the number of years in an *asankya*" (Buchanan in Hardy, 7).

Frames, panels and handles must also be cut. This is how the evils of timber and stone are driven off.

8. On the day the twenty-eight Buddhas attained enlightenment and received their robes, 60,000 sages stood and chanted. Ceremonial pots (*mal kalas*) now surround us here. By the power of all this, O woman (refers to the demoness in the following verse) let me go in.

9. A demoness with breast of one cubit and body of six has materialized and stands in the middle of the house. Let this evil spell be broken and let her depart the site without causing harm.

10. The two upright posts are free of evils and so are the cross bars top and bottom. By the power of Sakra (*surindu*) who is exalted in this world and also by the power of Lord Buddha, I cross the doorframe free of evils.

11. By the power of the guardians of the four quarters (*sivvaran deviyan*)¹⁴ who wear ornaments known as *nagara*, and by the power of their retinues, the god Visvakarma is crossing the door.

12. When the cruel army of Mara¹⁵ came to wage war on the virtuous Lord Buddha, lotuses sprang up at his feet. By the power of that miracle, no evil influence will henceforth come from the *magul kapa* (the first post placed, the auspicious post).

13. Lord Buddha preached The Doctrine peacefully and defeated Vasavath¹⁶ who came against him. He gave alms to beggars like water. May evils flow from the plank on the north.

¹⁴ In classical Buddhist mythology, the guardians of the four quarters, Dhrtarastra, Virudha, Virupaksa and Vaisravana. In modern Sinhala rituals, there is another group of gods who are the guardians of Sri Lanka, generally, Visnu, Saman, Vibhisana and Kataragama (Obeyesekere, 1984:79).

¹⁵ The adversary of the Buddha, and in Buddhist mythology, the personification of evil and death. Mara attacked the Buddha with a formidable retinue of demons, but the Buddha defeated them all.

¹⁶ Another name for Mara.

14. Six lakhs of Buddhas have attained enlightenment, and the Doctrine has spread through the worlds. If one keeps the goodness of those Buddhas in mind, evils will disappear from the world.
15. If there are evils due to the lunar asterisms in the joining of timbers, and if I who keep the virtues of The Doctrine in mind as I jump the doorframe have any evils emanating from my person, I shed all of them by the power of The Doctrine.
16. Clad in their robes, aspirants to Buddhahood (*rahat*) bear the virtues of the precepts they have observed in their lifetimes. If there is any evil left caused by a defect in decoration, may it flow away by the power of the Holy Order.
17. When Lord Buddha was in Vaisala (Ujjain), the glorious city, he was venerated. There he preached the almighty Ratna Sutra. By that power, I am without remaining evils and I cross the doorframe.
18. The beams and rafters have been set and tied, the roof has been covered and the walls plastered. The hearthstones have been set, and the fireplace glows like a blue sapphire. The doorframes are now free of evils.
19. The evils are thus dissipated from the threshold to the lintel. If the ritualist does these things, the house will be doubly blessed with happiness and long life.
20. According to many sages, by reciting verses and mantras to drive away evils and covering the head with a cloth, all the evils are driven away.
21. Those evils lodged in the lintel and the cross pieces of the doorframe come out from the threshold in the direction of (the ritualist's) head. Without descending to the calves or the ankles, they pass out of the ten fingers by the power of Lord Buddha.
22. Evils caused by faulty carpentry or by the timbers used in the building are dissipated by the power of the great sages.

23. There can be many defects in the joining, cutting, and boring of timber. Let the evils caused by such defects be driven off by the power of Visvakarma.
24. If there are defects in the height, breadth and length, if the length and breadth are equal, if the corners are in direct line with the boundaries of the land, there will be no evil consequences by the power of Lord Brahma.
25. May Visvakarma protect us and drive away evils that arise in the course of painting eyes on statues, making turrets or spires on temples, constructing images, writing books and crossing doorframes.
26. By the power of the refuge of Lord Buddha and the ancient sages and by the power of the hands and feet of Visvakarma, may we banish and be protected from a hundred evils.
27. By the power of the Doctrine of the Lord Buddha on the day he visited Kelaniya when the king of the Nagas gave up his jeweled throne, may this house be blessed forever.¹⁷
28. Lord Buddha's alms-bowl floated upward in the river Anoma.¹⁸ May all evils vanish by that power as well as by that of Lord Sakra.
29. On the day of the plowing festival when Prince Siddhartha sat in the air with his legs crossed beneath the *damba* tree, ten million people, retinues and his father venerated him.¹⁹ By the power of this miracle, the two hundred

¹⁷ On the Buddha's second journey to Sri Lanka, two Naga kings were fighting over a throne of gems. Through the power of his preaching, the Buddha convinced them to lay down their arms, after which they asked him to sit upon the jeweled throne.

¹⁸ After Prince Siddhartha became an ascetic, he went to the river Niranjara (here identified with another important river in Buddhist legend, the Anoma). He decided that he should throw his alms bowl into the river, and if it floated upwards against the current, it would be a sign that he was about to become a Buddha. When the bowl was thrown in, it rode against the current (Hardy, 168-9).

¹⁹ When Siddhartha was five months old, a ploughing festival was held in his father's kingdom, during which the young prince performed the miracle of ascending into the air.

and sixteen lucky signs and the Buddha's footprint, may six lakhs of evils be driven away.

30. By the power of Lord Buddha, all the evils found in the entire body, — in the head, forehead, eyes, ears, mouth, neck, shoulders, chest, heart, navel, loins, calves, feet and fingers have been destroyed.

31. By the power of six lakhs of twenty-five thousand Buddhas, by the power of the teachings of ten million Pase Buddhas,²⁰ by the power of the sixteen sacred places and by the power of the four tooth relics, all the evils in me have vanished.

32. May all the evils depart from my head, forehead, eyebrows, breasts, nose, ears, mouth, tongue, neck, shoulders, hands, elbows, ten fingers, chest, stomach, knees, loins, calves, ankles and twenty fingers.

PART IV: ADDRESS TO VISVAKARMA

At the beginning of the Maha Bhadra kalpa (the present age), there was a king called Vaidya. A seven storied palace was built for him. This is the sort of master carpenter who did it: a Brahmin named Aggika Bharaddvaja who came down from the Brahma world built it. After finishing the palace, the Brahmin Aggika Bharaddvaja gave it to the king and went back to the Brahma world. Eight goddesses took possession of the eight cardinal directions of the palace. This caused the loss of all the riches within. Because of the evils found in the *makara* door frame, the king who first crossed it fell flat on his face. The ministers who followed him did likewise. Then by the power of the meritorious deeds of that king, the throne of the Lord of the two worlds of gods, Lord Sakra, melted like a lump of clarified butter. Immediately, Lord Sakra looked round with his thousand eyes at the human world to discover the cause. Seeing what had happened, he called the god Visvakarma and instructed him to rid the seven

²⁰ In Buddhism, the Pase Buddhas are considered to be the highest order of intelligence in the universe. They are described by Hardy as "sages of wondrous power who never appear at the same time as a supreme Budha." It is said that when alms are given to them, it produces merit hundreds of times greater than offerings to ordinary ascetics (37).

storied palace of King Vaidya in the mortal world of its evils and to secure the eight directions and the sixteen directions from evil influences. Visvakarma obeyed him and came carrying a golden chisel, a golden adze, two golden compasses and a golden thread. He came from the world of the gods to King Vaidya's palace in the mortal world. He touched the *makara* door frame at the entrance to the palace and addressed the king as follows:

Proud king, pure monarch. The people of this city are not without wisdom. What then is the source of the suffering that has befallen this mortal dwelling?

Having heard that, the king replied: *Are you a demon or a god?*

Then Visvakarma replied: *I am Visvakarma the creator, and I am Visvakarma the teacher of the world. I am Visvakarma the sage, the noble Visvakarma.*

The king then asked Visvakarma what he should do, and Visvakarma said: *Great king, give me as offerings (dola) to the eight goddesses who have taken possession of the eight corners of the palace, eight measures of hill rice cooked in milk undiluted by water, flowers of five colors and a shawl.*

The king supplied them immediately.

Then the god Visvakarma prepared the offerings at the eight directions and gave eight prestations (*bat taTu*) to the goddesses Indrakami, Vatakami, Jalakami, Bhumapali, Yami, Yama, Kalaraksiya and Astabrandi and drove off the evils of the eight directions. Then he stood on the threshold of the *makara* doorframe covered completely from head to foot with the shawl and uttered the following verses.

On Mount Kailash, the golden peak, is his residence in the golden mountain in a mansion on top of Mount Meru. In Patala (the nether world) in Vaijayanata (Indra's palace), in the mansion of Ganapati, in that of the Siddhas, the Gandharvas and the Nagas, in Brahma's Egg, in the mansion of Visnu, in the abode of Siva, in the light of the sun and the moon. May you have happiness and success in all undertakings and may the gods bless you.

Once these stanzas were recited, the seven-thousand four-hundred evils vanished. He destroyed the evils in walls, clay, lime, and so forth as well as in the stone, stairs, brackets, rafters, and in the mortises of the *makara* doorframe of the palace and recited these stanzas to drive off the evils from the palace site.

On this site, Lords Siva and Visnu shall cleanse the entire world, ensure prosperity and protect all.

As he continued to recite, about eighty more evils vanished. Then in order to rid the evils from his person, he recited the following stanzas:

Indra, Prajapati, Varuna and Yama. May they all ward off all misfortunes, diseases, dangers and illness, drive away armies of demons and ensure abundant life and prosperity.

So saying, he drove off all the evils, conferred blessings on the king and long life on himself. Then he bathed in the golden vessel and went back to the world of the gods. This is the origin of the tradition of driving off the evils which comes down from that time to this one.

By the power of the Lord Visvakarma, let all evils that afflict me be destroyed on this day as well.

OBLATIONS FOR THE ALUTNUWARA GOD

1. (Stanza invoking Alutnuwara God)

Son of Navanagara, you who are also known as Dedimunda, powerful and mighty god, possessor of abundant merit, gladden your devotees whose hearts are joyful. May goodness be with me always.

2-3. (Stanzas invoking the Buddha)

You who are attended by Brahma, Indra and the other gods in the sky,

who have dispelled the darkness of ignorance and destroyed the fetters of becoming Supreme Lord of the world, Lord of gods, supreme conqueror, noble lion, I bow down to you.

O' enlightened one, peerless Buddha-king,

You who raised the sweet sound of the Buddha teaching

You who by your skill vanquished the terrible Mara

To you Buddha king, I bow down.

The following verses invoke Visnu, Visvakarma and the Buddha.

4. (Invocation of Visnu in the form of Rama)

Victor of the battlefield, son of Dasaratha, destroyer of enemies, ruler of the four directions from the receptacle of pearls (Mount Meru), bearer of the conch, Sri Rama, wielder of the cakra.

5. *Bearer of the white conch and the bow, handsome, with skin blue in color, wearing a crown, earrings and golden vestments, almighty lord of gods, you who smite enemies, bless me, wielder of the bow, increaser of blessings.*

6. *Promoter of fame, glory and the majesty of the example of Lord Krisna, increaser of order in this human world, belonging to the Kosalas, increaser of Dharma, enricher of the earth, bring us fortune and blessings. May whatever gods preside over building sites in heaven, the nether regions or on earth bless us.*

7. *Let Visvakarma receive our offering and go away satisfied from this house. The drum, the bull, the snake, the flag, the fan, the lion, the makara (crocodile) and the lamp, these eight are offered. In the night of the month of Vaisakha, in the dawn, the rays of the sun and in Cancer.*

8. *In Venus, in the bearer of a thousand rays (the sun), in the signs of Aquarius and under the moon, under the signs of Tula and Mesa, Great Sage, possessor of all knowledge, born in the city of Kapila, by his power, may all evils be vanquished and may we be granted protection.*

9. *Protector of the evils of this world, who carries the book and the sword (?), endowed with all knowledge, attainer of nirvana carrying the rosary and the pitcher, O wise one, of great form, you who have great understanding, born from the crescent moon (or Aries).*

10. *Hail! Sri Haribhadra, vanquisher of desire, mighty one who has attained nirvana, source of illumination, who emanates rays of six colors, lord of three worlds, possessor of the three-fold power, we venerate you.*

11. *I venerate the Buddha-king who has mastered all knowledge, who possesses ten powers, who is the supreme lord of the whole world.*

12. *I venerate the great Dhamma (teachings of the Buddha), the word of the sacred texts, the teaching of the worlds of gods and men.*

13. *I venerate the Sangha (the holy order of Buddhist monks), sons of the vanquisher who are invested with the six kinds of higher knowledge, mindfulness, faith, virtue and perfect poise in meditation, who are worthy of veneration by gods and men.*

14. In the southeast corner of the house, construct a flower-hut (*mal paela*) with nine baskets (*goTu*). Worship with flowers, lime, camphor, frankincense, sandalwood, water distilled from flowers (*pinidiya*) and coins of gold and silver. The following stanzas should be recited in honor of the deities of the eight directions, the lords of the underworld (*the nagas*), and the Bhumi-pala (Lord of the Earth).²¹ So as to insure good fortune for the new building, the owner should stand at the front door of the house after erecting the flower hut and recite the following stanzas:

15. *I venerate Isa (Siva) lord of the worlds, the lord of all sacrifices, lord of the gods, the four-faced, four-armed progenitor of the Vedic scriptures.²² I venerate the lord who is mounted on a swan, the Creator, Lord Brahma.*

²¹ Possibly an allusion to the Site Spirit, but commonly taken to be an epithet of Siva.

²² With the recitation of these verses, the house is ritually constituted as three dimensional space and oriented to the main axes of the world. The invocation begins with Siva as Isana, the upward facing god, and hence, the rising axis. He is also the regent of the northeast. Brahma represents the center and the Nagas, the downward axis. The invocation then proceeds in a clockwise direction, invoking the deities of the major and minor directions from the east (Indra) back to the north (Soma) and the starting point.

16. *I venerate the king of the Nagas who resides in Patala, the neither world. I venerate you lord of the gods, lord of the sun, Indra who carries the mace.*

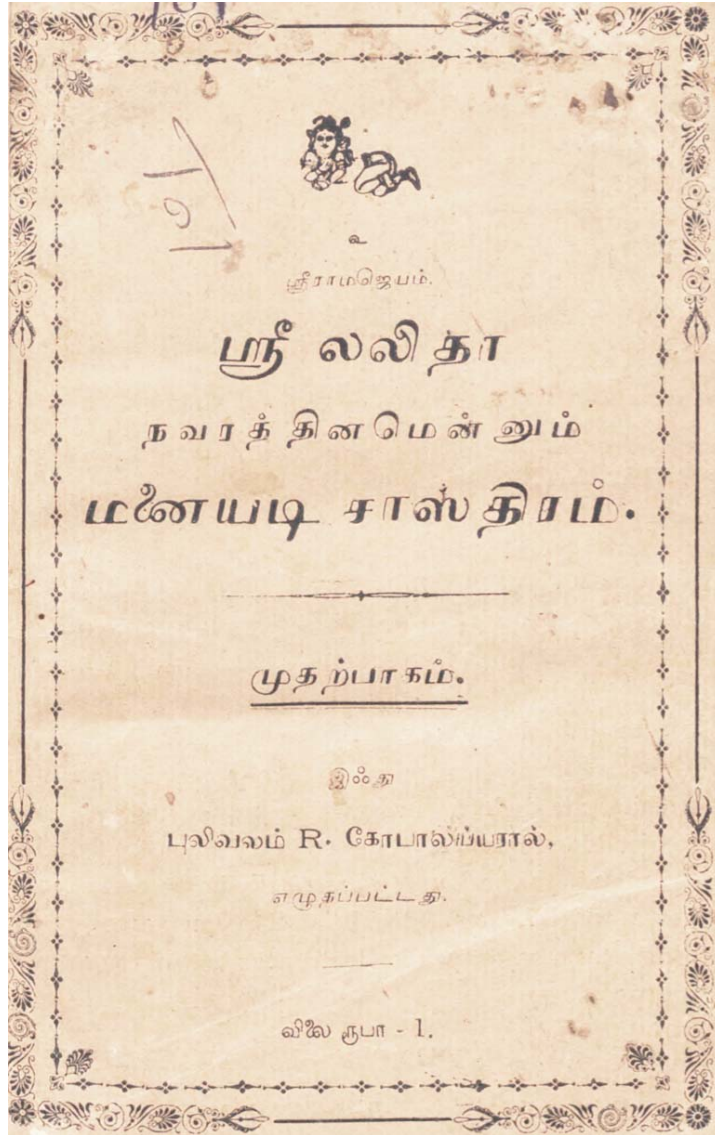
17. *I venerate you Agni, the luminous one, glowing like a gem, may your outstretched hands grant peace. I venerate you Dharmaraja (Yama), with rod in hand, you the dark one, the surveyor of Dharma, who wears the black antelope's skin.*

18. *I venerate you Nirutti, sword and spoon bearer, blue bodied one. I venerate you god Jalaraja (Varuna) who carries the snare.*

19. *I venerate you Vayu, armed with the Dharma, lord of all beings. I venerate you Chandra (Soma), lord of the constellations and wielder of the mace.*

Appendix III:

The Sri Lalitha Navaratnam Manaiadi Sasitiram



Translation by Bonnie G. MacDougall
and Christobelle Amarasingam



Figure 45. Rickshaw driver in front of exterior wall around precincts of Meenakshi Temple, Madurai, Tamil Nadu, India.

