

Kim H. Veltman

Wowology and Wonderology

2020

Table of Contents

Preface by Marcello Sestito

Preface

1. Introduction
2. Circular Cities
3. Mountain as temple
4. Temple as mountain as creation and world
5. Temple as cosmos
6. Temple as terrestrial world and garden
7. Temple as God
8. Temple as seven heavens and seven hells
9. Temple as world of 7 planets
10. Temple as Man
11. 7 Wonders
12. Modern Towers
13. Modern Pyramids and Towers of Babel
14. Mountain and Clouds
15. Wowology

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<http://www.liveinternet.ru/users/4132950/>



1-2. Belovodje; Atlantis¹

Preface

A book sometimes has an unexpected beginning. My neighbour has three children, one of whom, Dries Zimmerman, is an urban planner, working for the city of Rotterdam in a committee on the future of the city. On 7 December, 2019, he invited me to Rotterdam for the weekend. He spent the afternoon showing me around the city. Everything was modern, clean, efficient. The new buildings were by famous architects (e.g. Renzo Piano,² Rem Koolhaas).³ Everything was safe, respectable, comfortable, almost smugly self-satisfied. Dries was hoping that I would be thrilled, but I felt something was missing. Suddenly, half-frustrated, half-guilty at not being sufficiently appreciative I said: “there’s no wow.” He half gasped. I explained more fully: if I were from other great centres, I would be disappointed that there is nothing here that is superlative. This is not just about Rotterdam. Melbourne has over 2000 churches and not one is a wow. At the end of the weekend I left, with him still a little shocked, and myself provoked to articulate what were the ingredients of wow.

A week later Marcello Sestito invited me to write something linked with utopia. I proposed to write on wowology and wonderology. This short book is hardly a definitive study. It is an invitation to think about our world in a new way. It is intended to raise more questions than answers: not just about wow and wonder, but about the amazing, the incredible, the superlative, the memorable, the unforgettable, the enduring, the immortal, the ineffable. I thank⁴ my two friends who inspired it and hope that it will lead to new inspiration.

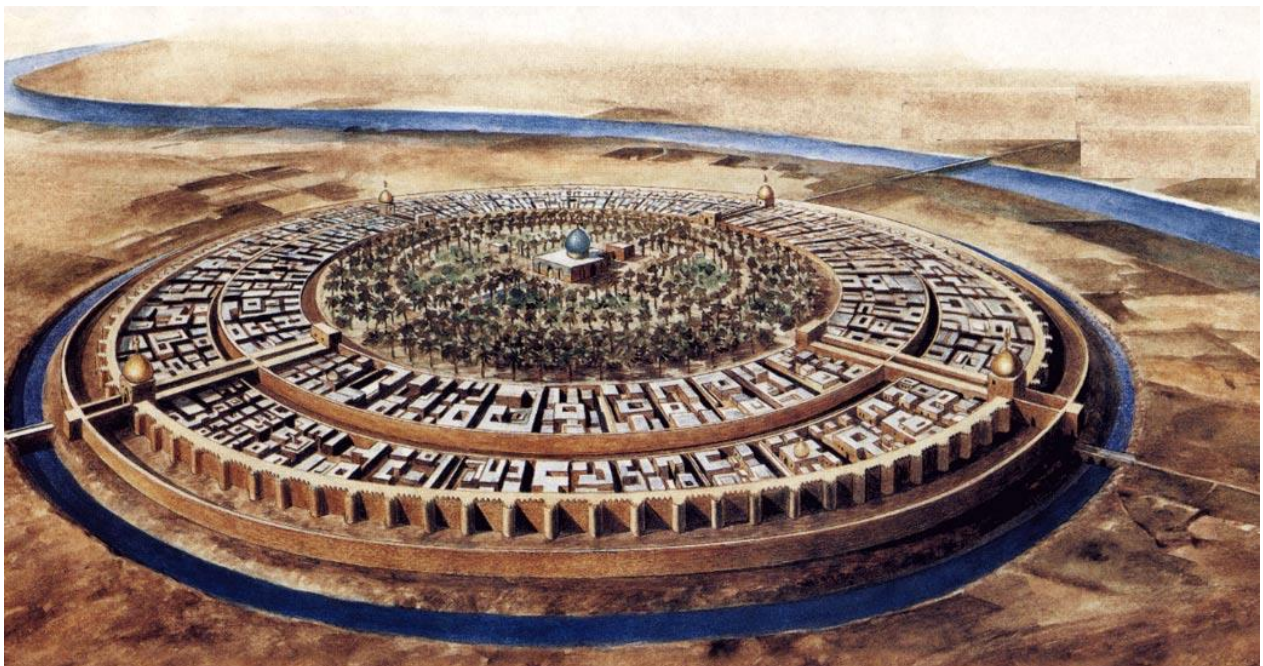
1. Introduction

A typical academic essay analyses a concept; defines a narrow problem and solves it; or describes its history. Our concern is different. Ours is an exploration of a new horizon, a plea for the need of something new. The topic is wow. Cynics will note that miracles and mirabilia have long been fields of study. There is a *Mirabilia Journal*.⁵ Indeed, on the surface, there are many elements, which might seem to cover the problem, but not really. Since 1955, we have a *Guinness Book of Records*, which records superlatives.⁶ To be sure these records are very impressive and yet, knowing who was the first to cross the Atlantic in a balloon or first to climb Everest solo is not per se a wow.⁷ There is a Wow creative studio and a Wow journal.⁸ Google has 1,720,000,000 hits for Wow (beginning with World of Warcraft), but offers no obvious answers or solutions. For circular cities Google offers 66,400,000 hits. Pinterest offers 5,750,000 hits but here the sources of the images are often lacking in detail. Both Google and Pinterest offer a confused mix of past, present and future. There is nothing that allows us to search for (a particular wow theme) such as circular cities geographically and chronologically. The term, Wiki circular cities, gives 4,960,000 hits but the Wiki List of circular cities offers only 14 cases.⁹ We need a new organization of knowledge and new search engines to find things better.

Advertising is another seemingly related topic. Advertisers are always trying to impress us with surprising, unexpected ads. There are new disciplines such as influenceology¹⁰ and persuasionology. There is even an Australian company called WOW Ads.¹¹ There are many catchy ads¹² which sometimes “grab our eye.” Yet eye grabbing is a long way from something that catches our imagination and very far from something that sparks and unleashes the imagination; that leads us to look at something, perhaps even the whole world in a new way. Advertising tries to make us choose a preselected item. Knowledge requires seeing and understanding new and potentially all items, preferably in a fresh way.



3-4. Atlantis Science Fiction and Atlantis, Dubai¹³



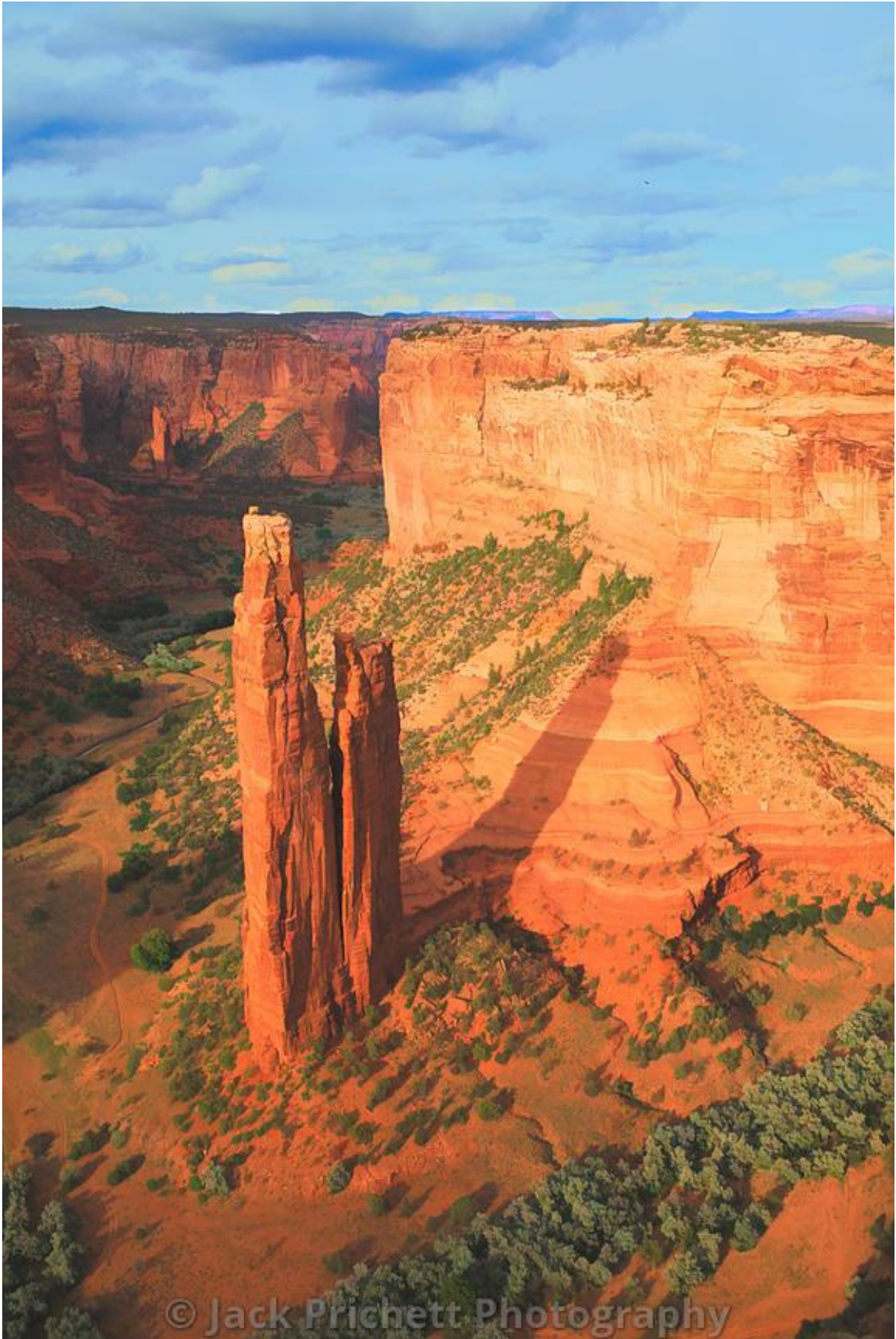
5-8. Round Cities of Arkaim, Russia; Darabgard, Iran; Mari, and Baghdad, Iraq.¹⁴