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A translation into English of the *Sri Lalitha Navaratnam Manaiadi Sasitiram* by Bonnie G. MacDougall and Christobelle Amarasingam.

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THE SRI LALITHA NAVARATNAM MANAIADI SASITIRAM¹



CHAPTER 1

How This Science Was Created

Long, long ago, the great seer Parasara³ taught the seer Brahaspati about the principles of housebuilding, and Brahaspati in turn passed on his knowledge to Visvakarma. Visvakarma later laid down all the instructions for housebuilding and the precepts of the science of sites.

¹ I have used the *Tamil Lexicon* and Winslow (1987) as authoritative sources in the translation. In transliterating words from Tamil, I have identified the letters of the Tamil alphabetic system with their closest English equivalents for the sake of typographical convenience. I offer my apologies to Dravidianists for the absence of diacritics. bgm

² The first page of the text shows a drawing of Lord Siva and his consort astride the bull. A salutation to the Goddess, here called Ahilandesvari, is given beneath. This is followed by verses that invoke the blessings of Ganesh, the elephant-headed god, who is depicted in the preface. Ganesh is regarded as the remover of obstacles, and he is propitiated at the beginning of all undertakings of consequence. Verses follow that commemorate Sarasvati, the goddess of learning and literature. A salutation to Sakti (the female energy principle in Saivite religion) and to the nine planets is then given.

³ The name of a great seer sometimes regarded as the codifier of the *Rig Veda*.

How the Site Spirit Came to Be

In the Silver age, a demon of immense proportions lay asleep in the primordial waters. The very sight of him frightened the gods. They ran to Lord Brahma (the Creator) in heaven who had power over all the demons. "Do not be afraid," said Lord Brahma, "push him to earth, face downward." The gods did it and lived in peace ever after.

So that is how it happened in the Silver Age, in the fortieth year of the Hindu cycle, in the month of Puruttasi (September-October), on a Saturday, in the third phase of the waxing moon, under the Pleiades, in the very early hours of the morning. Brahma transformed the Titan who was previously known as The Great Demon and called him Site Spirit and blessed him. The demon appealed to Brahma for protection. "O Brahma, you who are the creator of everything on this earth, the gods are terrorizing me," he cried. "Do not be troubled," answered Lord Brahma, "you are now known as the Site Spirit. From town, to village, to well side, to house, to temple, people who venerate you will be showered with blessings by the Goddess of Fortune.⁴ Whosoever fails to do so, will face hardship, suffering and death."

So that was the great gift that Brahma gave to the Site Spirit. This is why people must venerate the Site Spirit at housewarming ceremonies, when children are born, at marriages, when house posts, windows and doors are set in place and at other times when a new house is under construction. A puja to the Site Spirit should also be performed when lightning strikes, or when fire breaks out, or if the household is menaced by serpents or thugs. If owls, crows and other inauspicious birds nest in the house, or if there is unseemly noise from horses, cattle or cats that live in the place, or if arguments break out among the women, a puja should also be performed on the site.

The Characteristics of a Good Architect (Silpin)

The hair of the builder should be tied in a knot at the back of his head. He should be garbed in a cloth that is tucked in or folded in five ways⁵ and wear a shawl across his shoulders, a gold chain, a ring and a rosary.⁶ He should be a devout Hindu, performing the prescribed rites on a daily basis and be of good conduct, good countenance and good judgment. He should be well-bred and even tempered. He should be well-versed in all matters that pertain to building

⁴ Lakshmi.

⁵ The garb of a holy man.

⁶ The Rudraksa beads, which make up the Saivite rosary, are made from the small berries of the shrub *elaecarpus ganitrus*.

a house including testing the site, selecting the timber, and the use of other materials such as brick, stone, metal and lime. He should have mastered the art of drawing.

When someone like this builds a town, a temple, a house, a village, a well or a public garden, those who live there will prosper and endure. If lesser men embark on these projects, their clients will fall on hard times.

The builder should be honored with clothes, gold, sandalwood paste, betel leaves, sugar and plantains. When he presides over the rites of construction, the householders, relatives and friends should assemble for the ceremony. Everyone present should be welcomed and honored with sandalwood paste, betel leaves, flowers and fruit.

Omens

Those who go to solicit the services of the architect should never stand on one leg and scratch the opposite one, or scratch their heads or approach him with their hands folded. They should not give the impression of being inattentive or moody or speak in an unpleasant tone. In addition, they should be advised that if they arrive in an untimely manner and catch the builder while he is applying oil on his head, the house will never be completed and the wealth of the householders will be drained away.

Good and Bad Characteristics of the Site

Be advised there should be no hair, ash, bones, scraps of wood, fragments of ivory, or charcoal on the site when the consecration rites are performed. If these substances are found on the site, it will be unlucky for the head of the house. If gold, red brick, frogs, gems, conch shells or silver are present instead, it will bring him good luck. If Jupiter is in the ascendant (=lagna) at the time of the ceremony, it will be disclosed by the appearance of crows and vultures. If the moon is there, it will be disclosed by the common crane. If Venus is there, it will be disclosed by the king crow. If Mars is in the third, seventh or ninth house, it will be revealed by storks. If there are malefic planets in the third, sixth or eleventh house, it will be disclosed by bits of hair and flesh. If Venus is in one of these houses, the sign is a pot of curd. If Jupiter is there, the sign will be a pot of milk. If Saturn is there, the sign will be fire. If Rahu and Ketu⁷ are in the *kendra*, that is the first, fourth, seventh or tenth houses from the ascendant, it will be made known by serpents.

The Divisions of a Measuring Rod⁸

8 atoms	= 1 speck of dust
8 specks of dust	= 1 speck of cotton fiber
8 specks of cotton fiber	= 1 hairs breadth
8 hair's breadths	= 1 nit
8 nits	= 1 louse
8 lice	= 1 barley seed
8 barley seeds	= 1 manankulam

General Guidelines on Measure

The *manankulam* (inch) is the circumference of the middle finger. An orbit, or twice the distance from the elbow to the middle finger, is equal to one *mulam* (cubit). The basic proportional unit used at the Chidambaram *citsabha*⁹ was equivalent to 34 English inches.¹⁰ Therefore, a rod of 34 inches in length is the authoritative one. Brahmin houses should be measured in inches. So should places of worship, shelters for pilgrims, chariots, drawings and images. Do not use inches for the other three castes.

Wood to be Used for the Measuring Rod

Make measuring rods of tamarind, *venkai* (kino tree, *pterocarpus marsupium*), teak, *acca* (sal tree, *shorea robusta*), palmyra, bamboo, ebony, coconut, sandalwood, champak (*michelia champaca*), jak, *purasu* (=Battle of Plassey tree, *butea frondosa*), lotus stalks and iron. The rod made of bamboo cane is for Brahmins. The one made of sal wood is for rulers. Those made of teak are for merchants, and those made of kino for Vellalas.¹¹ The measuring rods of iron are for the gods.¹²

⁷ Ketu is the descending node of the moon and Rahu the ascending node. In Hindu astronomy they appear as two of the nine planets.

⁸ The treatment of measures is the one section of the text that I have abridged. It contains a long list of archaic technical terms that are not followed up elsewhere. In addition, some of the proportional relations set forth make no sense because of poor editing or proofing.

⁹ Chidambaram is one of the most important places of pilgrimage in South India and is said to be the site of Siva's dance of joy. Its innermost sanctum is called the *citsabha* (cf. Shulman, 41).

¹⁰ According to Indian measure, rods of different lengths (generally ranging from 24-34 inches) are to be used for specific purposes. For example, according Acharya, a rod of 24 inches is to be used for measuring carts and furniture (1934:8).

¹¹ A Tamil cultivator caste.

¹² This means for temples.

Characteristics of the Housebuilding Site

The consequences of using sites with white, red, and black earth should be clearly understood. It is necessary to examine the soil carefully when building all habitations.

The Smell of the Earth

Earth with a fragrant smell is for Brahmins. That which smells like blood is for the Ksatriyas (hereafter, 'warriors'). Soil with the smell of honey is for the Vaisyas, and that with the smell of toddy for the Sudras.

The Taste of the Earth

Earth that tastes sweet is for Brahmins. If it is bitter, it is earth for the warriors. If it is sour it is for the Vaisyas, and if it is pungent it is for the Sudras.

The Shape of the Site

The following types of sites are not suitable for building: sites shaped like elephants, lions, oxen, horses, donkeys and goats; sites like hatchets, those in the shape of a sacrificial altar, and those that look like a trident; sites in the shape of a Siva lingam, those that look like jugs and flags, those that look like stars, and sites shaped like wheels; sites shaped like serpents, frogs and sheep; sites that are crooked or in the shape of a fan or an arrow, triangular sites and sites that are uninhabited. All these sites should be avoided. Only land that is desirable and good should be selected for building and venerating the Site Spirit. You should examine the building site carefully.

If the site is well compacted and mounded and slopes to the north and east, it is a good one for Brahmins. High sites are good for warriors, and ones with ridges are good for the Sudras. Land that is level is good for everyone.

Sites Suitable for the Four Castes

Sites where the kusa and darba grasses¹³ grow are good for Brahmins. Those with the arka plant¹⁴ are good for warriors. A site with abundant flowers is good for the Vaisyas, and a site with honeysuckle and one near a river are good for the Sudras.

¹³ These are both names for *poa cynosuroides*, the sacred grass used by the Brahmin community in religious rites.

¹⁴ These passages seem to have suffered a good deal along their journey from their original source. The term given here is *aruhu*, the common Tamil name for darba grass, associated above under its Sanskrit name with Brahmins. This is possibly a reference to arka, a plant

Places Where Houses Should Not Be Built

Sites shaped like pestles, those that are frightening, those where undesirable plants grow, those that slope to the center, those that have awkward shapes, sites with stones and iron, those next to graveyards and cremation grounds, sites near undesirables, those with anthills, sacred grounds, all these have to be ruled out for housebuilding. Sites with the appropriate taste and smell for each caste should be chosen as those that are beneficial in the long term. If you do otherwise, harm will come to the householders. So examine sites for houses and temples carefully.

Portents of Various Sites

If the land is regular on all four sides, high, or resembles an elephant, it will make you rich. If it resembles a lion, you will have happy children.¹⁵ Bull-shaped sites will give you cattle. If the site is circular, you will be moderately prosperous. If it looks like an altar, you will be rich. If it is shaped like a trident, it will bring forth heroes and riches. If it is like a lingam, it is good for devotees of Siva. If it is like a star, you will move up in this world. A site like a pot will make you rich.

Triangular sites lead to the destruction of progeny. Land that resembles a cart brings on illness. Sun shaped sites will lead to loss of wealth. A fan shaped site will lead to fear. Smoke and frog shaped sites will lead to death. Cobra shaped sites also lead to death. One resembling a crow or a short-horned owl will bring on misery. Snake-like sites will lead to the death of progeny. They may also produce sons who kill Brahmins. Land inhabited by the wicked will lead to loss of property. Land free from all defects will bring you long life and prosperity.

If the site has water in the north and east, you will be blessed with children and riches. Fertile sites will bring you blessings and wonderful children. High land will confer peace and plenty. Level ground brings good health. Rugged and inhospitable land is left to the outsiders of the realm. The areas around rocky highland fortresses (*kiri turakkam*), forest strongholds (*wana turakkam*)

associated elsewhere in India with Indra and warriors. In South India, the arka (*Calotropis gigantea*) is associated with Siva and Ganesh and also with rites performed in the month of January-February on *ratha saptami* (the seventh day in the bright fortnight after the new moon day) heralding the beginning of the northward course of the sun. It is also a powerful poison.

¹⁵ Some of these passages contradict the injunctions given above.

and embattlements such as moats (*jala turakkam*) are therefore suitable for Sudras. They are also suitable for hermits, ascetics and thieves.¹⁶

The Properties of the Land

White soil is for Brahmins, and red soil is for the warriors. Green and fertile soil is for the Vaisyas, and black soil is for the Sudras. Although soils of these colors are generally held to benefit only the respective castes, soil that is white is auspicious for everyone and will confer blessings down through the generations. Soil on which *nanal* (*saccharum spontaneum* = bulrush) grows will bless you with children.

If you choose land by a stream, you will have ill-mannered children. As for sites in the middle of a river, your children will be needy. Those on a crooked site and on uneven sites will be quarrelsome. Pallid sites lead to bad health. Sites that are irregular will bring forth dimwitted sons. Cat and winnowing basket shaped sites and those shaped like pestles will lead to fear and loss of progeny. Sites that have been terrorized will lead to the same. Sites with thick black soil will lead to loss of cattle. Low land between hills will give rise to sons as crafty as dogs and foxes. Soil that gives off heat will spawn children with bad habits. Sites with anthills will lead to accidents and dishonor. The children will die on sites near the wicked. Sites on temple lands will make you restless. Land that has been used by holy men leads to poverty. Sites with ditches lead to danger. Sites curved like the back of a tortoise will lead you to ruin.

Testing the Site

On the site you have chosen for housebuilding, dig a hole one cubit square, then fill it up with the soil you have taken out of it. If the soil more than fills the hole, you will be lucky. If it just fills the hole with nothing to spare, then the portents are neutral. If there is not enough soil to fill up the hole, you will be unlucky.

¹⁶ In the classical materials, those at the social margins are assigned to the perimeter of the ideal town. Here their association with the periphery is projected on a larger scale. They are associated with the remote lands of the defensive perimeter of the fortified state. associated elsewhere in India with Indra and warriors.

Dig a hole one cubit square, and fill it up with water to the brim. Now retreat about 100 feet from the hole and then come back. If the water level holds steady, it is an auspicious sign.

Dig a hole one cubit square and plaster it with cowdung on all four sides. Light an earthen lamp with wicks dipped in ghee and place it in the hole. If the entire hole is illuminated, it is a very good sign. Examine the burning wicks one by one, starting from the east. The east is for Brahmins, the west is for warriors, and the north is for Sudras.¹⁷

Plow the site and sow seeds all over the building site. If the seeds do not germinate in three, five or seven days, the site is not suitable for building. If they sprout in three days, it is very good. If they sprout in five days, the portents are neutral. If nothing happens by the seventh day, no house, temple or shrine should be built.

The householder should stand in the center of the site and throw a handful of earth into the air. If it is borne off in the wind it is a very good sign, but if it plops back down on the site, it is unlucky.

Before the Site Spirit puja is performed, ask three or five married women (*sumangali*) to bring pots of water to be poured into the hole. Then drop in a flower. If it circulates in a clockwise direction, it means good luck for you. If it goes counter-clockwise, it is an ominous sign. Your house will never be finished. When you dig a hole, pour in water and test the site, if the foundation of the house is cracked, or if it is the dry season, the water will disappear soon after it is poured. Under these circumstances, dig a hole with dimensions of one cubit and pour in water 150 hours (an 'hour' = 24 minutes) before the proposed puja. After doing all this, do the flower test right before the Site Spirit puja is performed. If the flower comes to rest in the east, you will be wealthy, prosperous and blessed with children. If it settles in the southeast, your wife will be barren. Also, you will be threatened by thieves and snakes. If it stops in the south, you will face illness, misery and death. If it stops in the southwest, you will be wealthy and prosperous. If it stops in the west, you will enjoy all kinds of good luck. If it stops in the northwest, you will fall ill and face all kinds of loss. Demons will occupy your house. If it stops in the north, you will be prosperous and very lucky. If it stops in the northeast, you will be lucky and rich.