9-10. My Circle City: Yvan Feusi, Dreamstate Australia, 2017.¹⁵



11-12. Gaëlle Seguillon - Xandar city; Grand Cancun first Net Zero Energy Eco Resort.¹⁶



13.Spider Rock, Canyon de Chelley.¹⁷

2. Circular Cities

By way of introduction, we begin with a paradox posed as questions: why, how, is it that almost all our images of lost civilizations such as Belovodje in Russia or Atlantis in Greece have circular cities (pl. 1-2)? Why do the most dramatic science fiction images of Atlantis look similar to modern developments such as the Atlantis hotel in Dubai (pl. 3-4)? Why did some of the most famous mediaeval cities follow this model (pl. 5-8) and why do science fiction and futuristic plans continue to follow this model (pl. 9-12)? Is there a Jungian archetype that creates a common strand between the mythical, the historical, the science fictional and the utopian? The round theme is universal: it underlies the Temple of Heaven in China and the structure of the universe in Hinduism and Buddhism. Is there something in the depths of our conscience that links them and inspires in us a sense of wow and wonder? We shall return briefly to this theme in §13 when we show that ancient pyramids and towers of Babel are continuing with modern pyramids and towers of Babel.

There are two basic words: wow and wonder. Wonders, whether they are 7 ancient (e.g. Pyramids at Giza) or the 7 modern wonders (e.g. Taj Mahal) are akin to top tourist attractions, places that almost everyone has heard of, or knows, even if only a fraction of us have seen them all. These are dealt with briefly in § 11. Sections 12 and 13 will show that these lists are, in many ways, outdated, insomuch as they do not reflect new top attractions.

Wow is something more. It is that extra something that makes a given building or monument special, unforgettable and inspiring. To begin, I collected a series of images, which seemed to fit the category: sure winners, the best of the best. The majority were sacred buildings (temples, stupas, monuments). An attempt at classification suggested eight categories. A first is where the sacred place is something in nature: a mountain (e.g. Mount Kailash) or rock (e.g. Spider Rock or Uluru) in the natural world, temples of nature. The remaining categories pertain to the built environment. Two involve an expansion of scope: e.g. mountain as world and place of creation; then as cosmos. The next five entail a gradual narrowing in scope: e.g. the terrestrial world; as (a) God; as seven heavens and seven hells; as seven planets and finally as man symbolizing the seven planets. All eight categories are found in India. The seven planets become a model for the Middle East: Mesopotamia (modern Iraq) and Armenia. Man symbolizing the seven planets becomes linked with Palestine (modern day Israel).

Which leads to an hypothesis: traditionally wow is not so much about a physical object as about its connotations with the metaphysical. A second hypothesis is, that as this approach travelled West, the details of those connotations became clearer, but the scope of connotations contracted seriously from the whole universe to the earth and seven planets and then to man. Protagoras'¹⁸ famous saying that man is the measure of all things exalted the importance of man. It also diminished the quest for wow and increased the importance of wonder. As you look through the images that follow, please weigh these hypotheses. Are they forced or are they convincing? Is linking metaphysical with physical the key to understanding wow? Can studying the Silk roads help us to understand their connections? Can the Silk Roads project help us?

3. Mountain as Temple

In early cultures, the “temples” are temples of nature. For instance, among the Navajo Indians in Arizona, the place of creation is spider rock (pl. 13):