¹⁷ The objective here is to observe which wick burns the brightest or longest.

Water for the Site Spirit Puja

When you perform pujas for the house, you have to bring the sacred water for them from local rivers. For temple pujas, bring water from the four oceans. Otherwise, bring water from the seven sacred places. Otherwise, at least bring water from the four quarters of the town to do the puja.

CHAPTER 2

Good Omens

The following things bring good luck: listening to sacred recitations, listening to musical instruments, catching the sight of a pot prepared for a puja and seeing a Brahmin, a pregnant woman, a teacher and drums. Also catching the sight of a young girl dressed in white, tasty fruit, healthy cows, flowers, gold, silver, pearls, red coral and good food.

Coming into contact with cows, sandalwood, a mirror, a fan, peacock feathers, a deer, flesh, curd, milk, a palanquin, fish and a married couple will confer good health, wealth and prosperity. If you see lotus flowers blooming, a white heifer, two Brahmins, an elephant, a horse, or a married woman, or if you hear prayers being recited from the Bhagavad Gita, you will have many children and plenty of money. If you encounter a harlot, an axe, a lamp, a flower garland or a beautifully dressed young women at the time of the housewarming ceremony, you will be healthy, strong and powerful.

Bad Omens

Wicked words, toddy, leather, bones, iron, grass, paddy husks, snakeskin, cotton, salt, mud, oil, hermaphrodites, medicine, feces, sugarcane, grain, sick people, a man with unkempt hair, a madman, a man who has just oiled his head or shaved, firewood, two birds, a naked man, clatter, and the smoke from fires being lighted or extinguished are bad omens. If you hear or see any of this, you will face death and ruin. Do not start building a house or try to occupy one.

How to Do the Puja for the Site

The householder should choose an auspicious day and a good lagna. He should bathe and put on new clothes. He should be seated facing the east and perform a puja to Ganesh first and then to the nine planets. After this, he should

clear the spot, plaster it with the five products of the cow¹⁸ and draw *kolams*¹⁹ on the ground. Then he should ask for blessings from the astrologers and the Brahmins.

The householder should set out *pancamirtam* (a mixture of five delicacies: either plantain, honey, sugar, cocoa and milk, or milk, curd, ghee, sugar and honey), and the nine auspicious grains,²⁰ in a brass pot bedecked with fragrant flowers. Then a *purohit* (priest) should chant the necessary verses and waft incense while invoking the sacred rivers, mountains and forests as well as deities such as Varuna who rules the waters and those who rule the sky to bless the pot. Next he should invoke Indra and Vasuki, the king of the serpents, and the serpents of the eight directions. He should perform a puja and invoke the deities in Sanskrit, uttering the mantra known as *satrusan* and the *rudra* prayer. He should invoke the Site Spirit and ask for his blessings on the site, the householder, and his family and all those who worship him. He should also say, "O Site Spirit, please accept this puja we are performing in your honor and come to dwell here. O Site Spirit, you who dwell on the earth, we praise you. Bless us and grant us health, wealth and prosperity." Then he should draw the figure of the Site Spirit either with grains of rice or rice flour on the ground. The Site Spirit should be invoked again with the verses beginning with *visnorradamasi*. Then he should be venerated by reciting the mantra *namo astu sarvepiyaha*. The puja should be performed on the stomach of the Site Spirit.

CHAPTER 3

Coconut Omen

At the auspicious time when the coconut is broken, if the upper part of the broken nut is bigger than the lower one, you will definitely have the blessings of the Goddess of Fortune. If it breaks into three parts on top, and one on the bottom, you will be very happy. If it breaks into five pieces on top and one on the bottom, you will become exceedingly rich. If the coconut breaks into slivers,

¹⁸ Milk, curd, ghee, urine, and dung.

¹⁹ Auspicious diagrams drawn on the house site or in the yard at the New Year or on other occasions, usually by women.

²⁰ These offerings are associated with the nine planets. They include wheat, offered to the sun, paddy to the moon, the pulse *Cytisus cajan* to Mars, *payaru*, the name for a number of beans, to Mercury, Bengal gram to Jupiter, *avare*, a name for several species of pulses to Venus, sesame seeds to Saturn, the pulse *phaseolus mungo* to Rahu and horse gram to Ketu.

you will live a long time. If a small piece of the nut chips off and falls inside, you will acquire gems one day.

If the nut breaks in the center, there will be discord. If it breaks into six and four parts, you will have trouble. If the eyes of the coconut are broken, it predicts death. If the shell comes off the coconut in the process, you will be poor. If the coconut is spoiled, and there is no kernel inside, you will have a great deal of misery.

Driving in the Stake

A stake (*sanku*) should be made from the following materials: the bo tree, the atti fig tree (*ficus glomerata*), elephant tusks, teak, tamarind, ebony, vanni (*prosopis spicigera*), and kino. The perfect stake is twenty-four manankulum long, the next best is eighteen, and a poor third is one that measures twelve. Now, the perfect stake has a six inch base and it is one inch wide at the point. The next best ones are 3/4 and 1/2 inches respectively.

The wood used for making the stake should not be bent, nor should it have any kinks or marks on it. Pegs made of ivory and sandalwood are for the gods. Those made of ebony and vanni are for kings. Those made of kino and teak are for the Vaisyas. Tamarind and atti fig are for the Sudras. It is not good to use the wrong material.

Dig out a square hole of four cubits where the stake is to be driven in. At an auspicious hour, pour saffron water over the stake, smear it with sandalwood paste and decorate it with flowers. Install the stake in the middle. When the sun rises, the shadow of the stake will fall on the western rim of the hole and as the sun ascends, you can mark it out at the half cubit mark and then at the full cubit mark and then at the two cubit mark and so on. Do it as the sun moves through its northward and southward course. Connect these marks with a mason's line from east to west. The months of August-September, October-November and November-December are good for all human habitations. The other months are for the gods.

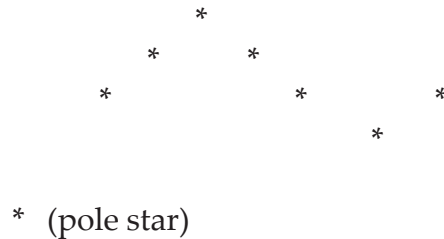
Another Method

In order to find the south, north, east and west direction for the house, stand at the center of the site and face in the direction of the pole star and Mount Meru. That direction is north. Mark the spot where you are standing. Now step back three paces and make a second mark on the ground. Draw a line between the two marks you have made. This will give you the north-south axis. The east-west line is at a right angle to this line. Right to the east is the northeast

direction which is that of Isana (Siva). If you look to the south in the western corner you can see the direction that is under the protection of Kanni (=the Goddess, i.e., Durga).²¹

How to Find the Pole Star

The pole star lies in the extreme north. It does not move. Seven stars called the Seven Sages (the Big Dipper) revolve around the pole star. The Seven Sages are shown below. The two stars in front point to the pole star. The distance between the Seven Sages and the pole star is seven times that between the first two stars.



How to Locate the Spot for an Auspicious Ceremony

Divide the perimeter of the site into 28 parts. Now set aside 17 parts on the side of the feet and 10 parts on the side of the head. Perform the ceremony right in the center between them.

Omens for the Spade

The spade for housebuilding should be strong. It should not bend or break. If the strings for laying out the site snap, it is a sign of bad luck. You will lose your possessions and maybe your life. A three-stranded string of silk thread should be used by warriors. A three-stranded string of cotton should be used by the Vaisyas, and palmyra or coconut strings are used by the Sudras. Strings made of cotton are commonly used by all four castes.

The Length of the Stakes

The length of the stakes should be between eleven virals²² and twenty-six.

²¹ The northeast-southwest axis is marked on the site plans in the *Manushalaya Chandrika* as the 'ear' line, and it has a significance in South India that the other diagonal running northwest to southeast does not. It connects the upward facing axis (northeast), often associated with the upward face of the five faced Lord Siva, with the downward one associated with the Goddess in some form and therefore has an implied vertical dimension.

²² A finger's breadth.

Driving in the Stakes

Drive the main stake in the area of the Site Spirit's stomach. Then drive others successively in the southwest, southeast, northeast and northwest corners. Once you drive them in, do not pull them out and drive them in again. Do not use broken ones and do not drive them in upside down. It will only bring on trouble.

Figuring Out the Right Spot For Building

The building site should be 50 feet from a riverbank, 25 feet from any waterway and 17 feet from a well.²³ If you do not remember this, you will have no end of trouble. If you want to combine two sites and make them into one, or if you want to include part of a site that already has a house on it, demolish the one that is standing and plow up the whole area and sow it with seeds.²⁴ When the seeds sprout, let cows graze on the plants for three days. After that, perform the puja to the nine planets, have food cooked for Brahmins on the site and then start building the house. Then you will be blessed with good luck and prosperity. Otherwise, expect trouble.

Things That Should Not Be Visible When You Enter the House

A cross beam or a support of a building should not be visible from the entrance. If the corner of the courtyard, a lintel, or a pillar are visible from the door, you will have bad luck. There will be perpetual discord. A house should never be divided in half. This leads to loss of property, unhappiness and perpetual difficulty.

Angling the House to the Northeast

The house can be turned one inch. That will bring good luck. Six inches is neutral. If it is more than six, illness in the family will follow. The dwelling place of the sun lies from east to west and that of the moon, from north to south.²⁵

²³ These distances are contradicted elsewhere in the text.

²⁴ Here and elsewhere, especially in Chapter 8, the text is obsessively concerned with new beginnings and with eradicating any material evidence of prior use or occupation, whether by humans or animals.

²⁵ This terse passage appears to refer to deviations in the main diagonal running from southwest to northeast, but why at this point in the text? It may actually refer to the size of the holes bored into the walls of buildings along the northeast-southwest diagonal, a common practice in South

The Positions of the Site Spirit

The legs of the Site Spirit lie in the house of the Zodiac in which the sun lies. His head lies in the seventh sign of the Zodiac from there. He is lying with his left hand downward. If any ceremony is performed in the area of his legs, the master of the house will die. If it is done on his back, the occupants will be threatened by government authorities. So take note of the place that the Site Spirit faces and there perform the ceremony for placing the main post or any other ceremony connected with building the house.

The Site Spirit lies with his head to the west during March-April, April-May, and May-June. He lies with his head to the north during June-July, July-August and August-September. His head is in the east during September-October, October-November, and November-December. His head is in the south during December-January, January-February and February-March, and in these months he sleeps. His legs lie in the house of the sun, his head is in the seventh house from there, and his left hand is downward.²⁶

The Rising Times of the Site Spirit

The Site Spirit wakes in the fifth hour on the tenth day of Taurus, in the eighth hour on the twenty-first day of Gemini, in the second hour on the eleventh day of Cancer, in the twenty-first hour on the sixth day of Virgo, in the second hour on the eleventh day of Scorpio, in the tenth hour on the eighth day of Sagittarius, in the eighth hour on the twelfth day of Capricorn and in the eighth hour on the twentieth day of Pisces.

The Site Spirit is awake for 3-3/4 hours. These hours are divided into five parts. In the first segment, he attends to his toilet. If any ceremonies are performed at this time, the house will be threatened by kings. During the second period, he bathes. Ceremonies conducted at this time will bring on misery. During the third, he performs puja. Ceremonies conducted at this time will lead to poverty. During the fourth period, he takes his meals. Ceremonies conducted at this time will bless the householder with children, wealth and prosperity. In this fifth

India, through which the mason's line is drawn during construction and in making subsequent additions. This keeps the marmas or vital points clear and visible. Since the preceding passages deal with other problems stemming from visual obstruction, this would make more sense. The dwelling places of the sun and moon seem to refer to the other two major axes on the site running east-west and north-south, although the purpose of inserting this information (which is nowhere repeated or drawn out) is not clear.

²⁶ The text here gives the Tamil months.

period, he attends to affairs of state. Ceremonies conducted at this time will bring forth everything in plenty.

Note the time of the sunrise and make your calculations. The Site Spirit sleeps during the remaining months. No ceremonies should be conducted at these times. Some books also mention the twelfth, twenty- first, and twenty-second days of Pisces. The twentieth is also mentioned, especially by the *Chudamani* treatise that was written sixty or seventy years ago.

Astrological Predictions for the Householder According to the Paksi²⁷

Auguries for the Rising Period

If ceremonies are initiated in the first minute, it will lead to happiness for 300 years, and in the second one, for 250 years. If in the third minute, there will be peace and prosperity for 200 years and prosperity down through the generations. If in the fourth minute, health and well being will continue for eighteen years. If in the fifth minute, there will be good luck for twenty-five years. Good marriages and other signs of prosperity will follow.

Auguries for the Transiting Period

If ceremonies are conducted in the first minute, the lifespan will be 100 years but without much prosperity. The house will be plundered by thieves, and the owner will be moody. If in the second minute, there will be mixed luck for 90 years. The third minute will confer a span of 80 years but invite terrorism from kings. The owner will be disgraced. In the fourth minute, the span will be 80 years, but there will be many adverse effects. There will be many obstacles and

²⁷ This word *paksi* (bird) probably has an identity here with *paksa* (segment), the 'segment' being either one of the five states in which a planet is located (rising, transiting, ruling, waning and setting) as it passes through a particular house of the Zodiac or the house itself. Winslow (1987), however, connects these periods with a system of augury called The Five Birds. The birds, eat, sleep, walk, govern and die between the full and new moon. These terms (rising, transiting, etc.) are my own attempts to lend coherence to these passages. Tamil speakers who are not specialists in astrology generally see them as non-technical terms referring somewhat enigmatically to eating, walking, ruling, sleeping and dying. These passages are introduced without any further clarification. Since the author suggests in the passage immediately following that divination by respiration be used as a simpler method, it may be that even he was not fully knowledgeable about these particulars. They can no doubt be fully explicated by consulting Tamil manuals on astrology, but I leave that to others.

intolerable tyranny from kings. The owner will be so poor that for a time, he will not even be able to afford a lamp. In the fifth minute, there will be 60 years of life, but women will die. The owner will feel apathetic. The men of the household will be maimed and have enemies.

Auguries for the Ruling Period

The first minute leads to a bountiful life of 1,000 years that cannot be summed up in words. There will be elephants, lions and palanquins everywhere. The second one leads to a life of 800 years that will be happy and prosperous. The owner will enjoy the goodwill of kings. He will have many friends, and the Goddess of Fortune will rule over the house. The third minute leads to a life of 600 years, great happiness, goodwill from kings and nobles, fame and favor at court. The fourth minute leads to a life of 150 years. The owner will be as wealthy as Kubera. His lineage will prosper, and people will praise him. He will go around on horseback or in some other kind of conveyance and will not be obliged to travel on foot. Four hundred years of life will follow if the fifth minute is used. The owner will be so wealthy that no words can describe it. The owner will be prosperous and marry well. He will have no enemies.

Auguries for the Waning Period

If the first minute is used, the life span will be a mere fifty years, and there will be terror from thieves and fire. No one will help the householders, and there will not be a second of happiness in the house. The dwelling will always be afflicted by misery. If the second one is used, a foreshortened life of forty years is in store. Illness, poverty and terror from fire are some of the other consequences. If the third one is used, a ruinous life of thirty-five years is predicted. The householders will lack money, friends and heirs. Nothing will ever work out. If the fourth minute is used, there will be a span of thirty years. The house will go to ruin in poverty and distress. If the fifth minute is used, the span will be only twenty years. Misery will be everlasting. No one will assist the householders, enemies will abound and the residents will be so poor that they will not be able to afford a lamp.