14. Adam's Peak, Sri Lanka. Adam's Peak, Sri Lanka.¹⁹



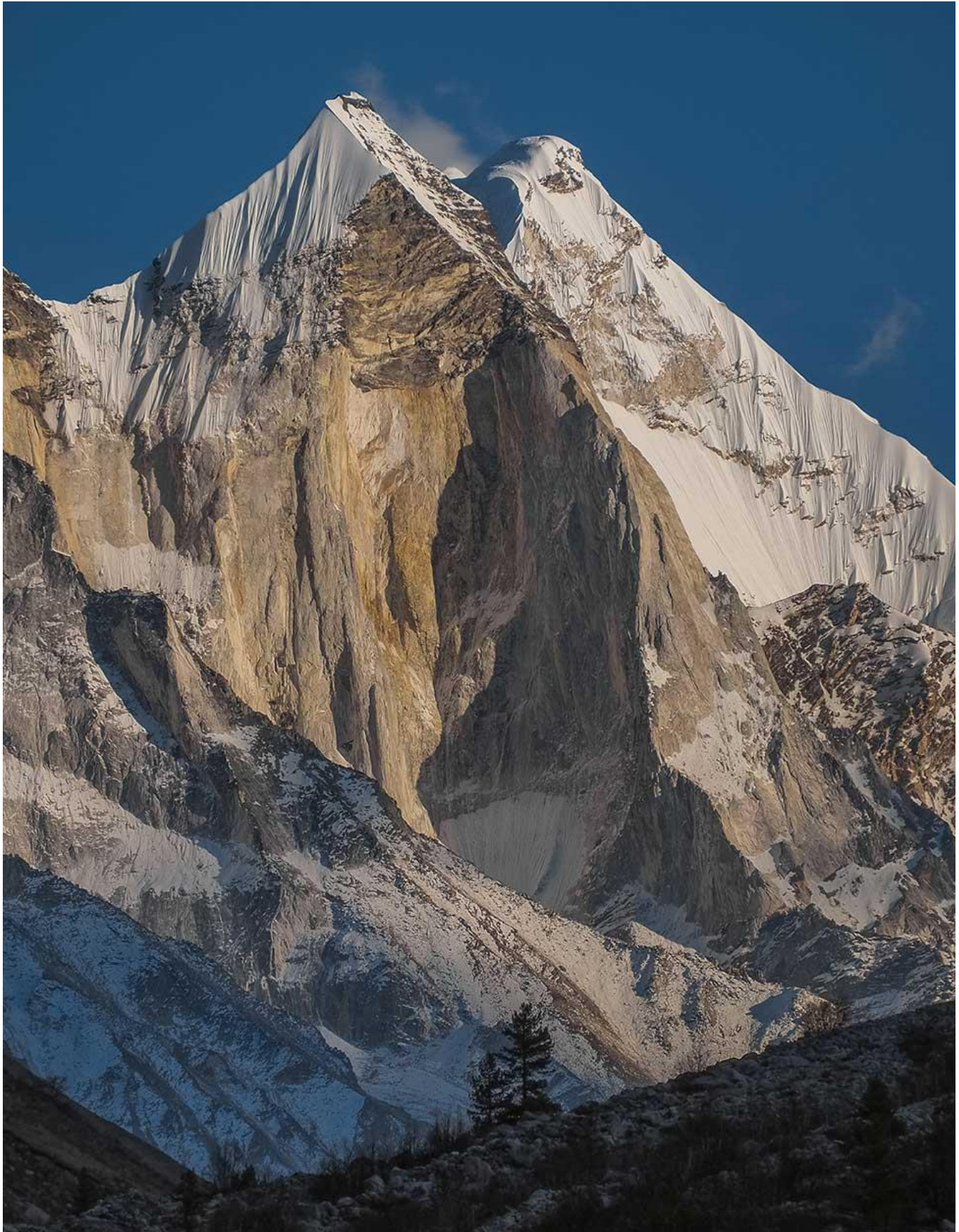
15. Fanjingshan, China.²⁰



16-17. Mount Kailash.²¹



18-19. Kailasa Temple, Ellora Caves.²²



20. Mount Meru, north of Dheradun, India.²³



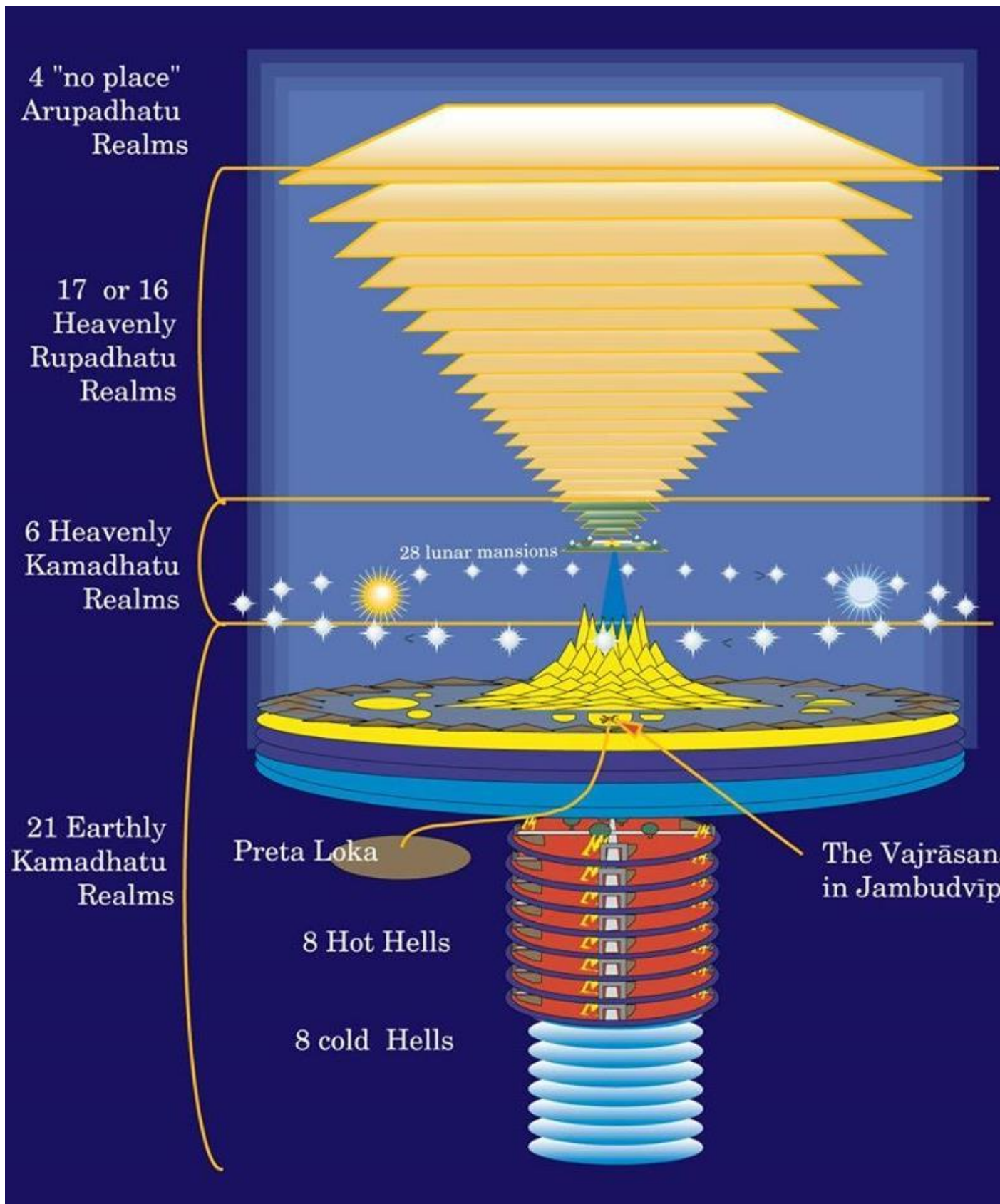
21-22. Mount Meru (Sumeru) Tanzania, Africa; Java.²⁴



23-24. Jain Temple as Mount Meru, Uttar Pradesh; Cambodian style Prang as Mount Meru.²⁵



25. Mount Meru as Building: Temple of Dawn, Thailand.²⁶



26. Mount Meru with 47 realms in Buddhist Cosmology.²⁷

This sacred place of the Navajo is the lair of the mythical Spider Woman (Na'ashje'ii Asdzaa). In the story of the *Third World*, Spider Woman descended to the top of Spider Rock. From here she spun her silken web and draped it to the ground.... Other variations of the legend tell that it was Spider Woman who taught her people the fine art of weaving.²⁸

In a more detailed version, spider woman is involved with 4 worlds of creation.²⁹ Among the Anangu people of Australia, Uluru (Ayers Rock),³⁰ plays a parallel role in the creation. In this case, the details of the stories are known only to initiates of the tribe. But the basic message is clear. The rock functions as a headquarters for cosmic forces, which spread throughout the land, and the whole earth. Such holy places of the natural world are typically called sacred mountains. In the East, most countries have a small number. For instance, Tibet has 8 sacred mountains³¹; Mongolia has 10 sacred mountains.³² China has 5 traditional mountains, but then there are 5 sacred Taoist and 4 sacred Buddhist mountains. Sometimes, as in the case of Khan Tengri, the sacred mountain marks a border between three countries: Khyrgistan, Kazakstan and China.

Such sacred mountains fall into two distinct categories. One category believes that mountains are more holy through having sacred buildings on top of them. The Parthenon in Athens is a famous early example, as is Meteora in Greece. Sri Lanka, Adam's Peak (pl.14), sacred to Buddhists, Muslims, Christians, Hindus,³³ and Mount Fanjingshan, China (pl.15) are other examples.³⁴ The Jains have created a series of such inhabited peaks in Northern India: Mount Girnar, Mount Abu and Mount Palitana with 863 temples at the peak. Mount Olympus in Greece is a compromise case. There are no buildings at the top, but there are a series of buildings at base camp level two thirds of the way up.

A second category is considered so holy that any attempt to climb them is strictly forbidden: e.g. Spider Rock; Machupuchare in Nepal; Mount Kangchenjunga in India/Nepal; Mount Gangkhar Puensum in Bhutan; Mount Banahaw, Philippines; Shiprock, New Mexico; Mount Umunhume, California.³⁵ At Ayers Rock (Uluru) climbing was grudgingly accepted and is now forbidden. In Tibet, a corresponding natural monument is Mount Kailash (p.16-17), which is sacred to Hindus, Buddhists, Jain and Bon:³⁶

Tibetan Buddhists call it Kangri Rinpoche; 'Precious Snow Mountain'. Bon texts have many names: Water's Flower, Mountain of Sea Water, Nine Stacked Swastika Mountain. For Hindus, it is the home of the Hindu god Shiva and it is believed that Shiva resides there; for Jains it is where their first leader was enlightened; for Buddhists, the navel of the universe; and for adherents of Bon, the abode of the sky goddess Sipaimen.³⁷

It is linked with the source of 4 rivers: "the mythical Lion, Horse, Peacock and Elephant Rivers, and in fact the Indus, Yarlung Tsangpo/Dihang/Brahmaputra, Karnali and Sutlej all begin in the Kailash-Lake Manasarovara region"³⁸ (cf. the four rivers of Jambu dvipa, pl. 36). Mount Kailash inspired the creation of Kailasa Temple (pl. 18-19, c. 756 – 773), which involves more square footage than the Parthenon, and is the more impressive because it is hewn out of a single block of rock. The left side is devoted to Shiva and has scenes from the Ramayana. The right side is devoted to Vishnu and has scenes from the Mahabharata. The temple version of the mountain links Hindu gods and Indian epics:

These amazing works of art hide some secrets. Archaeologists estimate there are more than 30 million Sanskrit carvings that have yet to be translated. If experts can find a way to unlock the hidden meaning of the language, it would make Kailasa Temple one of the most valuable historical artifacts on Earth.³⁹



27a. Nava Kailash Temple, Kalna, West Bengal⁴⁰

Mount Kailash is much more than a single mountain in Tibet. It is regularly identified with Mount Meru, which is considered a central mountain in the Hindu creation story. Except that there are a number of mountains, which compete for this honour. One important contender is in India, north of Dehradun (pl. 20). Others are in Tanzania (pl. 21) and Java (pl. 22). In addition to being a physical mountain, Mount Kailash acquired a special role in Buddhist philosophy (pl. 26), where it became a model for the universe with 21 earthly khamadhātu realms, including 8 cold and 8 hot hells; 6 heavenly khamadhātu realms; 17 or 16 heavenly rupadhātus and 4 arupadhātus (no place) realms. In Buddhism, these 47 realms sometimes became linked with 47 stages in the quest for enlightenment.⁴¹

Once its symbolic form was in place, Mount Meru began to assume a whole range of metaphysical representations, which reduced the mountain into a large symbolic pillar.⁴² Another consequence was that Mount Meru became a starting point for multiple constructions (pl. 23-25). Both Kailash and Meru are associated with the god Shiva. Shiva has many temples. In Tamil Nadu, for instance there are nava kailasam:

Sage agasthiyar was doing penance in the podhikai hills. One of his prime disciples was urOmacha munivar. He prayed Lord pashupathi to get liberation. The Lord wanted to bless this to him through his guru agasthiyar. agasthiyar put nine flowers in the river and asked uromacha munivar to install a shiva lingam as kailasha nathar, wherever the flowers dock on the bank and finally bathe and worship the Lord in the place where the river joins the ocean, by doing so he would get what he wished. Adhering to his guru's words, munivar worshipped the Stain-throated Lord in the nine places where the nine flowers stopped in the form of shiva lingam and finally bathed in the place where thamiraparani joined the ocean and got liberated. These nine abodes are called nava kayilayam.⁴³