Auguries for the Setting Period

If the first minute is used, the predicted lifespan will be twenty years, but it may be foreshortened to five by some disaster. There will be misery in the house. If the second one is used, the entire lineage will be destroyed within ten years. The other consequences are punishment, loss of wealth, loss of support

and anguish. If the third one is used, the house will be robbed within five years. The owner will die soon after he occupies the house. He will never have a single day of peace. If the fourth one is used, there will be a lifespan of a mere three years. Misery and fear of death are the other consequences. If the fifth one is used, the owner will up and die in a year. The family will be ruined. The occupants will be unspeakably wretched. So, it is very important to reconcile the times at which the Site Spirit is awake with these other considerations when you plan out a site consecration ceremony.

The Science of Divination Through Respiration

Sometimes it is difficult to determine the correct time from the complicated procedures given above. So here is an alternate method. When the owner breathes out through his left nostril, it is a good time to start housebuilding activities. The portents are not as good when he is breathing out of his right nostril. If he is breathing out of both nostrils, then the portents are comparably worse.

Finding Auspicious Months

In Taurus, Gemini and Cancer, the stomach is in the northeast, the neck in the northwest and the tail in the southwest.²⁸ The months of Leo, Virgo, and Libra come next. In these months, the head will be in the northwest, the stomach in the southwest and the tail in the southeast. After these months come Scorpio, Sagittarius and Capricorn. In those months the head will be in the southeast, the stomach in the northeast and the tail in the northwest. Install the first post in the area of the stomach. That will make you lucky. If you do it on the head, it will lead to death, and if you do it on the back, bad luck will follow. If you do it on the tail, there will be incessant quarreling.

After you perform the puja to the Site Spirit, impale the stomach and recite verses from the Vedas. It is best to lay the foundation in the three months beginning with Aries, in the three months from Cancer, in the three months from Libra and in the three months from Capricorn only after you have thought about the direction in which the Site Spirit is lying.

In the three months starting with Aries, do these things in the north. In the three starting with Cancer, do them in the east. In the three from Libra

²⁸ These passages seems to describe a snake, but no sense can be made out of them because of substantive errors and careless editing. For a depiction of the image the author might have been trying to describe, see Figure 22.

onward, do them in the south and in the three months starting with Capricorn, do them in the west. If you cut the door in the area of the Site Spirit's head, the household head will perish. If you do it on the back, your parents will perish. If you do it on the tail or feet, the women will perish, but if you do it in the stomach, you will have very good luck.

The Construction of a Building and the Position of the Moon

In the seven asterisms beginning with Krittika, the third, the moon is in the east. In the seven beginning with Anuradha, the seventeenth, the moon is in the west. In the seven beginning with Magha, the tenth, the moon is in the south, and in the seven beginning with Dhanistha, the twenty-third, the moon is in the north.

If the asterism under which an auspicious ceremony is performed is opposed to the asterism of the owner, it will bring him very bad luck. If it is to the right side of his asterism, the householder will come into a great deal of money. If it is to the left side, the women in the house will be blessed. The householder should offer prayers. He should chant the mantra that begins with *sivayanamah* and the mantra *nivarttayami*. He should then impale the stomach area of the Site Spirit with an iron rod. The deeper the cut, the longer the Site Spirit will remain in the house.

Then, the iron rod should be covered with cloth and given to a Brahmin along with money and betel leaves. If the cloth is folded once, the owner will have male heirs. If twice, he will have daughters and granddaughters.

Dreams

Auspicious words and the sight of handsome men and women will ward off the evil eye. At this time, the recitation of the Vedas, and the sight of flowers, offerings and musical instruments are all auspicious. Curd, gold, buried treasure, silver, pearls, jewelry, coral, gems, gold leaf, cat's eyes, crystal, savories and perfumes are all auspicious for the site. Thorns, date palms, honeycombs, termites, insects, hair, bones, nails and so forth are not good.

First, the petitioner should worship Ganesh, Lord Indra, the deities of the directions and the nine planets. He should also worship the earth. Next, he should spread a white cloth on a clean spot, sit down, and worship the Goddess of Fortune and Badrakali,²⁹ chanting the necessary mantras. Then, he should invoke the deities of the earth with special mantras. The petitioner should wear

²⁹ The goddess Durga in her horrific aspect.

silk clothes and face the east. He should chant the mantra beginning with *sudra sudra*, and he should also recite the *sadrikkeyum*³⁰ prayer. Along with the Brahmins, astrologers, and the family priest, he should pray to the deities. Next, he should clear and purify the place, scattering white mustard seeds and reciting more mantras. He should utter the mantra *yatastai tan, yajakkirtho deva mut avi* and venerate the deities. Then, he should lie down on his right side and repeat the following invocation: “O Siva, the three-eyed one, O Rudra. O thou who ridest the bull, answer our prayers.” If he has good dreams after he falls asleep, it is a sign of good luck.

Significance of the Various Directions

When you build a new house in a new place, take note of the following. A house built in the east will be blessed by the Goddess of Fortune. One in the southeast will bring on misery, and the one in the south is associated with Yama. The one in the southwest spells terror, and the house in the west is one of the waters. The house in the northwest is associated with the fear of death, but the one in the north will bring on longlasting prosperity, and the one in the northeast is associated with the nine precious stones.

The Portents of the Months

These are the portents of the months:³¹ April-May (illness), May-June (wealth), June-July (fear of death), July-August (loss of cattle), August-September (many friends), September-October (no friends), October-November (discord), November-December (prosperity), December-January (fear of death), January-February (fear of fire), February-March (luck in precious stones), and March-April (fear of death). June-July, September-October, December-January, and March-April are unlucky months for housebuilding. May-June, August-September, November-December and February-March are the lucky months. Mixed results come from the house built in the remaining months.

Portents of Days

Monday, Wednesday, Thursday and Friday are good days for beginning construction. Saturday and Sunday are neutral. Tuesday is very unlucky.

³⁰ The print is not clear here.

³¹ These refer to the months of the Tamil calendar.

Portents of Lunar Days

The following lunar days are not good: the eighth day after the new moon, the fourth day, the fourteenth day, the new moon day and the full moon day. The others are acceptable.

Portents of Asterisms

The following asterisms are auspicious: Rohini, the fourth, Sravana, the twenty-second, Anuradha, the seventeenth, Pushya, the eighth, Uttaraphalguni, the twelfth, Uttarabhadra, the twenty-sixth, Revati, the twenty-seventh, Mrigasiras, the fifth and Hasta, the thirteenth. Chitra, the fourteenth, Dhanistha, the twenty-third, Svati, the fifteenth, and Satabhishak, the twenty-fourth are neutral. The rest of the asterisms are inauspicious.

Houses of the Zodiac

The fixed signs of the Zodiac: Taurus, Leo, Scorpio, and Aquarius are good. Gemini, Virgo, Sagittarius and Pisces are neutral. The rest of the houses are not auspicious. If you build under favorable astrological conditions, you will have wealth, prosperity and success for your family.

Building Without Paying Attention to the Portents of the Months

When certain kinds of flimsy materials are used in housebuilding, i.e., wood like bulrush, palmyra, bamboo and sugarcane, you need not look for good and bad months. However, when durable materials such as brick or stone are used in housebuilding, it is necessary to pay attention to these matters. In months that are supposed to be very lucky, you should not just go off and start building a house. You need to take note of other things such as the position and strength of Jupiter, Venus, the sun and Mars before beginning. A good time to start building the house is when the moon and Mercury are strong. Most important of all, the positions of the sun and the moon should be taken into account.

Good and Bad Planetary Influences

If the sun is in the house of the owner's lagna, the master of its house will fall ill. If Venus is there, there will be no prosperity in the house. If Mercury is there, the children and grandchildren will be adversely affected. If the moon is there, bad luck will come to friends. If Mars is there, the siblings of the owner will be badly affected. If the sun is in a strong position, and the owner's Zodiac

sign and asterism are weak, the sun will dominate. When the ruling planet is in a debilitated condition, no ceremonies should take place.

If a foundation laying ceremony is performed when the sun is in the same lagna, the owner will be stricken with leprosy. If it is in the second house away, poverty results. The following are the other portents: third house (wealth), fourth (fear), fifth (death of children), sixth (enemies will suffer), seventh (loss of wife), eighth (death), ninth (no good fortune), tenth (success), eleventh (wealth) and twelfth (loss of wealth.)

Before performing any ceremony or undertaking any housebuilding at all, you should worship all the ancient deities. Unless you do so, you will not lead a peaceful and happy life. When ceremonies are conducted during good planetary conjunctions, or if Jupiter is in the sixth house from the lagna, or if the sun is in the twelfth house or if Mercury is in the fourth house and Saturn is in the third house, the dwelling will last for 100 years.

If Venus and Mercury are in the seventh house, the sun is in the eleventh house and Jupiter is in the first, fourth, seventh or tenth house, the house will last for 100 years.

If Jupiter is in the fourth house, the moon is in the seventh house and the sun and Mars are in the eleventh house, the house will last for 80 years.

If Venus is in the lagna, Jupiter is in the fifth house, Mars is in the sixth house and the sun is in the third house, the house will last 100 years. If Venus and Jupiter are in the lagna, Mars is in the sixth house, and the sun is either in the first quarter or the third, that house can go on for 200 years.

If Venus is in the lagna, or in Taurus or in Pisces, and if Jupiter is in the fourth house or in Sagittarius, Pisces or Cancer, and if Saturn is in Capricorn or Aquarius, that house will go on for 1,000 years.

If Mercury is in Gemini or Virgo, or in the first, fourth, seventh, or tenth house, the house will last for 200 years. If Cancer is the lagna and the moon is there, and if Jupiter is in the first, fourth, seventh or tenth house, and if the sun is in Leo, Aries or Scorpio, the Goddess of Fortune will reign in that house for a very long time.

When Venus is in the lagna, and the sun is in the fourth or seventh house, towers and weaving houses built at that time will last 100 years. If the moon is in the lagna, and Mercury and Jupiter are in the fourth house, the house will go on for 100 years.

If Venus is in the lagna or in the tenth house, and Mercury is in the third house, and Jupiter has set, the house will last 600 years.

If a ceremony is performed when Jupiter is in the ksetram³² and Mercury is in the house of Jupiter, the house will last for 800 years. If in addition the sun sets or the moon rises at the same time, the building will last for 1,000 years.

When Venus is in the lagna and is ruling the seventh house, and the moon is in the tenth house, the house will last 1,000 years.

If an auspicious moment is chosen when Venus is in the lagna or Jupiter is in the ksetram, you need not fear fire. When the moon is in Cancer, Pisces or Capricorn, it is a good time to lay up hay. On a Thursday when Rahu (the ascending node) is in the following lunar asterisms, to wit, Purvashadha, the twentieth, Sravana, the twenty-second, Rohini, the fourth, Uttaraphalguni, the twelfth, Uttarashadha, the twenty-first, Aslesha, the ninth and Mrigasiras, the fifth, the ceremony will bring happiness.

Wealth will be the result of performing a ceremony on a Friday when Venus is in an aquatic sign of the Zodiac. If the moon stands in an aquatic sign at the time of the wife's menstrual period or during a bereavement, it is inauspicious.

Effects of the Sun

If you start building a house when the sun lies in the second part of Bharani, the fourth part of Krittika or the first part of Rohini, fire may break out.

Effects of Mars

If you start building a house when Mars is in Krittika, Pusya, Magha, Purvaphalguni, Hasta, Mula or Revati, your children will perish. When the moon, Jupiter and Venus are opposed to Virgo, Gemini, Libra or the aquatic signs of the Zodiac, there is no need to consider the potential effects of Mars.

Effects of Mercury

The family will thrive if housebuilding is started when Mercury is in Asvini, Mrigasiras, Hasta, Chitra, Rohini or Uttaraphalguni or high in the lagna.

Effects of Jupiter

If Jupiter is in the lagna or in Sravana, Uttarashada, Purvashada, Mrigasiras, Aslesha, Rohini or Pusya, it will bring forth everything in plenty.

³² The situation of the moon in conjunction with Jupiter, also in the first, fourth, seventh or tenth sign.

Effects of Venus

If Venus is in Kritika, Punarvasu, Chitra, Asvini, Purvashada, Dhanistha, Anuradha, Ardhra, Vishaka or Satabhishak, the family will be healthy and prosperous.

Effects of Saturn

If Saturn is in Satabhishak, Purvabhadra, Svati, Uttarabhadra, Bharani, Dhanishtha, Anuradha or Kritika, the house will be taken over by birds and demons.

Effects of Rahu

The third asterism forward from the one in which Rahu is located and fourteen more after that foretell death.

Inauspicious Conjunctions

1. Do not build houses when Venus and Jupiter are set or when they are waning. Whatever caste the builder of the house belongs to, if his birth planet is aligned with an opposing planet or has set or is waning, it is not the householder but outsiders who will eventually occupy the house.
2. The ksetra planet is inimical to the rising one, and if in the tenth place, it is also inimical.
3. When a house is built when an inimical asterism is in an inimical house to the lagna of origin or is in the seventh or the tenth house of the Zodiac, the house will be of no use to anyone.
4. If the house is built when there are waning planets in the lagna, or if there are no favorable planets opposite, the house will be unlucky for the owner.
5. If a house is built when the moon is waning in the lagna, or if Mars is in the eighth house, it will go to ruin.
6. Below are the portents of the times for laying the foundation with respect to the positions of the planets in the twelve houses of the Zodiac. If a house is built when the sun is in the lagna, the house will be struck by lightning. If the

moon is in the lagna, the owner will fall on hard times. If Mars is in the lagna, the owner will fear death. If Mercury is in the lagna, he will be prosperous. If Jupiter is in the lagna, the owners will be prosperous. If Venus is in the lagna, the house will be blessed with children. If Saturn is in the lagna, the family will fall on hard times.

7. If a house is built when the sun is in the second house, the owners will lose money. If the moon is in the second house, they will lose gems. If Mars is in the second house, wild animals will frequent the place. If Mercury is in the second house, the owners will be rich. If Venus is in the second house, the family will be healthy. If Saturn is in the second house, there will be all sorts of trouble for the owner.

8. If there are good planets in the third house, it does not matter what other planets are there.

9. If the sun is in the fourth house from the lagna, it will lead to terror. If the moon is there, it will bring good health. If Mercury is there, the owners will be rich. If Jupiter is there, the owner will win the favor of kings. If Venus is there, it will be blessed. If Saturn or Mars are there, the owner will lose everything.

10. If the sun is in the fifth house from the lagna, children will die. If the moon is there, there will be discord. If Mars is there, expect enemies. If Mercury is there, expect big profits. If Jupiter is there, health, wealth and prosperity will follow. If Venus is there, the house will be blessed with many children. If Saturn is there, expect trouble with relatives.

11. If the sun is in the sixth house from the lagna, expect good health. If the moon is there, expect the same. If Mars is there, you will find buried treasure. If Mercury is there, you will be cursed by poverty. If Jupiter is there, mantras will be efficacious. If Venus is there, there will be no ill effects. If Saturn is there, life will be tranquil.

12. If the sun is in the seventh house from the lagna, the owner will lose his reputation. If the moon is there, expect trouble and worry. If Mars is there, there will be accidents. If Mercury is there, the owner will possess horses and

carts. If Jupiter is there, the owner will acquire an elephant. If Venus is there, he will come into more land. If Saturn is there, he is likely to fall ill.

13. If the sun is in the eighth house from the lagna, enemies will suffer. If the moon is there, all will go to ruin. If Mars is there, there will be conflict. If Mercury is there, the owner will be rich and command respect. If Jupiter is there, he will be doubted by others. If Venus is there, there will be conflict. If Saturn is there, the householders will fall ill.

14. If the sun is in the ninth house from the lagna, the owner will become very stingy. If the moon is there, he will fall ill. If Mars is there, money will be scarce. If Mercury is there, all kinds of happiness will follow. If Jupiter is there, the owner will be widely respected. If Venus is there, you will defeat your enemies. If Saturn is there, it will lead to dishonor.

15. If the sun is in the tenth house from the lagna, the owners will have many friends. If Mars is there, they will acquire precious stones. If Mercury is there, they will get money through the women in the house. If Jupiter is there, they will acquire household goods. If Saturn is there, it will make you famous.

16. It does not matter whether the planets in the eleventh house from the lagna are weak or strong, the owners will still enjoy good results.

17. After performing the initial consecration ceremony, you should refer to a book on architecture and plan out the house to suit your family, closely observing all the rules and precepts described therein. After that you can start laying the foundation.

CHAPTER 4

The Entrance (vacalpati)

There are fifteen different types of designs described for installing an entrance. Divide the twelve months of the year into threes and locate the entrance on the side the Site Spirit is facing. If it is put in any other position, there will be misery in the house. No other position (other than the one the Site Spirit is

facing) is suitable for installing the door. During the three months in which no auspicious work can be undertaken, no entrance should be placed on the eastern side. If you must, you can put the door on the other three sides during these months.

When the sun is in Cancer, an entrance can be placed in the east, and in Aquarius, it can be put in the west. During Aries, it can be put in the north, and in Sagittarius, it should be put in the south. If you fail to observe these rules, illness and bad luck will follow.

In August-September, put the entrance in the west, and in October-November, put it in the north. In July-August, put it in the east. It should not be placed in the west. Also, in October-November, if the sun has already entered Scorpio, it should not be placed in the west. In January-February and February-March, do not put it in the north. When the sun is in Leo and Cancer, an entrance should not be put on the south. During July-August, September-October, December-January and March-April, no main posts or pillars should be set in place. During August-September and February-March, do not cut down trees for doorways. If you do so, the house will go up in flames. From the full moon to the eighth lunar day, place no entrance on the east and from the ninth lunar day to the fourteenth in the lunar fortnight, place none on the north.

Put the entrances for Brahmins on the north, for the warriors on the west, for the Vaisyas on the east and for the Sudras on the south. Cancer, Scorpio, and Pisces are good for Brahmins, Aries, Leo and Sagittarius are good for warriors, Taurus, Virgo and Capricorn are good for Vaisyas, and Gemini, Aquarius and Libra for Sudras. It is advisable to install the door under the appropriate sign of the Zodiac. If you do otherwise, you may have bad luck. When the moon is in Sagittarius, Aries or Leo, the door should be put on the east, and when it is in Taurus, Virgo or Capricorn, it should be put on the south. When the moon is in Gemini, Libra or Aquarius, the door should be put on the west, and when it is in Cancer, Scorpio and Pisces, it should go on the north.

Build doors in the east under the seven asterism beginning with Krittika, in the south under the seven asterisms beginning with Magha, in the west under the six asterisms beginning with Anuradha and in the east under the seven asterisms beginning with Dhanistha, but not behind these directions. Brahmins can place doorways in the directions in which these bodies are in retrograde.

Put no door in the north in the month of August-September. Do not put a door on the west or the south during May-June. Remember that doorways should not face the corner directions. The consequences will be discord and danger from fire.

Beginning with the month of December-January, divide the months into segments of three. No entrance should be put in place on a Sunday in the following direction: southwest, north, northwest, south and southeast. Do not use the east. Do not install doors, build houses or organize housewarmings on Sundays.

There should not be too many apertures in the walls. A door to the east will yield bountiful harvests. One to the south will bring victory. One to the west will bring good health. A door on the north will bring on health, wealth and prosperity.

There should be no opening to the minor directions. In the northeast, however, a small opening of about one inch can be made.³³ A door facing directly north is not good. This orientation is a so-so one for places of worship, but if it is used for houses, it is very unlucky. The northeast is the same. An orientation to the south can bring about accidents. Entrances on all four sides can lead to victory. However, this arrangement is good only for kings.

Features of the Main Entrance

A plank, called the sun plank, should be placed above the door. The planks on the sides should be in pairs. There should be three steps to the door. If the door post is set in place under an asterism that faces upward, the owner will be famous and powerful. If the post is installed under asterisms that face downward, he will perish. Transverse asterisms bring health and good fortune.³⁴ The door should be not installed under one that is incompatible with the birth asterism of the owner.

The door post can be installed under the transverse asterisms. The side planks can be put in place under Asvini, Uttaraphalguni, Hasta, Pushya, Svati, Mrigasiras, Rohini and Punarvasu and on the following lunar days: the fifth, the seventh, and the ninth. If they are installed on the new moon day, it will cause misery. The second day causes loss, the third, sickness, the fourth, very bad luck. The eighth day brings bad luck to the whole community. The tenth day brings loss of wealth, and the full moon is not lucky. These days are not good for installing the frame.

Before installing the main post, a puja should be performed for the Site Spirit, the directional guardians and the nine planets. The good planets should

³³ Again, an apparent reference to keeping the main northeast diagonal open.

³⁴ The twenty-seven asterisms are grouped into three sets of nine, those that face upward, those that face downward and those that are transverse. Those facing upward are numbers 2, 3, 9, 10, 11, 16, 19, 20, and 25. Those facing downward are 4, 6, 8, 12, 21, 22, 23, 24, and 26. Those that are transverse are 1, 5, 7, 13, 14, 15, 17, 18, and 27.

be in the first, fourth, seventh and tenth houses of the Zodiac, and the malefic ones should be in the third or sixth houses. The lagna, the sixth house and the twelfth house must be completely favorable before any decision is taken to make an opening in the wall.

After the walls have been constructed, they should not be knocked out in order to create an entrance. Entrances can be installed on any of the four sides of the house, but if they are on all sides but east, the house will attract animals and thieves. If there are entrances on all sides but south, it will bring good luck. If there are entrances on all sides but west, it brings the best possible results. If there are entrances on all sides but north, it is also good.

Installing the Street Door

Measure the side of the house and divide it into nine parts which are sun, moon, Mars, Mercury, Jupiter, Venus, Saturn, Rahu and Ketu respectively. You can put the entrance in the areas assigned to the moon or Mercury. To use other parts of the facade for the door is not appropriate in the case of houses. If it is placed in the area of the sun, it must face the east. If it is placed in the area of the moon, it must face south. For temples and palaces it can be placed in the Jupiter area. Doors to cattlesheds should be placed in the area of Venus.

Effects of Building Doorways in the Nine Areas

A door constructed in the area of the sun will lead to discord and loss of wealth. One constructed in the moon area, will make you very prosperous. If it is in the Mars area, there will be debts, suits and loss of wealth. If it is placed in the Mercury or Jupiter area, it will bring forth riches, but you should be careful to place the door slightly off center. If it is in the area of Venus, look for paltry returns, disputes and trouble. Saturn, Rahu and Ketu will lead to loss of children, money and, eventually, the house itself.

The areas of the facade assigned to Mars and Jupiter give good results, but if there are other kinds of constraints on where the door should be placed, the opening can be moved a little to one side or the other. If you do so, however, do not expect the best possible outcome.

A house with main buildings in the south and west is 'lotus-like' and brings prosperity. Those with buildings in the west and north are called 'golden' and are associated with thieves and illness. Those with buildings in the north and east are called 'flower-destroying' and are associated with the threat of robbery. A house built in the south, west and north is called 'lineage destroying' and generates fear. A house with an entrance on the west with rooms or buildings

in the east, south or north is a configuration associated with bad luck and injury. If a house is built on the east, west and south and a main entrance on the north, the occupants will be healthy and happy. For houses built in the west, east and north, entrances can be placed in the three directions. It leads to health and happiness. Entrances built on the four sides of houses built in all four directions bring very good luck, but they are meant only for kings and gods.

Setting the Main Pillar or Post

The activities associated with the cutting of the trees for the post should be undertaken under asterisms that face downward. The post should be set during their transverse aspects. For a two storey house, the post should be put in the southeast. Installing it in the first watch is good. The second one leads to fear. The others are prohibited. After setting the post, the owner should not look at the sky so as to avoid bad omens from birds of prey. Do not allow any bird to sit on the post. If necessary, a parasol should be tied to the top of it. Precious stones should be buried beneath. Before you do any construction, you should organize a puja for the Site Spirit.

No door should be built in the center of the house. The post should not be made of granite. Only one type of wood should be used for making the doorframe. The post should be constructed when Jupiter is in the lagna. The crossbeam should be placed when Mercury is in the lagna. If the roof tiles are placed when Venus is in the lagna, the house will be free of fire, terror and theft. If you start building on a Friday when the moon is in the fifth house of the Zodiac and Venus is in the ninth house from an aquatic sign, you will be healthy, wealthy and happy.

Conduct the ceremony for installing the post in the southeast when the sun is in Taurus, Cancer, Virgo, Aquarius or Libra and when the moon is in Uttaraphalguni, Hasta or Chitra. The ceremony should be conducted in the southwest corner of the house when the moon is in contact with Aquarius, Pisces, and Aries or when the moon is in Rohini, Mrigasiras or Punarvasu.

The Height of the Walls

The bricks should be one cubit by two. A height of ten spans is for Brahmins, sixteen for warriors, nine for Vaisyas and eight spans for Sudras. The walls should never be shorter. If the wall falls down during construction, the owner will have to worry about theft. If an outer wall falls, there will be discord. If an inner wall falls, it is bad luck for the owner. The wall should generally be at least nine feet in height and one and a half feet thick. For doorways and posts,

make sure that the cut tree is installed in the same way it grew, that is with its root side down. Similarly, for horizontal members, the root side should face west or south and the top should face north or east.

Dividing the House Into 64 Parts for Building

The site should be divided into 64 squares leaving 16 in the center as open space. The remaining 48 can be used for building. Before beginning any construction, remember that you must organize a puja for the Site Spirit.

The Party Wall

The overall measurements for the house include the exterior walls. All four walls must be taken into account, but if one building is attached to another, the three walls should be included in the calculations but not the party wall. The spaces occupied by the lane by the side of the house and the roof overhang should not be considered in calculating the overall dimensions.

Wood for Constructing the Entrance

Teak, kino and *puvarasu* (Portia tree, *thespesia populnea*) are the preferred woods for doorframes. You should avoid using other types of woods. The frame should be divided vertically into nine parts. The proportion of the width to the height should be nine to five. The same type of wood should be used for the entire frame. Use the same wood for the windows and doors. Use a single plank of wood, not two, for each door of the house.³⁵

The doorway to the house should be at a higher elevation than the outside entrance (to the compound.) Otherwise, the owner will lose his property. Odd numbers such as 1, 5, and 9 should be used as dimensions for the interior spaces between the pillars, that is for the courtyard. Even numbers are bad. The main beams must be equal on all four sides. As for the rooms of the house, they should have dimensions such as 5, 7, 9, and 11 and not 1, 2, 3, 4, 6, 8, 10, and 12. Measure the dwelling using the appropriate stick and then divide the area by 8.³⁶ A remainder of 1 or 2 is auspicious. The lintels of the house should not be uneven. The entrances of the rooms of the house should not be directly opposite each other. This leads to anguish and distress.

³⁵ This would seem to apply to a door of two leaves.

³⁶ This refers to the *yonī* formula discussed below.

The Number of Detached Buildings or Rooms

The house of the Brahmin should be composed of four rooms³⁷ and that of the warriors, three. The Vaisya house is composed of two, and the Sudra house is composed of a single main building. Houses with a single main building are good for all castes.

The Location of the Cattleshed, Staircase and Drains

The cattleshed should be separate from the house. It should be placed in the north or east parts of the compound. The staircase should be built so that it rises upward to the north or east. The drains should flow outward to the north, northeast or east. If the drains flow to the west, it is not a serious matter, but no drain should flow to the south.

The Use of the Eight Directions Within the House

Put the shrine room, bedrooms and granary in the east. Use the southeast for the kitchen and dining area. The husband and wife should not use the southeast for their bedroom since children conceived there will turn out to be thieves. The south can be used for the shrine room and dining, but not for anything else. No bedrooms should be located in this direction since children conceived there will be born deaf, dumb, blind or with other handicaps. The southwest may be used for storage of vessels, weapons and study, but not for other purposes. The shrine may be in the west. Male children conceived there will be wise, and females will be chaste and virtuous. Northwest is used for grain storage and the shrine. A lying-in room may be constructed here, but no bedrooms should be placed on this side. A child conceived here will be poor. Money should be kept on the north side of the house, and bedrooms can be placed there as well. The granary can be placed in the northeast, as can the shrine and the bedrooms of the owners.

The kitchen outside of the house (in a separate outbuilding) should be in the east. Put the cattle shed in the southeast, the rubbish pit in the south, the garden in the southwest, the buffalo shed in the west, the granary in the northwest, the dining room in the north and the well in the northeast.

³⁷ This refers to detached, or semi-detached buildings arranged around a central courtyard.

CHAPTER 5

Instructions for Felling Timber

1. The following trees are good for Brahmins: cedar, teak, sandalwood, vanni, the mahua and the Battle of Plassey tree.
2. The following trees are good for warriors: ebony, *vilvam* (bael tree, *aegle marmelos*), the maruta tree (*terminalia alata*), sal and teak.
3. The following are the ones suitable for the Vaisya: ebony, *sindu* (Tuscan jasmine), sandalwood, arka, banyan and mango.
4. Mango trees, those with thorns and those with milky sap are good for Sudras.
5. Fell timber during the fixed signs of the Zodiac, that is when the sun is in Gemini, Virgo, Sagittarius, and Pisces, and during the months of February-March and September-October.
6. You can also fell timber under the asterisms that are two, three, four, eight and nine places away from the sun, and under the asterisms in which the moon is located. These times are suitable for all four castes.
7. It is auspicious to use the same wood for the entire house. If two woods are used, the portents are neutral. If three types of wood are used for the house, it will bring you bad luck.
8. Fruit bearing trees and those with milky sap or thorns should be avoided.

Good and Bad Trees for Housebuilding

9. Trees that ooze milky sap have bad effects on human beings and other creatures that nurse their young. Trees with thorns lead to discord. Fruit bearing trees will bring bad luck to the children. Do not use the following timber: wood from cremation grounds, trees struck by lightning or felled by

wind, rotten trees, temple trees, trees that are chopped up or dried out, forked trees, fruit trees, lean trees, female trees and those with too many branches.

10. You will lose your money if you use trees with milky sap or those in which birds have built their nests. Trees where crows once lived will bring on disease. Trees from cremation grounds will lead to death. Trees felled by storms and lightning will bring on more of the same. If trees along the byways are used, it will bring on bad luck, and if those from the town are felled, it will lead to terror. Trees from intersections where roads meet will bring bad luck right down through the generations. Deformed trees lead to stillborn children. Rotten trees lead to trouble with authorities. Trees with three forks lead to problems in pregnancy. Trees cut by strangers bring enemies to the house. Trees from parks cause harm. Trees entwined with creepers lead to poverty. Flowering trees and those from temple grounds cause fear. Trees with holes bring on danger from snakes. If female trees are used, only female children will be born. Do not cut down any trees when the moon is in Kritika, Rohini, Mrigashira, Ardra or Punarvasu.

11. Before felling any timber, you must examine the position of the stars and the planets.

12. The malefic period in the month, the one in the week and the one in the lunar fortnight are not good times to fell timber. Other inauspicious times include the new moon day and the sixth lunar day. Do not cut timber at the time of eclipses or under a death conjunction of the planets.

13. The following asterisms are generally good for the felling of timber: Mrigashira, Punarvasu, Anuradha, Mula, Uttaraphalguni, Uttarashada and Shraavana.

Procedures for Felling the Tree

14. The ground should be leveled for the puja and the tree should be venerated with flowers, fruit, and sweetmeats. It should be covered with dhotis (cloths worn by males) and tied with sacred threads.

15. At an auspicious time, the builder, or whoever cuts down the tree should tie a sacred thread around his arm. He should then touch the tree to be felled and repeat the following: "I worship this tree. However many demons are living in this tree, may you all prosper. I salute you all."

16. The builder should set out such things as sweetmeats, curd and lighted lamps for the puja and repeat the following: Please accept my prayers O you spirits, hobgoblins and demons of various stripes. I am petitioning you on behalf of the house. Please give it your blessings and bless our efforts. I beg you all to accept what I have offered and to go elsewhere to dwell from now on. I salute you all."

17. Then he should anoint the tree with water, pour out honey and ghee and cut the tree from the northeast with his right hand.

Portents Associated with the Direction in Which the Tree is Felled

18. If the tree falls to the east, you will be wealthy. If it falls to the southeast, the house will be consumed by fire. If it falls to the south, you will perish. The southwest will lead to discord, the west to abundant cattle, the northwest to plunder, the north to wealth and the northeast to blessings of all kinds.