In Kalna, West Bengal, there is a Nava Kailash temple, or 108 Shiv Mandirs (pl. 27a-b):

Built in 1809, the temples are constructed in two circles. One consists of 74 temples while the other circle has 34. The former has white marble and black stone shivlingas, while the latter has only white marble ones. Due to its ingenious planning, all the shivlingas can be seen from the centre of the temple complex.⁴⁴



27b. Nava Kailash Temple.⁴⁵

The 108 chapels are highly significant. There are 108 beads in a Tantrika rosary, 108 dance positions, 108 worlds, 108 lesser divisions in the Zodiac (navamsa), 108 lingas, all mantras are to be recited 108 times, etc., etc.⁴⁶ 108 is the number of beads in a Buddhist *Japa mala* (kind of rosary). They implement the following formula: $6 \times 3 \times 2 \times 3 = 108$:

- 6 senses (sight, sound, smell, taste, touch, thought),
- 3 aspects of time (past, present, future),
- 2 conditions of heart (pure or impure),
- 3 possibilities of sentiment (like, dislike, indifference).⁴⁷

The 108 rosary beads are Buddhist, Hindu and Tibetan:

There is also the Chinese rosary of tantric and buddhic origin. These 108 rosary beads of the Eastern would come from the sum of the 12 months, the 24 arrangements in which the solar calendar has been divided, and the 72 divisions of the Chinese year in periods of 5 days: $12 + 24 + 72 = 108$. According to another extremely old tradition in the East, the importance of the number 108 would derive from 10800 which multiplies the number of moments in the year and the number of verses in the Rig-Veda.⁴⁸

There are 108 branches, breaths, buddhas, channels, columns, deities, kinds of food, energies, experiences, eternal statues, faces, feet, forms, gestures, gods, gopis, karanas, knots, letters, mandalas, mantras, movements, mudras, names, niches, numbers, padas, pillars, postures, pressure points, shrines, seeds, signs of perfection, squares, stages, stairs, stars, strings, stupas, syllable, techniques, temples, tones, Upananishas, verses, virtues, waterspots, words, worlds, yoga poses and yugas.⁴⁹ 108 has all the ingredients for a wow experience. $108 \times 100 = 10,800$, which is the number of breaths in 12 hours. 10,800 muhurtas are 360 days or 1 cycle of the earth. 10,800 days is 1 cycle of Saturn. 10,800 years is 1 great year. In the Hindu system, 108 and its multiples encompass everything in time and space. This has the makings of a megawow.



28-29. Churning of the Ocean of Milk in a manuscript and at Angkor Wat.⁵⁰

4. Temple as mountain as creation and world

In the Mahabharata, one of India's two great epics, there is a story about the churning of the ocean of milk (*samudra manthan*),⁵¹ which gives a version of the creation story. Indra annoyed the sage Durvasa, which led to the devas and asuras using the cosmic snake Vasuki wrapped around a mountain (*mandara*) to enter into a tug of war. The mountain turned to and fro and generated 14 treasures or gems (*ratna*), amongst which was the nectar of immortality (*amrita*). This special nectar is linked with the city of Amritsar and with the Kumbha Mela⁵² festivals. Georges Dumézil, linked this with the Holy Grail legend. Jarich Oosten, posited similarities with the *Hymiskviða*, an old Norse poem.⁵³

A Javanese source, the Tantu Pagelaran, explains that:

Batara Guru (Shiva) ordered the god Brahma and Vishnu to fill the Java island with human beings. However, at that time Java island was floating freely on the ocean, always tumbling and shaking. To stop the island's movement, the gods decided to nail it to the Earth by moving the part of Mahameru in Jambudvipa (India) and attaching it to Java.[30] The resulting mountain is Mount Semeru, the tallest mountain on Java. Mount Semeru, a large active volcano on Java, is named after the mount.⁵⁴

This is the more interesting because both the Mount Merus of Java and Tanzania are clearly volcanic mountains. A recent video from a volcano in New Zealand provides a vivid impression of how volcanoes could become connected with stories of creation.⁵⁵ It is where earth in the form of an island first emerges from the expanses of the waters.

To return to our story, Angkor Wat⁵⁶ in Cambodia, is described as the largest religious monument in the world⁵⁷ (500 acres, pl. 29-31). Its central towers refer to Mount Meru. Around its galleries are 8 scenes from the Mahabharata, including one of the Churning of the sea of Milk (pl. 29-29):

On the eastern gallery is one of the most celebrated scenes, the Churning of the Sea of Milk, showing 92 asuras and 88 devas using the serpent Vasuki to churn the sea under Vishnu's direction (Mannikka counts only 91 asuras, and explains the asymmetrical numbers as representing the number of days from the winter solstice to the spring equinox, and from the equinox to the summer solstice).⁵⁸

So, the greatest religious monument of the world, which is defined by its symbolic Mount Meru (262 m.), also tells a story of how a mountain played a role in creation and in a recurring struggle between good and evil. Angkor Wat's outer shape refers to the mountain of its creation, while the scenes of its galleries explain also the story that led to this creation. On the surface, the story of devas (good guys) versus asuras (bad guys) is purely mythological. But if we take the numbers in terms of days, the 92 + 92 for asuras and 88 + 88 for devas leads to a 360-day year, suggesting that there may be much more to this story if we are prepared to look beyond unaccustomed names.

5. Temple as cosmos

If we turn to Southern India there is evidence of an even larger context. The ancient Indians had a particular fascination of the Milky Way (pl. 32). On this spiraling form, they imposed a grid of four veethis (vithis, breadth, dimension)⁵⁹: Brahma, Devva, Manusya, Pischasa (pl. 33).



30-31. Angkor Wat.⁶⁰

These were then placed within a grid system where Brahma Veethi is 3 x 3; Deva Veethi is 5 x 5; Manusya Veethi is 7 x 7 while Peschasa Veethi is 9 x 9 (pl. 34). These dimensions define the main boundaries of the Arunachalesvara (or Annamalaiyar) Temple (pl. 35, a case where a temple is flanked by a sacred mountain). These boundaries are also evident at Chindabaram and the Meenakshi temple in Chennai and Angkor Wat. In the Hindu approach, 9 x 9 grids were used for houses; 12 x 12 grids were used for public buildings. Subsequent models gradually led to a diminution in the scope of the symbolic realms of temples (cf. § 6-10 below).

6. Temple as terrestrial world

One tradition linked temples with the terrestrial world, or, more precisely, temples within gardens. In the Hindu model of the cosmos, Jambu dvipa, the terrestrial world was a cruciform shape of 4 squares intersected by canals of water and circumscribed by an eightfold lotus (pl. 36). From this evolved the notion of the 4 gardens (*char bagh*), which showed the four rivers of paradise dividing as space into 4 portions each subdivided by 4 (i.e. 16 sections, pl. 37).

In the plan for the Taj Mahal in Agra (pl. 38) this basic pattern is repeated precisely, except that now each of the 16 squares are subdivided into a further fourfold division to produce potentially 256 squares which, due to roundings at the edges leads to roughly 238 squares. In a regular aerial view, this (hidden) symmetry is not immediately apparent (pl. 39). If we turn to the famous Humayun Mausoleum (Delhi, 1517, pl. 40-41) the same basic principle applies. Now there are 3 x 3 basic squares surrounding the monument, each of which is again subdivided by 4 to create 36 basic squares.

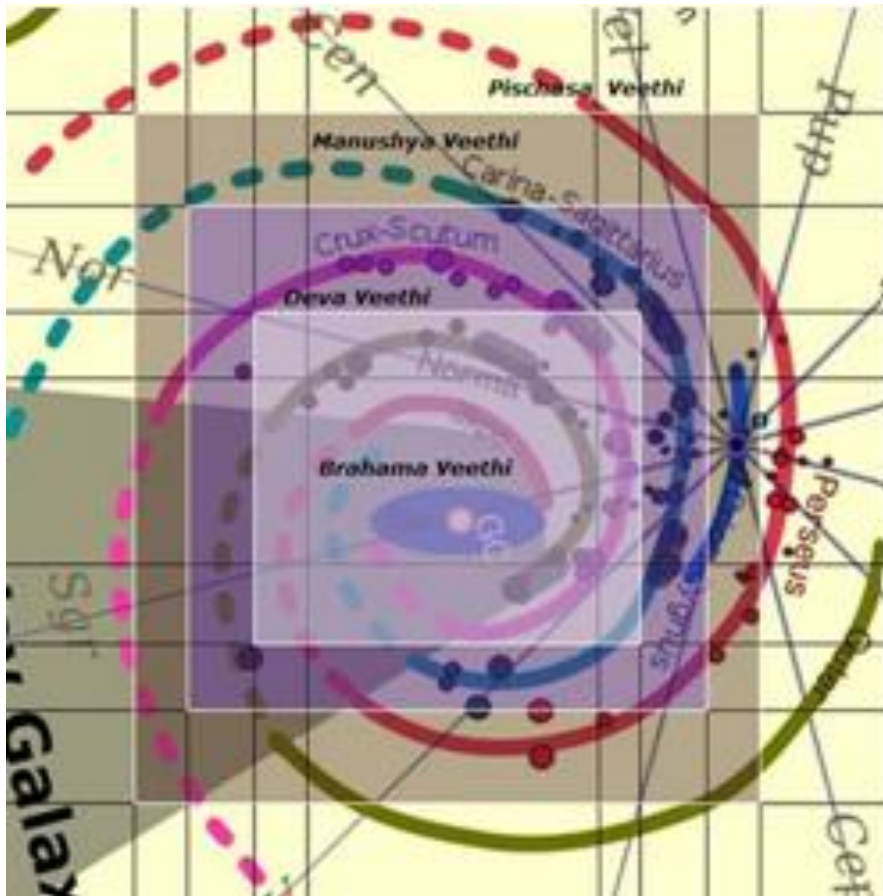
Nor is this model limited to India. It played an important role in Persia: e.g. Isfahan and Shiraz, which were earlier than Delhi and Agra, and where the *char bhag* were the *chahar bhag* (pl. 42-43). Of course, 4 rivers also play an important role in Islam, e.g.:

I saw four rivers flowing out from beneath Sidrat Al-Muntaha (the Lote Tree in the seventh heaven), two visible and two hidden. I asked, ‘O Jibreel (Gabriel), what are these rivers?’ He said, ‘The two hidden rivers are rivers of Paradise, and the two visible rivers are the Nile and the Euphrates.’⁶¹

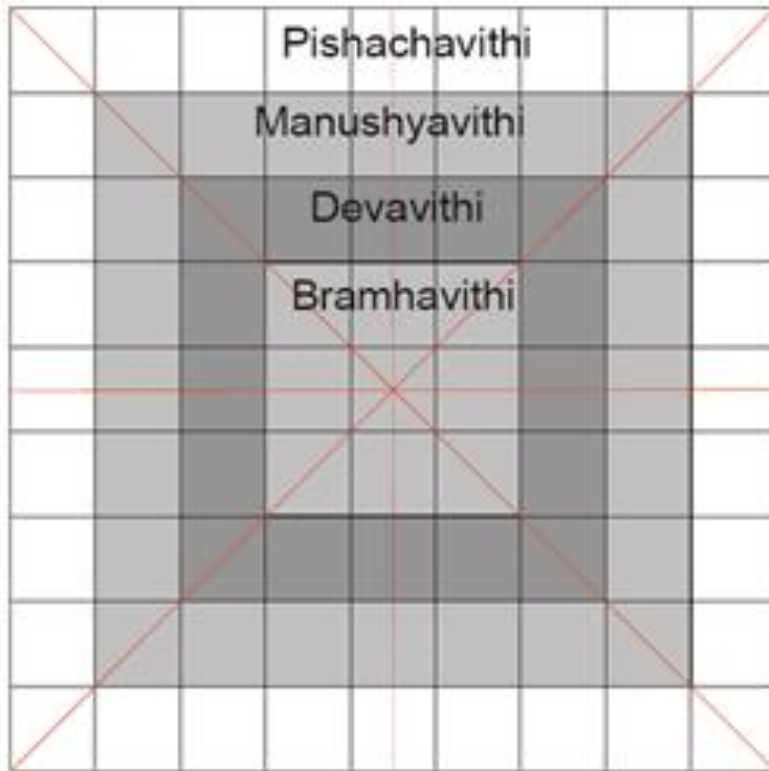
Elsewhere there is discussion of 4 rivers as rivers of honey, wine, milk and water.⁶² The Old Testament also spoke of rivers of milk and honey.⁶³ A future study might explore in more detail how the Indian model of the terrestrial world (*Jambu Dvipa*) served as a basis for Persian, Hebrew and Islamic conceptions. In any case, it is easy to see how this Indian framework is linked with the development of Islamic gardens from Isfahan in Iran to the Alhambra in Spain, as earthly visions of a future paradise.

For our purposes, it is worth noting in passing that when the concept reaches the Christian world, the four rivers are replaced by four paths to become a secluded garden (*hortus conclusus*, pl. 44). In religious contexts, the centre remains a fountain (pl. 45-46) which, in the Middle Ages was a symbol of the fountain of life (*Lebensbrunnen*) and of Eden. So, in the Christian tradition, what had been the four intersecting rivers of Jambu Dvipa in the Hindu tradition and the four rivers of the Islamic paradise is reduced to a well in a hidden garden.

In botanical circles, it becomes a botanical garden (*hortus botanicus*, pl. 47). Now the 4 basic squares are subdivided into 4 x 16 strips of land for plants. The memory of the terrestrial world

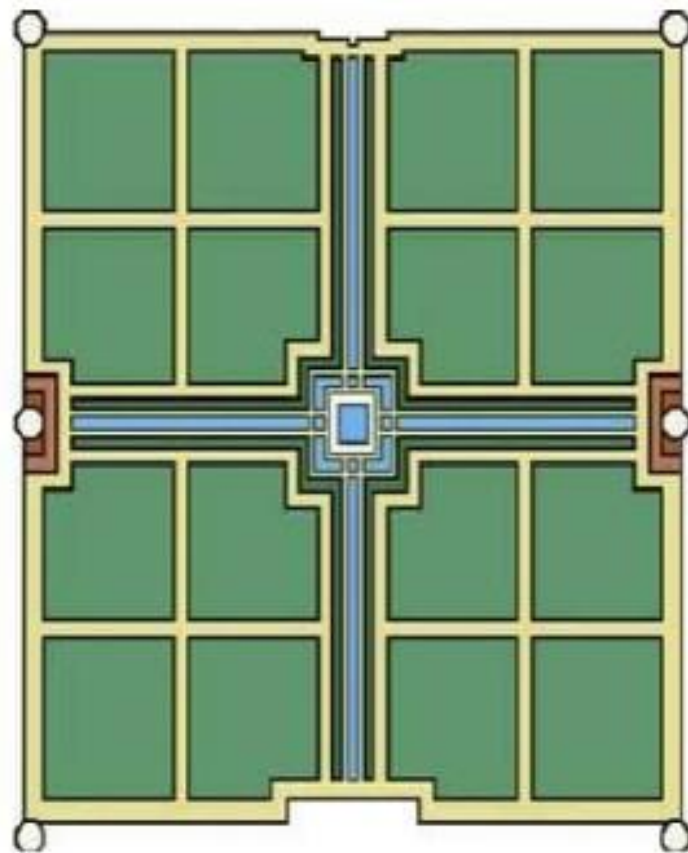
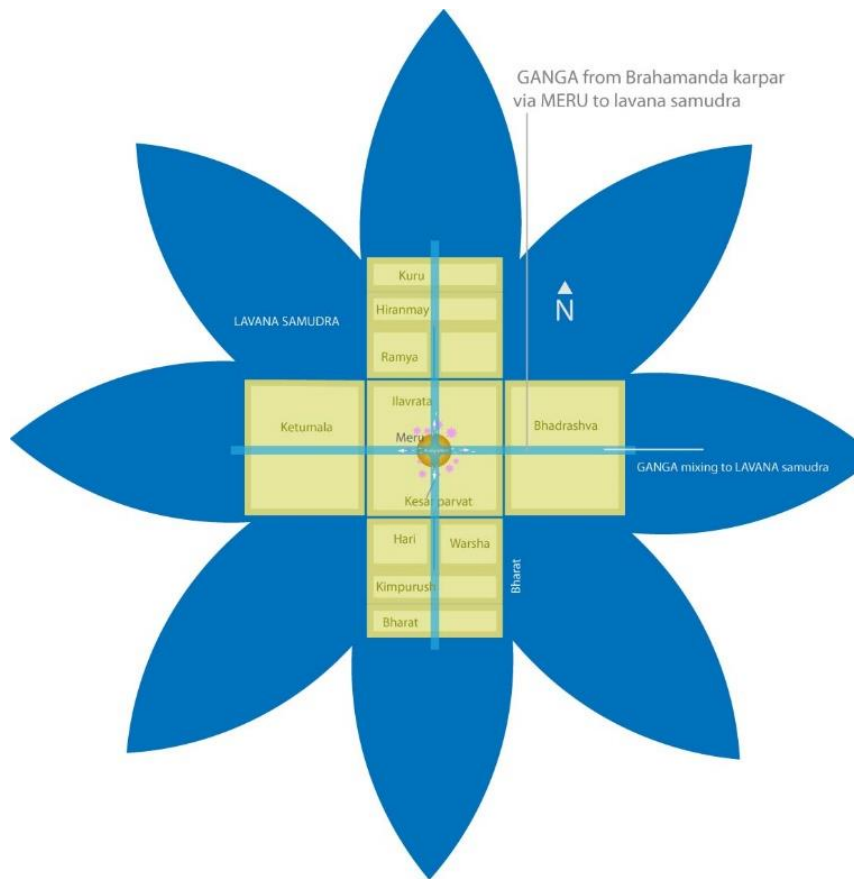


32-33. Milky Way; Brahma Veethi, Devva Veethi, Manushya Veethi, Pischasa Veethi.⁶⁴