19. If the tree falls on other trees, or if it breaks in pieces, the portents are not good.

20. If a branch falls on a living creature and kills it, it will lead to poverty.

21. If the tree is felled in one piece, it will lead to prosperity. If in two pieces, it is also good. But if it breaks apart and falls in three pieces, it will lead to misery. If it breaks into four or six pieces, wealth will increase, but if it separates into five pieces, it is very inauspicious. If the sections of the tree have hollows in them or if the outer bark of the tree penetrates the wood, it will cause misery. If the timber is bent, the owner will run out of money. If the pieces have gashes in them, it can lead to illness. If the pieces are unusually large, the owner will have many daughters. If the pieces are wormy or dripping with sap, it will bring on very bad luck.

22. Avoid the bright half of the lunar month in felling timber. The dark half of the lunar month is acceptable.
23. Once the trees are felled, they should be carried to the house or transported on a cart.
24. If the timber is not cut cleanly, or is of a peculiar hue, it is inauspicious.
25. When the tree is brought home, if anyone young or old makes a prediction, it will come to pass, so people should hold their tongues. If the rope breaks while the tree is being moved, the children will fall ill.
26. Now you know the scientific method of felling timber. Remember these instructions when you do it.

CHAPTER 6

Rules for Housewarming

1. Jupiter and the moon must be in a strong position for a successful housewarming to take place.
2. July-August, August-September, September-October, December-January, January-February and February-March are not good months for the housewarming.
3. The other six months are good ones in which to have the ceremony.
4. On the day before the housewarming, you should do the puja to the Site Spirit and make sacrifices to the demons. Colored stones should be set out in the four directions and the offerings placed on the four sides while uttering the mantra that begins with *hey butali*.
5. Lamps should be lighted from the east to the west. Then the householder should offer ghee, honey and sweetmeats and appease the deities. After this,

the Site Spirit should be worshiped with the mantra that begins with *visnunaradamasi*.³⁸ The serpents who are the lords of the directions should also be venerated with the mantra beginning *namo asta sri devaya*. The other deities should be worshiped by reciting the Gayatri.³⁹

6. The person uttering the mantra should do so at an auspicious time.

Auspicious Times for Housewarming

7. July-August, August-September, September-October, December-January, January-February and February-March are not good months. It is not necessary to observe auspicious times in order to renovate or repair old houses.
8. Before you conduct a housewarming, appear before kings or go on long journeys, you need to observe the correct position of the sun.
9. If you go on a journey or do a housewarming ceremony in a particular place, do not repeat the same activity nine years, nine months or nine days later or after nine hours on the same day.
10. Do not embark on two different major undertaking such as journeys and housewarmings on the same day.
11. The best times for a housewarming are those when the sun in the north from January-February to June-July. When the sun is in Cancer, Virgo, Sagittarius or Aquarius, a first entry into a house can be made during the fixed (*stira*) asterisms, but not under the ones that are not fixed (*sara*) or Uttaraphalguni.
12. If Rahu is in the asterism, it is not auspicious. Vishaka, the sixteenth lunar asterism, will bring destruction. The Agni asterisms lead to fear from fire.⁴⁰ A

³⁸ Some of the letters are missing here.

³⁹ A mantra regarded as one of extraordinary power that is repeated in daily devotions. It is addressed to the sun.

⁴⁰ There are three such periods each year: when the sun is in the last quarter of the second lunar asterism Bharani, when it is the third lunar asterism Kritika and when it is in the first quarter of the fourth lunar asterism Rohini.

second phase of the moon occurring in the same month is inauspicious. Tuesdays, Saturdays and Sundays are likewise. They will lead to terror from thieves. The following conjunctions are inauspicious: the south during the eleventh phase of the moon, the west during the second, seventh and twelfth lunar days of a lunar fortnight, the north during the third, eighth and thirteenth lunar days and the east on the full moon day.

13. The first phase counted from the owner's own will lead to freedom from illness. The others are as follows: (2) poverty, (3) wealth, (4) discord among relatives, (5) bad for children, (6) bad for enemies, (7) poverty, (8) death, (9) good health, (10) and (11) success and (12) ruin.

14. If you are under the favorable aspect of the declination and in a good lagna, it is good. Opposing ones are inauspicious.

15. Aries will bring destruction. Cancer and Libra can bring on illness and Capricorn can cause the ruin of crops.

16. Whoever conducts a ceremony venerating the Site Spirit under the following asterisms will have the blessings of the Goddess of Fortune: Chitra, Satabhisak, Svati, Anuradha, Pusa, Punarvasu, Rohini, Revati, Mula, Sravana, Uttaraphalguni, Dhanistha, Uttarashadha, Uttarabhadra, Asvini, Hasta and Mrigasiras.

17. Do not don new clothes or engage in housewarming or marriage ceremonies during the conjunction of Venus and Jupiter.

18. If the planets are positioned in a trigon within the kendra,⁴¹ it is lucky. The sixth, eighth and twelfth places are not auspicious. Abhijit and Sravana are not auspicious for a housewarming ceremony. Jupiter in retrograde is prohibited to all but kings and Brahmins.

⁴¹ As noted previously, the kendra is the first, fourth, seventh or tenth house from the ascendant.

19. Asterisms in which Mars is located and the asterisms that precede and follow them are unlucky. If Ketu is in the lagna, it is inauspicious. Do not select times during eclipses or during a *tiyacciyam*.⁴²
20. Asterisms in which the moon is located are auspicious. The tenth, sixteenth, eighteenth, twenty-third, and twenty-fifth asterism from the birth asterism of the owner are unlucky. The rest bring good luck.
21. If Venus or Jupiter are ruling or exalted, it is auspicious.
22. If the sun is ruling in the fourth house, it is lucky.
23. If Jupiter is risen, or if Venus is set, or if the sun is in the sixth house, or if Saturn is in the eleventh at the time of housewarming, you will defeat your enemies.
24. If Venus is in the birth lagna, Jupiter is in a beneficial house of the Zodiac, the sun is in the eleventh house or Mars is in the sixth house, the portents are the same.
25. If Venus and Jupiter are in beneficial houses, and Mars and the sun are in the eleventh house, you will become wealthy.
26. If Venus, Jupiter and the moon are ruling, it is auspicious.
27. If the moon is set, it brings bad luck regardless of other considerations.
28. As for the eighth day of the waning moon, within three years the wife will perish.
29. The eighth day of the waxing moon is generally good. Do not use the seventh or there will be conflict.
30. If a housewarming is conducted under malefic asterisms or Mars, it is very unlucky.

⁴² A period of one and a half hours during an asterism considered inauspicious.

Omens for Positioning the Feet

31. When you lie down on a bed, your feet should never be pointed in the direction of a teacher, a deity, a fire, a cow or a Brahmin. You will lose all your wealth if they are.

Omens for Positioning the Head

32. If you sleep with your head to the east, you will have good luck and prosperity. If your head is in the south, you will have a long life. If in the west, it can cause misery and if in the north, you may perish. If you sleep with your head in the minor directions, count on loss of your money and luck. The north is bad because the pole star is there, and if you sleep with your head in that direction, you may fall ill.

Portents for Beds

33. You can use iron to make a bed. Figures of the elephant, lion or the cow can be carved on the frame.

34. Beds, swings and chairs should be made with sandalwood, cedar, tamarind, the maruta tree or teak. Do not use wood from thorny trees, trees felled to the west or south and trees growing close to rivers or tanks or where waterways meet. If you use them for making furniture, you can count on enemies and illness.

35. As you start to construct a bed, the sight of any of the following is a good omen: the color white, flowers, curd, an elephant, fruit and a brass pot ready for a puja.

Dimensions of Beds

36. A bed for a king should be 100 inches long and 92 inches wide. Its height should be one-third of the other dimension(s). For other people, it should be six inches shorter. For princes and ministers, it should be ten inches less. For others, it should be eighteen inches less. For Brahmins, it should be twenty inches less. The height should be six parts less.

37. Beds six feet six inches long and three feet six inches high are good for everyone.

Portents When Building the Bed: Woods and Other Matters

38. The Indian kino tree brings freedom from illness. The tamarind gives rise to bile. Sandalwood will help you defeat enemies. Ashoka wood will bring you fame. *Simsava* (also probably Ashoka)⁴³ wood is a very good one, and *padmaham* (*cerassus pudum*) will confer long life and prosperity. Teak will lead to a happy marriage.

39. If the bed is made of sandalwood, and it is studded with gold and gems, the owners will be worshiped by the gods themselves.

40. If the bed is made of Ashoka, cedar or *tindukam*, the owner will be very healthy.

41. If mango wood is used, it will lead to fear of death. If the atti fig and sandalwood are used, it is very lucky. These woods can also be used for making chairs, although the measurements for them are different.

42. If you start building a bed under the wife's birth asterism, it can cause destruction. If it is started under the birth asterism of the husband, the couple will be blessed with children.

43. Trees that look like chameleons or snakes, crooked trees or trees on which the eagle, short-horned owl or crows have dwelt should not be used.

44. Trees that are red and black are not good. Trees that are white, trees with a mild fragrance, lush, green trees and trees from the northeast are good.

⁴³ The names of some of the woods given here have been taken from Sanskrit sources. They are not Tamil words and have sometimes been curiously spelled. When I have found a gloss in a Tamil dictionary, or even an unambiguous one in Monier Williams (1899), I have provided a translation.

CHAPTER 7

The Location of Wells, Tanks, Canals and Gardens

1. You should construct wells, tanks, canals and gardens according to the principles of the ancient sciences. Before you build a well, drop a betel flower or a jasmine flower on the site where you intend to dig a well soon after the sun sets. Leave it there all night. If it has not faded in the morning, you can be sure that the site is suitable for a well. Further details will appear in Chapter 11.⁴⁴
2. If the site is triangular, square or circular, it is lucky. If it is in the shape of a bow or a pot, the portents are neutral. If it is shaped like a snake or a banner, it is unlucky.
3. Work undertaken in April-May will lead to wealth, and that undertaken in May-June will give you abundant harvests. June-July is a dangerous month for work, and July-August will bring on misery. August-September will bring you good health, but September-October will lead to danger. October-November will lead to illness, and November-December will bring on misery. If you work in December-January, you will become famous, and in January-February, wealthy. Work undertaken in February-March will lead to terror from fire. For March-April, the portents are neutral.

Portents of Times For Digging Wells

4. The well dug on Sunday will run dry. There will be no water in the one dug on Tuesday, and the water in the one dug on Saturday will go bad.
5. Wednesdays, Thursdays, Fridays and Mondays are the auspicious days for digging wells.
6. Rohini, Uttaraphalguni, Uttarashadha, Uttarabhadra, Pusya, Anuradha, Satabhisak, Dhanistha and Magha, are the asterisms under which it is auspicious to dig wells and construct canals and tanks.

⁴⁴ There is no Chapter 11.

7. The first and the eleventh day of the lunar fortnight are neutral. The fifth, seventh and twelfth day of the lunar fortnight and the third, eighth and eighteenth days and the full moon day can bring very good luck. The fourth day is unlucky.
8. If the moon is in the lagna, an aquatic sign, the twelfth house or the kendra, or if Venus, Jupiter or Mercury are in the lagna, the water will remain pure, fresh and plentiful.
9. Mars should not be in the third house, Venus should not be set, the sun should not be in the sixth house, Saturn should not be in the the eleventh house, and the beneficial planets should not be in the sixth, eighth or twelfth houses.
10. If you propitiate the lords of the directions when Saturn is in the third house, the moon is in the seventh house, the sun is in the sixth house, Mars is in the eleventh house, and the beneficial planets are in the first, fourth, ninth or tenth houses, there will be abundant water, money and children.
11. If the beneficial planets are in the first, fourth or tenth houses, all will be well. This is just the right time to sink wells and to construct waterways, canals and dikes.
12. When the moon is risen or in the lagna or Jupiter is in the kendra, wells can be sunk.
13. Three houses of the Zodiac, Leo, Sagittarius, and Scorpio, are not good for sinking wells. The others are beneficial.
14. Sink wells in a lagna that is associated with good planets or with aquatic signs or in a lagna facing beneficial planets.
15. The southeast, the south, and the northwest are not good at all. The others are better.
16. A well in the east will lead to riches, but if it is built in the southeast, the children will perish. The wife will perish if it is sunk in the south. If it is dug in

the southwest, it will lead to wickedness and poverty. The west is a good direction, but the northwest will bring out your enemies. The north will lead to fame. The northeast is beneficial in every way. Sink no well in the center of the site. It will lead to poverty. These ideas are confirmed in the book the *Vastu Ratnavali*.

17. Building waterways that run from the south to the northwest and from the west to the north will lead to illness, anguish and poverty.

CHAPTER 8

*Diagnosing Injury to the Site*⁴⁵

1. To understand whether there are any injurious substances (*sallium*) on the site, first divide a rectangle into twenty eight parts from the head to the tail beginning with the rising of Aries (probably Rahu or Sesa).⁴⁶ Add up twelve and then subtract sixteen to find the sixteen locations of *sallium* fixed in Sesa.⁴⁷
2. There are sixteen kinds of *sallium*: (1) skull, (2) bones, (3) red brick, (4) potsherds, (5) firewood, (6) an idol or image, (7) ash, (8) charcoal, (9) human bones, (10) grain, (11) gold, (12) stone, (13) frogs, (14) ivory, (15) dog bones and (16 or zero) a jar.

⁴⁵ This treatment of the portents of a site merges two redundant divinatory systems. The first ascribes good luck or bad luck to maleficent influences that lie underground. It is a system of omens and essentially non-numerative in nature. Bad luck is merely the result of bones, ash and other leavings from prior use that need to be identified, dug up and thrown out. The location of the disturbances beneath seems to have been read originally from the body of the owner by a diviner. The second system, a numerative, astrological one, must have been a subsequent overlay, as the science of astrology increased in influence during the medieval period and into the modern one. In this system, the 'body' that is read is the one of the serpent that encapsulates cosmic elements and cycles. The cakra or wheel, sometimes called the Wheel of Sesa, the cosmic serpent, is a mnemonic device for astrological data. It is not a map of the site.

⁴⁶ Mesha. Probably a scribal error for Sesa which appears immediately below.

⁴⁷ This passage is almost unintelligible because of scribal errors. It is not even clear that the term 'remainder' refers to Sesa, the great serpent (also known as 'The Remainder') but that seems to be the intent. The term used in calculations elsewhere in the text for remainder is the more common *miccam*.

3. Of these types of sallium, numbers 10, 11 and 14 are lucky, 16 is neutral, and the rest are very unlucky.

The Organization of the Cakra for Diagnosing Injury

4. The *cakra* (=wheel or astrological diagram) for diagnosing *sallium* consists of a rectangle with seven boxes in each of the major directions for twenty eight in all, each of them associated with one of the lunar asterisms.

The Cakra for the Forenoon

5. Of the seven boxes that lie in the east, leave out the first two and begin with the third. Then go three boxes southward, take four westward, five northward and two eastward four a total of fourteen so that the boxes are all enclosed in the wheel beginning with Krittika, the third asterism.⁴⁸

The Cakra for the Afternoon and Night

6. Afternoon begins with the box for Magha, the tenth asterism. Evening begins with the box for Anuradha, the seventeenth. Evening begins with Satabhisak, the twenty-fourth. For the afternoon, count westward and for evening, count eastward. The first part of the night should take you northward and the latter part of the night, south.
7. The six asterisms from Rohini onward in the morning cycle, the seven beginning with Magha in the afternoon, the seven beginning with Anuradha in the evening and the seven from Sravana in the night should be measured out in sets of 2-1/4 hours each. These boxes are the locations for *sallium*.

⁴⁸ The rest of the passage describes how the asterisms are laid out in the diagram shown in Figure 16.

Using the Zodiac Signs to Identify the Presence of Sallium

8. Since the duration of a Zodiac sign is one month plus three days, add the other days to the beginning of the cakra and then begin to count forward beginning with Krittika.⁴⁹

How to Determine Whether There is Sallium or Not

9. If the beneficent planets are in conjunction or they are opposed, it is a sign of sallium. If they are not in conjunction and are not opposed, perhaps no sallium will be found. If the moon is in conjunction with Mars, or if Mars is opposed to the moon, or if Mars rises within the Zodiac sign, it is a sign that the bones of sheep will be found.