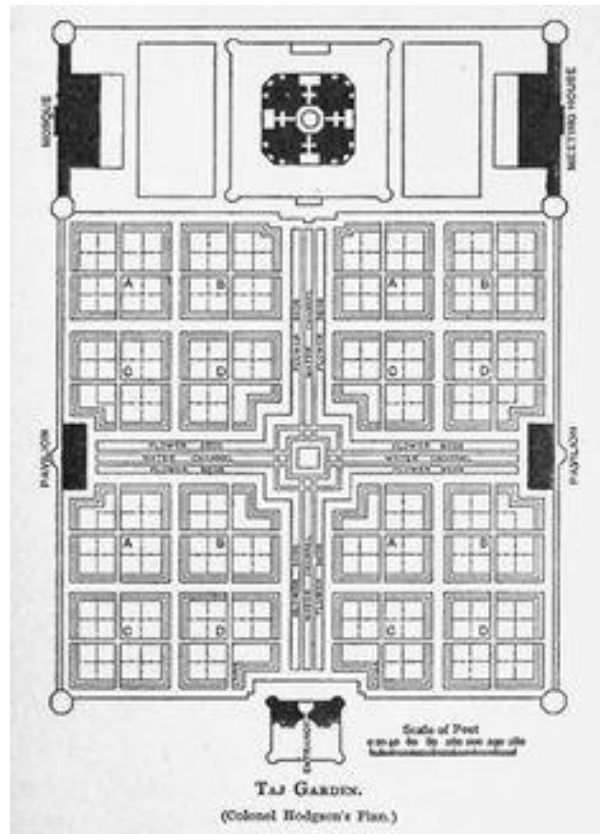


Paisaca Veethi Manushya-Veethi Deva-Veethi Brahma veethi

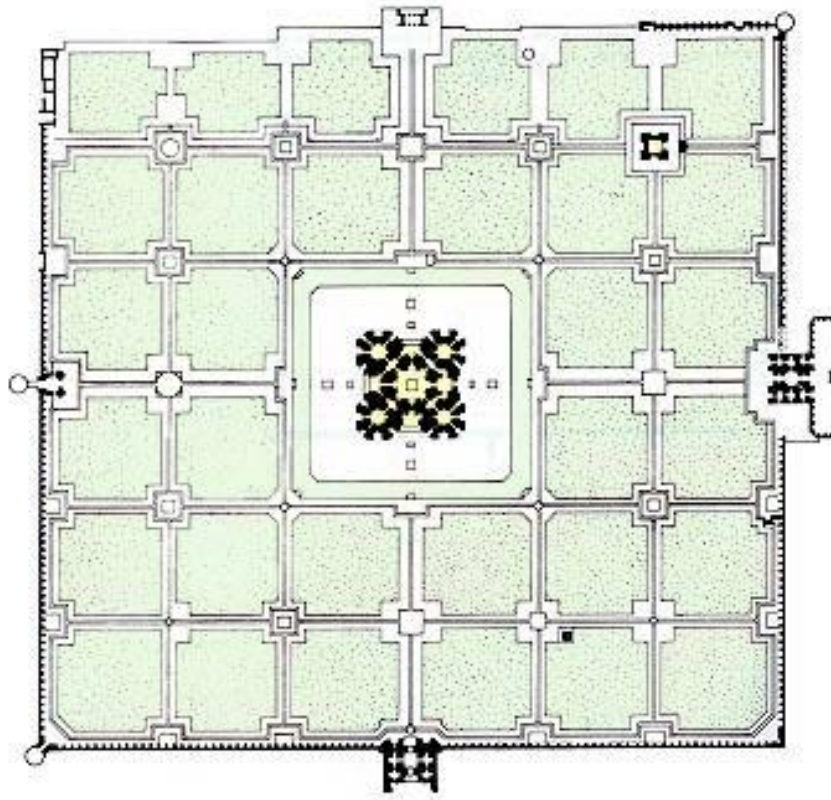
34-35. Pischachavithi, Manusyavithi, Deva Vithi, Brahma Vithi; Annamalaiyar Temple.⁶⁵



36-37. Jambu Dvipa (dweep) and Char Bhag (four rivers of Paradise).⁶⁶



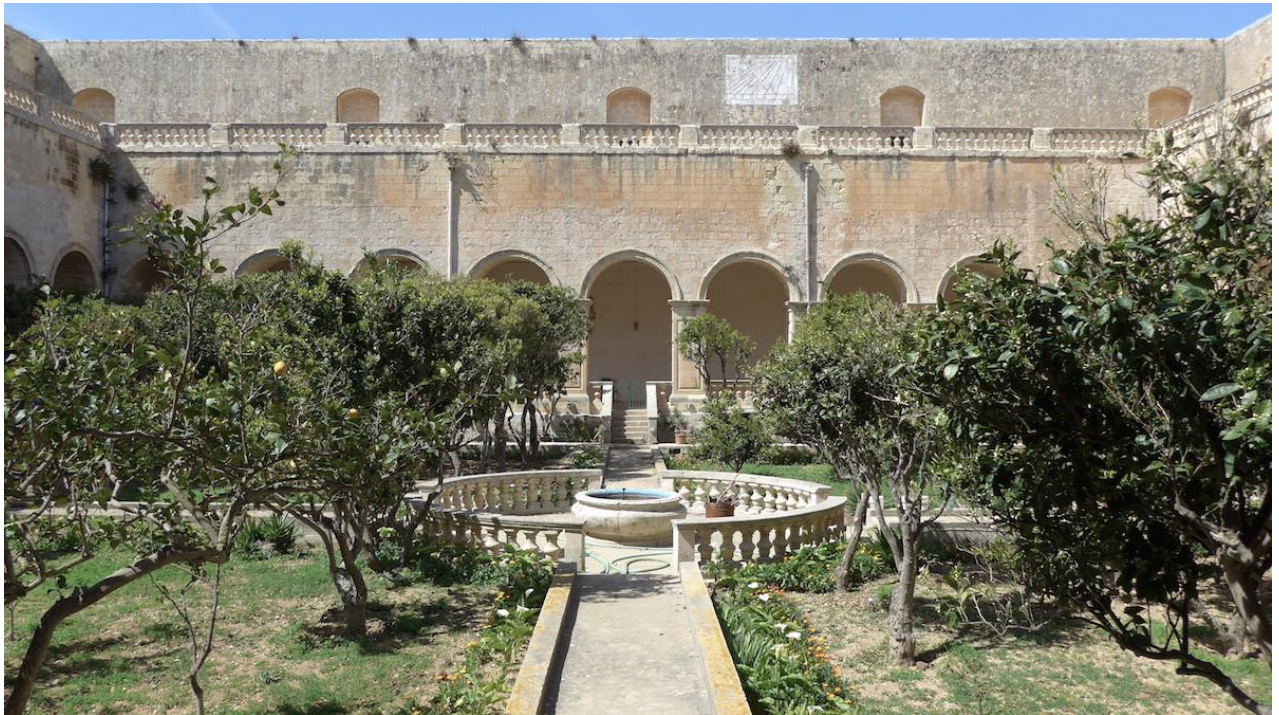
38-39. Char Bagh Taj Garden; Taj Garden (1631-1638).⁶⁷



40-41. Humayun Mausoleum, Delhi, 1571.⁶⁸



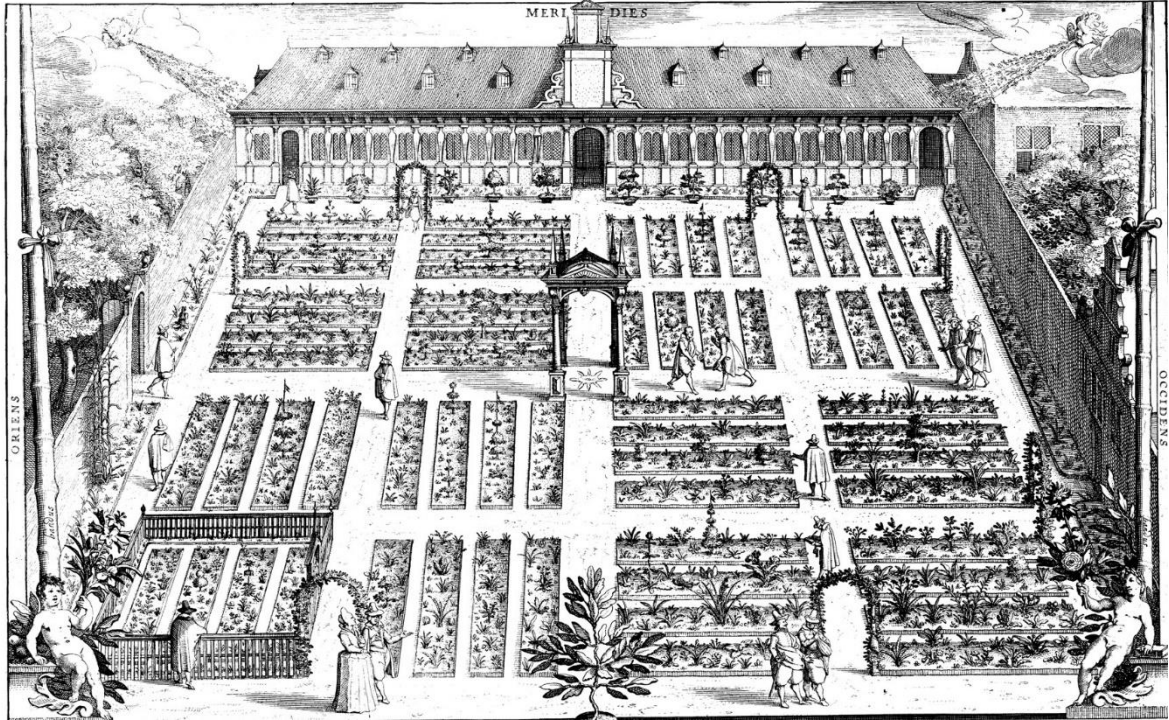
42-43. Chahar Bhag in Isfahan; Jahan Nama Garden, Shiraz.⁶⁹