10. If Jupiter is in conjunction with the moon, or has risen within the same Zodiac sign, it is an indication that either the bones of a Brahmin, a cow, or red brick or gold will be found.

11. *Images and buffalo bones.* When the moon is in conjunction with the sun, or if it is opposed to the sun, a sacred image will be buried below. If Saturn is in conjunction with the moon and/or the sun, the portents are the same. If Saturn is in conjunction with the moon or opposed to it, buffalo bones will be found underground.

12. *Snakes or snake bones.* If the moon is in conjunction with Rahu or Ketu or opposed, a snake pit or snake bones will be found on the site.

13. *Dog bones and silver.* When the moon is in conjunction with Mercury or opposed, dog bones will be found on the the site.

14. If malefic planets are in conjunction with good planets or opposed to them, there will be bad luck in the house. The owner will lose the house and all his possessions.

⁴⁹ This is not entirely clear. The discrepancy between the number of days in the months and the number of asterisms appears to be connected with counting from the third place, that is Krittika, the third lunar asterism.

15. If beneficial planets are completely absent and malefic ones are present, it is a dangerous sign. It is a good sign if only the good planets are present.

16. If the segment is ruled by good planets, the family will prosper and the owner will hold on to the property.

17. If the beneficial planets are at the zenith or are opposed to it, the owner will hold on to the property. If there are malefic planets in this segment, however, outsiders will eventually take over the house. In addition, the house may be inhabited by demons.

18. If you want to calculate the depth at which the sallium is buried, take the number of degrees or rays and calculate how many spans they are in all. Two spans make one cubit. Divide it into spans. Consider the positions of the beneficial planets, the ruling houses and their regents, and calculate the depth in spans at which the offending substances are located.

19. Measure out the dimensions of the east, west, north and south sides of a house in spans, divide it by 21(to get the cubit)⁵⁰ and multiply it by 28. This will give inches.

20. If (malefic) planets are in the seventh place from the birth sign, and if the moon is in the first, fourth or seventh place, there is influence from sallium. Women in the household will die and the lineage will go to ruin. Very bad luck and loss of property will follow.

21. If (malefic) planets are in the birth sign, and if the sun and Saturn are in the kendra, there will be ashes and chaff buried in the ground. Apathy and fear will beset the house. There will discord between husband and wife. The family will fall on hard times. The occupants will be subject to illness and face danger from poisonous snakes.

22. If there are planets in the fifth place from the birth sign, and if the moon is in the kendra, granite, wood and bones lie buried beneath the house. This will bring destruction to the whole lineage.

⁵⁰ This seems to be a misprint for two.

23. If the moon is in the second house from the birth sign, human bones lie buried below. This owner will lose strength, determination and his money.
24. If planets are in the tenth place from the birth sign, bones, stones, pieces of metal or brass lies buried below. This will lead to terror and bad dreams. The house will go to ruin.
25. If there are planets in the sixth, eighth or twelfth place away, you will be afflicted by the three ravaging diseases that are the result of sins in previous births, and sallium such as flesh, bone and shells will lie underground. If the moon lies in the kendra in the birth sign of the owner, the world of the householder will break apart like a ship in a storm on the ocean. The women of the house will be miserable and the lineage will go to ruin.
26. If Jupiter is in the birth sign, and the moon and Saturn are in the fourth or seventh houses, charcoal, bone, shells and pieces of tile lie buried in the ground. If the sun and the moon are in the second or third house, black granite and idols can be found buried beneath.
27. Compare the birth sign with the one in which the moon is located. When someone consults an astrologer, he should be asked to name a house of the Zodiac. If the moon is there, if Saturn or the sun or Mars are in it, or in the fourth, seventh, or tenth house from there, or if the sun is there, bones, ashes and elephant nails will be buried in the ground.
28. When Mercury or the moon are in the fourth, seventh or tenth house, and if the sun is in the third, sixth or eighth house, the householders will be wealthy.
29. When Mercury and Venus are in conjunction, the moon is in the seventh house, and they are not in retrograde, and if Saturn is in the sixth house from the moon, there is treasure buried below.
30. If children's bones are buried in the east, and you do not look into the portents, you will be like a person with a cow that does not give milk.

31. If bones are buried in the southeast, you will be threatened by kings.
32. If the remains of elephants are buried on the south side of the house, you will live in fear of death.
33. If the bones of pig are buried in the southwest side, there will be misery in the house.
34. If the bones of a bull are buried in the west of the house, there will be terror.
35. If donkey bones are buried in the northwest of the house, it will lead to destruction.
36. If goat bones lie buried in the north of the house, there will be conflict.
37. If the bones of a dog are buried in the northeast, there will be strife.
38. If human bones lie in the center of the house, there will also be strife.
39. Before building any house, you should dig up the earth to a depth of six spans and carefully examine the soil.
40. Dig down seven spans for a temple. As a general rule, the earth should be dug up to a depth of six spans for the dwellings of Brahmins, to four spans for Vaisyas and to three for Sudras.

Instructions for Builders Regarding the Diagnosis of Sallium

1. If the person who sets out to build a house begins scratching an area of his body, it is a sign of disturbances within the site.
2. If he touches his head, it is a sign that there is something bad buried eight cubits down.

3. If he touches his nose, it is the same. If he clasps his hands, horse bones will be found six feet under.
4. A good way to test for trouble is to fold a rope six times over and lay it out on the site. If something trips over it, it means there is some problem far down at about the height of a human body.
5. Another test for sallium is the letter test. Write the following letters beginning in the east around a square: (1)a, aa, (2) ka, kaa, (3) ca, caa, (4) da, daa, (5) ta, thaa, (6) pa, paa, (7) ya, yaa, (8) sha, shaa, and (9) ha.⁵¹
6. If someone or other says something beginning with the sounds in 1 above,⁵² it means that human bones lie buried in the east 1-1/2 cubits down. The owner of the house will die.
7. If someone or other says something beginning with the letters in 2, it means donkey bones lie buried two cubits down in the southeast. The portents are punishment and death in the house due to trouble with the authorities.
8. If the utterance begins with the letters in 3, there is something terrible buried waist deep in the south. It will lead to the death of the priest.
9. If the utterance begins with the sounds in 4, dog bones have been buried in the southeast 1-1/2 cubits down. Children will die.
10. If the utterance begins with the sounds in 5, fox bones lie in the west 1-1/2 cubits down. The householders will not occupy the house very long.
11. If the utterance begins with the sounds in 6, human bones lie in the northwest four cubits down. The owners will have no friends.

⁵¹ Single and doubled letters are here used to represent the difference between short and long vowels given in the text.

⁵² When the troubled householder consults the astrologer, the latter supposedly makes the diagnosis based on the first utterance of the householder.

12. If the utterance begins with the sounds in 7, donkey bones lie 1-1/2 cubits down in the north. No cattle will ever survive.
13. If the utterance begins with the sounds in 8 above, the bones of cattle lie in the north at a depth of 1-1/2 cubits. The owners will lose money and cattle.
14. If the utterance begins with the sound in 9 above, it means that hair, bones, ashes and metal are buried in the center chest deep. The owner and his family will be ruined.
15. In order to counteract these problems, first repeat this powerful Sanskrit mantra twenty-one times.⁵³
16. The earth should then be examined down to the water level or to the height of a human being.
17. The objects you should be worried about are those connected with human beings: pieces of metal, ancient coins and things like that. A thorough examination should be made before beginning construction.
18. If you do not identify troublesome substances at the time of construction, you may be able to discover them later after living in the house for a time. If they are still there after you occupy the house, you will fall ill, have bad dreams and endure endless trouble.
19. We will mention some of the omens that suggest there is sallium underground. Suppose for seven nights a cow, a horse or a dog keeps on making noise, or suppose women argue all the time. Suppose wild animals come into the house or vultures, tigers, foxes, pigeons and snakes are attracted to the property. This means that human bones are buried beneath, and lightning will eventually strike the dwelling. This house will be damaged by fire or wind. Demons will take up residence there. Crows will come to the house at night. There will be arguments day in day out between the husband and the wife.

⁵³ The mantra is given in the text.

20. Sometimes problems arise from evil trees as well. If bones and other inauspicious objects are found on the site, they should be carried away from the boundaries of the land. Bad luck can be caused by bamboo, doorframes and other influences. Anyone who cares about the welfare of his family will try to find out what is causing the bad luck and get rid of it.

21. The day the offending objects are removed, you must organize a puja to the Site Spirit. Pick an auspicious day under an auspicious asterism and other good astrological signs, and get a Brahmin to conduct the rites to extirpate the influences of the sallium. Make an image from nice stone. Now think of various deities as parts of its body. Nanda, as the head, for example, Bhaddra as the left hand, Rikta as the right one, Jaya as the legs and Purna as the navel. Now think of the Site Spirit and worship him as you meditate on the image.

22. Mark out the house site into three major divisions. In the center of the site, dig a small hole. In each of the four directions, venerate the aforementioned deities, Nanda, Bhaddra, Jaya, and Rikta, at the four directions. Right at the center, dig a hole waist deep and draw the auspicious sign of the swastika on top of the head of the image. This area should be divided into three parts with the square pit in the middle. Now have a priest invoke Nanda in the northeast, Bhaddra in the southeast, Jaya in the southwest, Rikta in the northwest and Purna in the center.

23. Around the perimeter, place eight brass pots wound with thread and filled with water. Make sure they are decorated with mango leaves and that each has a coconut on top. These are for the deities of the major and minor directions who are to be propitiated by the builder. Place the pots on the nine auspicious grains. Kohl, sandalwood paste, musk, and leaves of the Deodar cedar should be laid out. The following substances should be offered: sand on which lions and wild boar have trod, pieces of elephant tusk, pieces of bull horn, nail of lion, sand from a temple entrance, the five products of the cow, the five fruits in sugar syrup, water from the five rivers, leaves of the five auspicious trees, the five spices, the three kinds of honey and the seven⁵⁴ kinds of grain. Now Ganesh and the other gods should be invoked. Next, the

⁵⁴ Seems to be a mistake for nine.

planets should be invoked with the appropriate prayers. Then 800 Gayatri mantras and 800 mantras beginning with *tirunipata* should be recited. Then another mantra beginning with *tat vipara so* should be recited 100 times. The mantra beginning with *ato devaya* should be recited 300 times. At the end of all this, the soma sacrifice should be performed to Agni.

24. After the Brahmins have performed the soma rite, a puja to the Site Spirit and a soma puja must be performed. The nine planets, Ganesh, and the directional guardians all have to be worshiped. Also, the guardian deities of sacred places and the deities of the earth and the sky.

25. On an auspicious day at an auspicious time under an auspicious planet, place the image in the hole. There should be a bright lamp burning to the west of it, and all the brass pots should be placed to the east. After this, recite the mantra pertaining to sallium as follows:

O Nanda the daughter of Vasistha, bless me and my family with wealth and prosperity. O Bhaddra, you who are belong to the seer Kasyapa, give us good health and long life and protect us from the evils of sallium. O Jaya, you who belong to the seers named Bhargava, you who perform wonderous feats, save us from these evil influences. O Rikta, you who belong to the seer Atri, you who can dispel poverty, grant me and my family good health, wealth and prosperity. O Purna, you who belong to the seers called Angirasas, you who are without fault, grant us good health, wealth and happiness.

26. Now the main pot and the fire should be covered with sand. Then the priest should place one hand on the heart of the image and address the Site Spirit as follows:

O Site Spirit, guardian of the earth, protect this house. Fill it with abundant grain. Grant it wealth and prosperity. Keep everyone safe from harm. I bow before you, and I venerate you. You are the incarnation of the site. Confer your blessings on all mankind.

27. After this, a puja and prayers should be made to Ganesh and to the Goddess of the Earth. Then Isana (Siva as lord of the northeast), various demons, devils, serpents and the like should be invoked with lamps and prayers.

28. Take the water in the pots and sprinkled the entire house with it. As the priest sprinkles the water, he should recite more prayers asking for the end of the evil influences.

29. A cow should be given as a gift to the priest. Money and betel should be given to those who assisted. Food should be laid out for all the Brahmins. If all this is done, the householder will live safely from then on, free of all influence of sallium.

CHAPTER 9

*Defects in Dwellings (vedai)*⁵⁵

There are sixteen types of unsuitable houses, named as follows with their corresponding defects:

Name	Problem	Consequence
1. Antakam	Not enough space	Disease
2. Rutiram	Derelict house	Dysentery
3. Kupjam	Not complete	Leprosy
4. Karanam	Absent doors	Blindness
5. Vikikaran	Doors on the earth area	Misery
6. Tikavakkaram	Too many openings	Danger to pregnant women
7. Cipidam	Not high enough	Enmity
8. Viyankam	Frightening appearance	House will be degraded
9. Surajam	One side too high	Poverty
10. Kudilam	Gates and doors	Tuberculosis
11. Kuttakam	Wall in front of entrance	Bad luck
12. Sankapatajam	Chaotic	Fear
13. Sankapalam	Frightening	Disaster to owner
14. Vikadam	Minus one side	Disaster to children
15. Kankam	Very ugly	Beset by evil spirits
16. Kainkaram	High and ugly	Destruction of women

⁵⁵ This word refers to contact on a particular day between a particular lunar asterism or lunar day (*titi*) and the ones that precede or follow it. By extension, it appears to refer to other kinds of contact or obstruction.

1. These sixteen types of defective houses can cause untold misery. A few more are enumerated below.
2. If there is a dilapidated passage by the side of the house, the householders will be threatened by death. If there is a passage where there has been a fire, it can cause poverty and barrenness.
3. Avoid a house that is derelict, or has a fallen roof, or a history of fire.
4. If the front of the house is broken down, the householder will become a wandering ascetic.
5. If there is any defect in the top part of the house, it brings bad luck to the owner.
6. If the house is dilapidated, wealth and prosperity will trickle away.
7. If there is too much space in between the buildings, it can mean death.
8. If black granite is used in building the back side, it can bring good health to the householders.
9. A house that has been enlarged (or that is too large?) will lead to disturbance.
10. A house that is too long brings on poverty.
11. A three sided house can bring instant destruction.
12. A house built right in front of another or right behind can bring on illness, discord and poverty.

13. This is an example of a defect due to misalignment.⁵⁶ If the inside entrance is larger than the main one, it can leave to poverty and death.
14. This is an example of a four sided defect. Cattle will be destroyed if there are doors on all four sides.
15. This is an example of a defect due to a shadow. During the second and third part of the night, if a shadow falls on a house, it leads to illness.
16. If the four walls of the house are not even, the lineage will perish.
17. If one end of a bamboo frame is fitted with another member, and they come apart, the entire lineage will be destroyed.
18. If the beams or cross beams are of unequal size, it leads to discord and destruction.
19. If there is a defect due to height on the east or north, it leads to fear of death.
20. If one room is at a lower level than the other, it will lead to lethargy and illness.
21. If there is any black granite stone in the middle of the house or facing the entrance, it will lead to illness and poverty.
22. If a house is close to a river or a mountain, if it has no walls or if it is on marshy ground, if it is built with black granite, if the short-horned owl lives there even for one day, or if crows live there, or if rabbits, snakes and such live there, or if the house is struck by lightning, or by fire, or if there is perpetual discord in the house, or if the water dries up, or if tortoises, iguanas, dogs and such inhabit the place, if bees abound in the place, if there are no apertures, if there is no roof, if trees such as the jujube are there, or if the house has no

⁵⁶ Verses 13 to 20 give Sanskritized technical terms for types of defects or obstruction which I have not glossed.

locks, if the doors make noise, or if the doors have more than one layer of wood, or if there are processions of horses and elephants, or if the atti fig is nearby, or if the site is terrorized, you may go blind, be stricken with leprosy or become afflicted in other ways. A house with a bad history, one in which a murder or suicide has taken place, one without apertures, one built with thorny trees, one with an unbuilt frontage, a house built with the wrong kinds of timber, one too close to the jungle, one on marshy ground, one on which outsiders or mixed caste people have lived and so forth is most undesirable.

23. If one doorway built first is closed off and another one built in its place, or if the sun plank is not mounted on the main doorway, those living in the house will be vulnerable to harm. They may also experience the threat of death.

24. One house should not be torn down and a second one built with the materials from the first. It will lead to disaster, especially for the household head.

25. If the house is dilapidated, it can be rebuilt. The preceding prescriptions pertain to all castes.

26. If the east and north are lower than the west and south, it can be harmful.⁵⁷

27. No house should be higher in the west than on the other sides. It leads to harm.

28. If you have a house with rooms on the north and the south, live in the one built in the north. Otherwise the children will be defective.⁵⁸

29. If the front side of the house is lower than the back side, it leads to bad luck.

30. It is good if the sides of a house are high and the central section lower.

⁵⁷ Changes in pen have been made in the text which are virtually illegible but seem to reverse east with west.

⁵⁸ This refers to a prescription elsewhere in the text prohibiting bedrooms in the south.

31. In a house with obstruction from two corners, that is from the southeast and northwest, you will have to marry more than once, and you will have bad luck. If the southern side of the house is too high, you will lose influence. The wife will die, and money will trickle away. No one should live in such a house.

32. Children born on a new moon day are like houses with defects. Both bring bad luck. A house with defects is harmful just like as a wife with thick lips and black hair on the sides of her forehead who kills her husband. A phlegmatic body, a family with no children and a person born destitute are all similar.

33. If there is a water source close to the south of the house, no sons will be born there. If born, they will soon die. There will also be illness and death in the house. If there is too little water or too much, it is inauspicious.

34. If the banyan tree, atti fig, bo tree or tamarind tree are close to a house, it is bad luck. If the cassia tree or the margosa are close to the house, it is good. If there are trees with milky sap to the east of the house, thorny trees to the south, plantain trees to the west, and fruit trees to the north, it is very good.

35. If the cotton tree, arka tree, the palmyra, jambu, *nelli*, emblic myrobalan (*phyllanthus emblica*), the poison nut tree (*Strychnos nux vomica*), tamarind, castor, banyan or bo trees are nearby it can be harmful and drive the Goddess of Fortune from the house.

36. Beginning in the east, there are eight kinds of yonis, namely the eagle, cat, lion, dog, snake, rat, elephant and rabbit. The animal of any yoni is opposed to the one that is removed by four places. Thus, the eagle is opposed to the snake, and so forth. The eagle, the lion, the bull and the elephant bring good luck. So build a house in the north, south, east or west. The minor directions are no good.

37. Building the house in the minor directions is acceptable only for non-caste Hindus such as candalas.⁵⁹

38. The proper directions and the ones chosen for the house should not be opposed to each other.

⁵⁹ Untouchables who make their living by hunting.

39. Do not build houses near paths on which corpses are carried or near burial grounds.
40. It is good to place temple gardens and sites where there is plenty of water. The south is the best direction and then the west, north, center and east.
41. Two houses (or rooms of one house) facing each other should not have their entrances on axis.
42. Those living in houses that are too high will suffer and lose their money.
43. If a house is renovated to build another storey on top, the husband and the wife will come to harm.
44. If the house is too high on the south and the east, the householders may go from riches to rags.
45. A site where four roads meet is no good for building a house. If there is a wall to the south of the house, it is bad luck. If the southwestern side is concealed, there is no problem.
46. If there is a resthouse or an inn on the south side of the house that faces the east, or if there is a big water pond on the west, or an inn or a boarding house on the north, it is good luck for the house.
47. If there are fruit trees to the east of the house, trees with milky sap to the south and watery trees to the west, you will be safe from your enemies.
48. Trees with milky sap will make you poor. Fruit trees will lead to misery. Keep these trees away from the house.
49. The following trees can be planted around the house: the coconut, the plantain, the arecanut, the lime, the grape, the lemon, the jasmine, pomegranate, Arabian jasmine, the margosa, *cassia fistula*, Jasmine spp. (*nyctanthes tristis*), mango, Mandarin orange and dew flower (*guettarda speciosa*).

50. If an existing house is demolished on the east side, the occupants will perish. If it is demolished on the southeast, arguments will break out. If on the south, they will live in fear of death. If on the southwest, it will cause happiness all around. If on the west, money will run out. If on the northwest, they will perish. And if on the northeast, the wife of the house will die.

51. If there is an anthill on the east of the house, it can bring riches. If it is on the southeast, it can cause illness. If it is on the south, it can lead to misery. If on the southwest, it can bring prosperity. If on the west, you will be blessed with many children. If on the northwest, enemies will abound. If it is on the north everything will be fine, and if it is on the northeast, it can cause illness and death.

52. The *pancakam* are the five inauspicious periods of time.⁶⁰ There are certain ones for the installation of a priest and other important events⁶¹ and also one for housewarming which is referred to as the *akkini pancakam* or the Agni period.

53. There are also fifteen inauspicious hours called Abhijit that are inauspicious and have bad effects.

54. You can minimize the negative effects of the Agni period for housewarming by making offerings of sandalwood paste.

Sanctifying the Site

55. The place in the bright half of the lunar month for the housewarming ceremony is the twelfth.⁶²

⁶⁰ Obtained when the sum of the numbers of lunar day, hour, lunar asterism and lagna are divided by nine and yield remainders of 1, 2, 4, 6, and 8.

⁶¹ Enumerated in the text, but omitted here.

⁶² Places for other activities of importance are given in the text .

The Portents of the Openings to the House

56. Houses with buildings facing the west and the south are called 'lotus-like' and can lead to prosperity. Those facing the west and the north are called 'golden' and will be threatened by thieves and illness. Those to the north and east are called 'flower destroying' and will be threatened by robbery and wickedness. Houses to the south and west with entrances on the east are called 'lineage destroying'. The result will be fear. Houses with buildings on the east, south and north that have entrances on the west, will lead to ruin. If a house has buildings in all four directions and entrances right round, it is good. If there are buildings on the north, east and west of the house, and entrances in these directions, it is also good.

Unlucky Portents

57. Proximity to a temple and the following additional locations: near a Durga temple entrance, in a place where the shadow of a temple falls, near a canal or a river, opposite a street—these locations are not at all suitable for a house. The house should be at least 100 feet away from a river, 50 feet away from a village tank and twenty feet away from a well.

58. Two houses built together on the same site are not good. No house should be built attached to an existing one. It can bring bad luck. If you want to build on an existing site, the structures on it should be razed and the nine kinds of grain sown on the land. After the seeds sprout, cows should be brought in to graze and live on the ground for three days. After that a puja for the nine planets should be performed. Only then will it be safe to build on the site. Once a house is built, it should never be separated into two units. It will bring bad luck.

59. You should not see the following when you enter a house: the joints of the beams or the corner joints of the central courtyard. The sight of both is unlucky. The occupants will die one after another. There should be no obstructing wall opposite the house entrance on the roadside. It can be very unlucky for the occupants.

60. All inside doorsteps should be the same size as the main ones to the house. This will bring good luck in every way. If they are different, the occupants will be unlucky.

61. All beams of the house should be joined at the north and west. They should not be joined east-south.

62. If two sets of wood have to be fitted together, the two thick sides of the wood should not be joined, nor should the two thin sides.

63. The doors in the house should not have double planks. The doors should not be without bars. The bolts and locks should be fixed near the middle of the door in the area called the Visnu part. If fitted elsewhere, it will bring bad luck.

64. The beams should be no higher than the household head can reach.

65. The northwest side and the southeast side of the house should not be built higher than the other sides.

66. The doorsteps should be properly aligned with each other. We have already dealt with doorsteps in Chapter 4.

67. The eagle, the tortoise, the iguana, the snake, the goat, the owl, the dog, the non-caste Hindu called candala, women in their menses, pigs and donkeys should never enter the house. There should be no bee hives on the outer walls, nor should the walls be so flimsy as to catch fire. If any of this happens, organize a puja to restore peace to the site.

68. If stones once burnt are used in building a wall, there will always be an echo which could be the sign of an evil influence. Black granite should not be used to hide the burnt stone.

69. No housebuilding should be undertaken when Durga appears as a yogini in the sky⁶³ or under the influence of the Goddess of the Earth or Venus.⁶⁴

70. Other consequences and remedies are discussed in Chapter 11.⁶⁵

CHAPTER 10

The Kerpam Formula

1. Measure the length and breadth of the house with a 34 inch measuring rod, multiply them to get the area and divide the product by 8. The remainder is the *kerpam*.

How to Interpret the Remainders

- Remainder 1 (Garuda, the vehicle of Visnu) is suitable for all four castes
- Remainder 2 (pigeon) leads to poverty
- Remainder 3 (lion) leads to good luck.
- Remainder 4 (dog) leads to poverty
- Remainder 5 (bull) to success in every way
- Remainder 6 (crow) leads to mixed results
- Remainder 7 (elephant) leads to good results
- Remainder 8 (vulture), poverty will be unabated by the passage of time

Applying the Second Rule, the Rule of Gain

2. Take the area multiply it by 8 and divide by twelve. This is how to interpret the remainders: 1 (good luck), 2 (wealth), 3 (fame), 4 (good luck), 5 and 6 (neutral), 7 (neutral), 8 (happiness), 9 and 10 (neutral), 11 (owner becomes rich and generous), 12 (good luck).

⁶³ On each day of the cycle of the moon, the goddess Durga appears in a particular direction and makes it inauspicious.

⁶⁴ The text here is unclear and also partially obliterated.

⁶⁵ There is no Chapter 11.

Applying the Third Rule, the Rule of Loss

3. Take the area multiply it by 9 and divide by 10. This is how to interpret the remainders: 1 loss of wealth), 2 (fire), 3 (good luck), 4 (good for children), 5 (all efforts will be wasted), 6 (good health), 7 (poverty), 8 (wealth), 9 (children will suffer), and 10 (very good luck).

Applying the Fourth Rule, the Rule of the Yoni

4. Take the area and divide it by 3 and multiply it by 8. The remainder is called the yoni. This is how to interpret the remainders: remainder 1 (eagle) will lead to wealth and success. Remainder 2 (cat) will lead to misery and discord. Remainder 3 (lion) will lead to success in all things. Remainder 4 (dog) will lead to illness, discord and enmity. Remainder 5 (snake) leads to riches. Remainder 6 (rat) leads to perpetual illness and sorrow. Remainder 7 (elephant) leads to prosperity and remainder 8 (rabbit) leads to poverty, illness and misery.

Applying the Fifth Rule, the Rule of the Lunar Asterisms

5. Take the area, multiply it by 8 and divide by 27. This is how to interpret the remainders:

<u>Remainder</u>	<u>Asterism</u>	<u>Consequence</u>
1	Asvini	success
2	Bharani	death
3	Krittika	fear of fire
4	Rohini	success
5	Mrigasiras	good luck
6	Ardhra	good luck
7	Punarvasu	all good fortune
8	Pushya	luck with children
9	Aslesha	death of wife
10	Magha	neutral
11	Purvaphalguni	neutral
12	Uttaraphalguni	wealth
13	Hasta	luck with children
14	Chitra	illness
15	Svati	good luck

<u>Remainder</u>	<u>Asterism</u>	<u>Consequence</u>
16	Vishaka	loss
17	Anuradha	good luck
18	Jyestha	disturbance
19	Mula	illness
20	Purvashadha	ruin of house
22	Uttarashadha	good luck
23	Dhanistha	house goes to outsiders
24	Satabhishak	wealth
25	Purvabhadra	ruin of house
26	Uttarabhadra	all good luck
27	Revati	illness

Applying the Sixth Rule, the Rule of the Lunar Days

6. Take the area, multiply it by 4 and divide it by 30. This is how to interpret the remainders: 1 (neutral), 2 (peace and profit), 3 (success), 4 (neutral), 5 (good luck with children), 6 (neutral), 7 (good luck and riches), 8 (good luck), 9 (house will go to ruin), 10 (good luck), 11 (decline), 12 (food and clothing in plenty), 13 (householders will become educated), 14 (house will go to ruin) and 15 (good luck in all things).

Applying the Seventh Rule, the Rule of the Days of the Week

7. Multiply the area by 9, and divide it by 7. This is how to interpret the remainders (indexed to the weekdays beginning with Sunday): 1 (discord), 2 (success), 3 (loss), 4 (success), 5 (many children and riches), 6 (success) and 7 (theft and trouble).

Applying the Eighth Rule, the Rule of the Houses of the Zodiac

8. Multiply the area by 8 and divide by 7. The remainder is the house of the Zodiac. This is how to interpret the remainder: 1 (Aries) leads to illness and 2 (Taurus) to fame. 3 (Gemini) is neutral, and 4 (Cancer) leads to success and long life. 5 (Leo) leads to riches, and 6 (Virgo) leads to wisdom and long life. 7 (Libra) brings health, wealth and happiness, and 8 (Scorpio) leads to benefits of all kinds. 9 (Sagittarius) is lucky and 10 (Capricorn) will bring you children. 11 (Aquarius) is neutral and 12 (Pisces) brings success.

Applying the Ninth Rule, the Rule of Age

9. Multiply the area of the house by 27 and divide it by 100. The result is the age. If the remainder is below 45, abandon the project. If the remainder is greater, it will bring you good luck.

Applying the Tenth rule, the Rule of Caste

10. Multiply the area by 9 and divide it by 4. The remainder is caste. This is how to interpret the remainders: 1 (Brahmin) success, 2 (warrior) success, 3 (Vaisya) riches and 4 (Sudra) neutral.

Applying the Eleventh Rule, the Rule of the Angle or Junction

11. Multiply the area by 4 and divide by 9. The remainder is the angle or junction. This is how to interpret the remainders: 1 (great, probably an epithet of the sun) leads to misfortune. 2 (moon) is associated with wealth, 3 (Sakti, perhaps also Mars) brings health, wealth, and happiness. 4 (Mercury) brings wisdom and friendship. 5 (Jupiter) and 6 (Venus) are both associated with good luck. 7 (Saturn) brings on poverty, and 8 (Rahu, the ascending node) is neutral. A remainder of 9 (Ketu, the descending node), means the family will flourish.

The Effect of the Yoga or Astrological Conjunction

12. There are six, named auspicious or inauspicious conjunctions (of the days of the week with the lunar asterisms). The *sittayogam* and the *amirta yogam* are good, and the *marana* (death) *yogam* leads to disaster.

The Effect of Conjunctions Pertaining to the Astrological Class (Gana)

13. If the house falls under the group of nine asterisms that belong to the god (deva) class and the human class, it brings very good luck. If it conjoins asterisms from the god class and the demon class, enmity and discord are the results. A conjunction of the demon and human classes leads to death.⁶⁶

⁶⁶ The asterisms are divided into three groups (called *ganas*). This rule seems to pertain to matching the *gana* of the owner to that of the house, although this is not stated explicitly.

The Effects of the 'Eyes'

14. One eye is neutral, two eyes are most beneficial, and blindness leads to bad luck.⁶⁷

The Effects of the Sutra

15. Multiply the area of the house by 7 and divide it by 5. The result is the sutra or line. This is how to interpret the remainders: 1 (good), 2 (neutral), 3 (beneficial), 4 (neutral) and 5 (harmful).

The Effects of the Five Inauspicious Periods of Time (Pancakam)

16. Remainders of 1, 2, 4, 6, and 8 are inauspicious and 3, 5, 7, and 9 bring good luck.⁶⁸

The Presiding Deity

17. Divide the area by 8. The remainders yield the presiding deities who are as follows: 1 (Indra), 2 (Agni), 3 (Yama), 4 (Nirutti), 5 (Varuna), 6 (Vayu), 7 (Kubera) and 8 (Isana/Siva). Remainders of 1, 3, and 5 are for Brahmins and warriors; 7 and 5 are for the Vaisyas and the Sudras. [Note: The auspicious and inauspicious consequences of given yonis are here reprised with alterations as follows: 1 (flag) will lead to beneficence, 2 (smoke) to death, 3 (lion) to poison, 4 (dog) to illness, 5 (bull) to influence of demons, 6 (monkey?) to illness, 7 (elephant) to good luck and 8 (crow) to poison.]

Anyone following the prescriptions given herein and performing the rites as described, will live a full life. Best wishes, best wishes, best wishes.

⁶⁷The considerations refer to classes of asterisms. Weekdays are also sometimes referred to as sighted or not, Tuesdays and Saturdays being considered 'blind'.

⁶⁸See Chapter 9, verse 52.