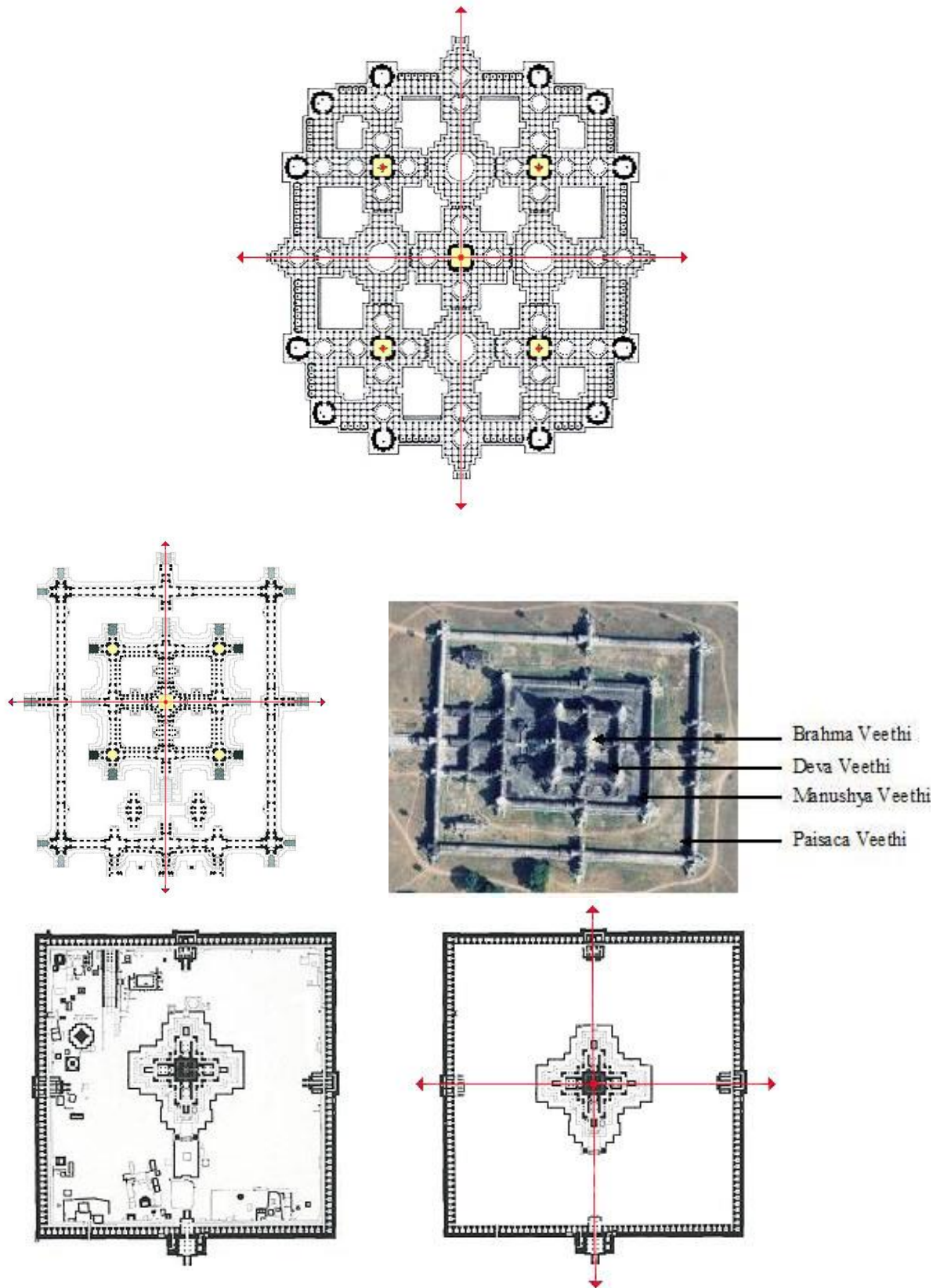
44-45. Hortus Conclusus.⁷⁰



HORTI PUBLICI ACADEMIÆ LUGDUNO-BATAVÆ CUM AREOLIS ET PULVILLIS VERA DELINEATIO.



46-47. Monastery Garden, Ravenna; Hortus Botanicus, Leiden.⁷¹



48-52. Chatur-mukhas (four faces): Ideal Jain Temple; Angkor Wat ground plan (cf. 28-29); Angkor Wat and Vithis; Somapura Mahavira, Paharpur, Bangladesh.⁷²

and paradise is now reduced to plants for doctors and apothecaries to keep our bodies alive, rather than saving our souls.

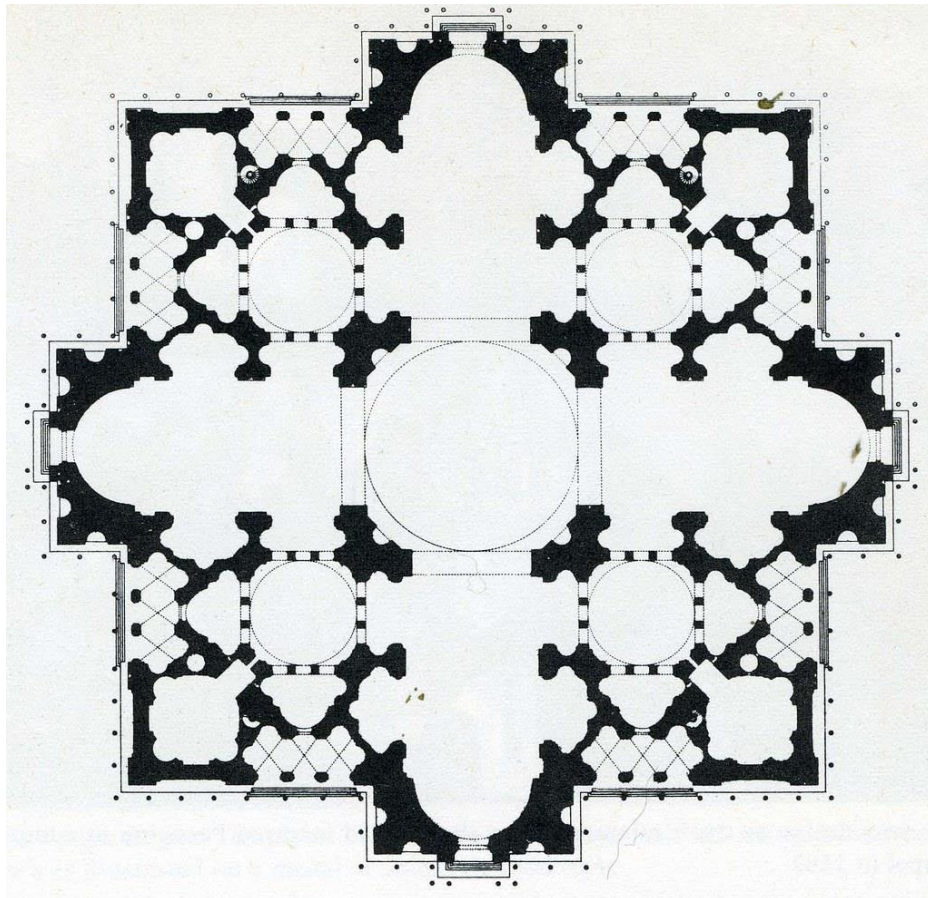
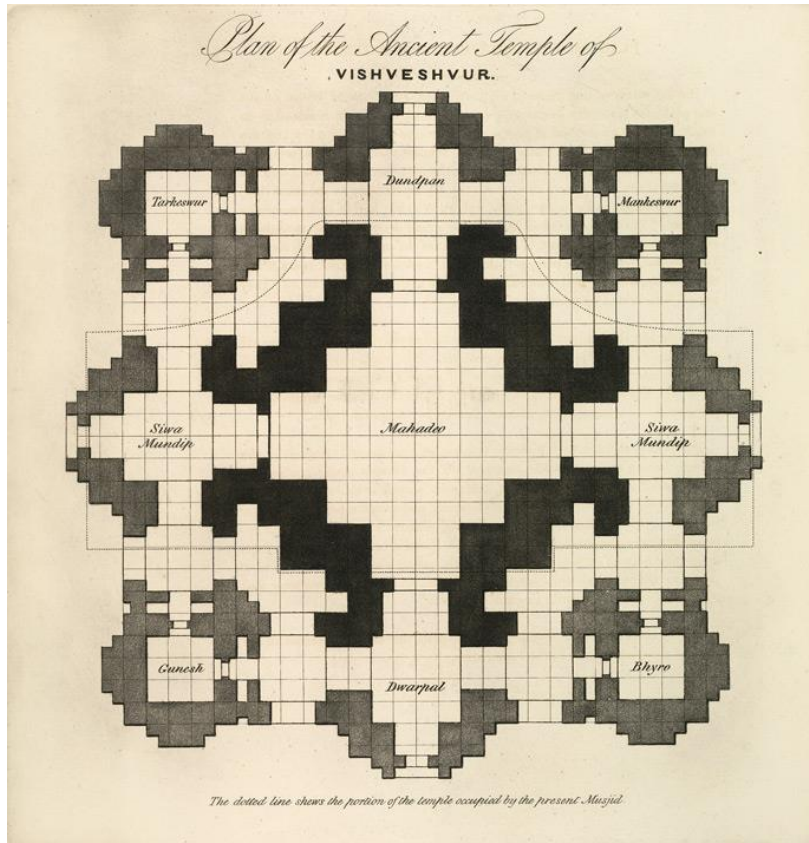
Early Hindu temples were a house of God and typically had only 1 entrance. By contrast, Jain temples were a place where a "Tirthankara" (Jina) gives teachings. "Samavasarana" required that the doctrine of Jina should be preached in all directions:

What is characteristic about the form of Jaina images is that four statues of Tirthankaras are often combined back to back with each other, in either standing or sitting posture. It is called "Chaumukh" or "Chaturmukha" (four faced) image.⁷³ If a temple is dedicated to this chaturmukha image, its garbhagriha is also opened to all four directions, thus provides mandapa, which represent a place of both worship and teaching, in front of each side....The method of setting four-faced building in the center of Chahar Bagh is an application of Indian chaturmukha form to Islamic architecture....In this context, we realize that the chaturmuka-type created by Jainas played an important role within Greater India.⁷⁴

The four faces are clearly connected to the four directions (*char taq*) of Zoroastrianism. Such connections between four gardens (*char bagh*), four faces (*chaturmukha*) and four directions (*char taq*) architecture are of great interest for our story for three reasons. First, they show that the Jain solution is part of a much bigger picture. We have already noted that Indian architecture, was linked with Persian and Islamic architecture. In addition, scholars have noted parallels between the ground-plans of an ideal Jain temple (pl. 48), Angkor Wat in Cambodia (pl. 49-50) and Somapura Mahavira, in Bangladesh (pl. 51-52).⁷⁵ Second, while the Jainas included both circular and square models, they provided one context for how the square model and thinking in terms of fours became important: e.g. 4 animals, arches, branches, causes, cubits, devas, directions, divisions, elements, faces, gardens, guardians, horses, humours, images, kings, knowledges, letters matriarchs, pillars, principles, realms, rivers, rulers, sciences, spokes, stages, stars, stoicheia, vedas, wards, winds, world protectors, worlds. The 4s of *chatur* (cf. *quatuor*, *quatre*) as in *chatur yugas*, *chatur-murthis*, *chatur-dharanis*, *chatur maharajas* (4 great kings) are building blocks for a new cosmology: chatur-ology, a grid system or a tetrad system.

The third reason is unexpected. Seen with an Indian eye the images of *jambu dvipa* (pl.36), *char bhag* (pl. 36) and *chaturmukhas* (pl. 48-52) are simply of 4 rivers along 4 axes in a model of the cosmos. To a Christian eye, however, these 4 lines along 4 axes also define a perfect Greek or Ethiopian cross. At school, and in our organization of knowledge, Indian models of the terrestrial world and Christian models of the cross are separate worlds and have nothing to do with each other. But the Greek cross existed at least eight centuries before Christ. Is it another example of the *Jambu dvipa* grid? Recognizing possible connections between India and Christianity could lead to a new wow.

For example, if we look at James Prinsep's⁷⁶ drawing for the Kashi Vishwanath Temple in Benares (pl. 53), it is easy to see its connection with the fourfold Jain approach just considered (cf. the Adinatha Temple, Ranakpur).⁷⁷ The central section (Mahadeo) has 8 x 8 squares at the centre with 4 sets of 9 squares. This is surrounded by 16 squares which contain 3 x 3 squares each (16 x 9 = 144). We can see it as a variant of the veethis approach outlined above (pl. 33-35). But we can also see it as a variant of the 4 axis approach that leads to 4 rivers, 4 gardens and to the 4 directions of a Greek cross. If we do so there is an unexpected similarity in pattern



53-54. Kashi Vishwanath Temple; Bramante's Ground plan of Saint Peters.⁷⁸

between Prinsep's Kashi Vishvanath temple and Bramante's plan for Saint Peter's in Rome (pl. 54). There is, of course, the possibility that Mr. Prinsep was a naïve imperialist who imposed Western methods on the East. That would have been quite against his character, because he was one of the first occidentals to take Sanskrit seriously in its historical development. The implication is that we need to see both the Kashi temple and Saint Peter's as two examples of a much bigger picture: cruciform plans reflect both Jain, Buddhist, Hindu cosmology as well as a Greek or Ethiopian cross, associated also with Christ's cross.

Our Western story is much narrower. Ground plans have been traced back to Vitruvius.⁷⁹ In the Renaissance, Brunelleschi is typically credited with having combined ground plans and elevations (*pianta, alzata*) for the first time. Given the workshops (*botteghe*) students learned from their masters. Hence, the accepted history of Michelangelo's Vatican is that architects such as Bramante did preliminary drawings (pl. 54), which Michelangelo and Bernini later developed. In our history books, this is told as an exclusively Western story. There have been moves towards world art.⁸⁰ A world architecture is equally needed.

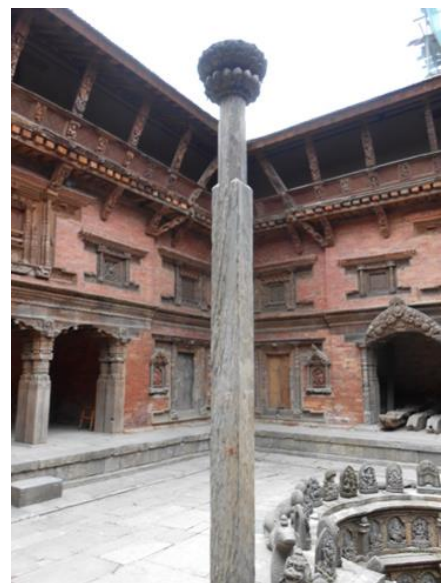
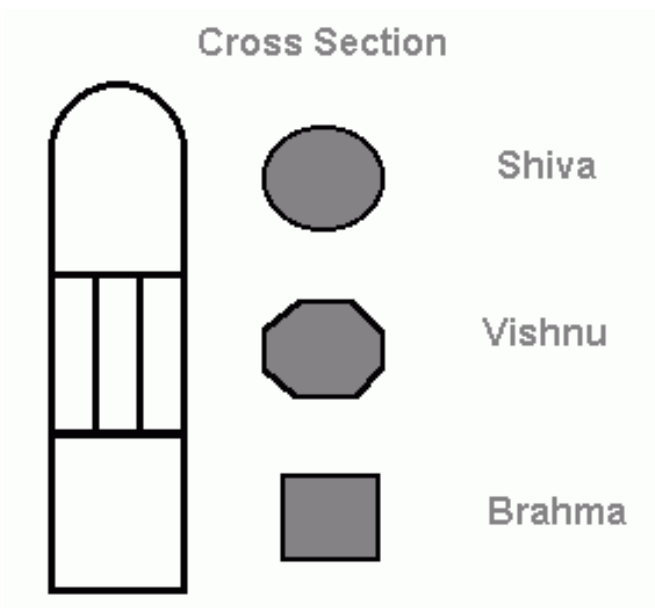
Another example may clarify this need. The Sabil ablution fountain at the Mosque of Ibn Tulun, Cairo (pl. 55) is a well-known building. In current histories of architecture, it is simply seen as a variant of the *chatur* or *chahar Taqi* (4 directions) fire houses in the Zoroastrian tradition.⁸¹ One feature that makes it different is that it combines three basic shapes: a square base, on which is an octagonal section, superimposed over which is a round dome. To understand a larger context from which this comes we need to look briefly at another trend: to use the temple in connection with god.

7. Temple as God

The Hindus gave their gods different number of faces (*murthis*): Brahma had 4; Siva had 5 and Vishnu had 6. They also gave them different geometrical figures: Brahma is linked with the square, Vishnu with the octagon and Siva with the circle. Accordingly, there were Brahma temples which tended to be square, Vishnu temples which were octagonal and Siva temples that embraced the circle. The Hindu version of the Western Trinity, was called the *Trimurti* (literally 3 faces) which combined Brahma, Vishnu and Siva in a single statue or painting.

There is also a quite unexpected version of the *trimurti* concept. Shiva is particularly associated with two symbols: a seated bull (Nandi) and a linga. In everyday discourse, the Shiva linga is said to represent Shiva's male organ. The full story is considerably more complicated. If we look closely at the lingam (pl. 56), we see that it is divided into three sections: a square base for Brahma, an octagonal middle for Vishnu and a circular upper section for Siva. Hence, the lingam is a symbol of the Hindu Trinity (*trimurti*, literally three faces).

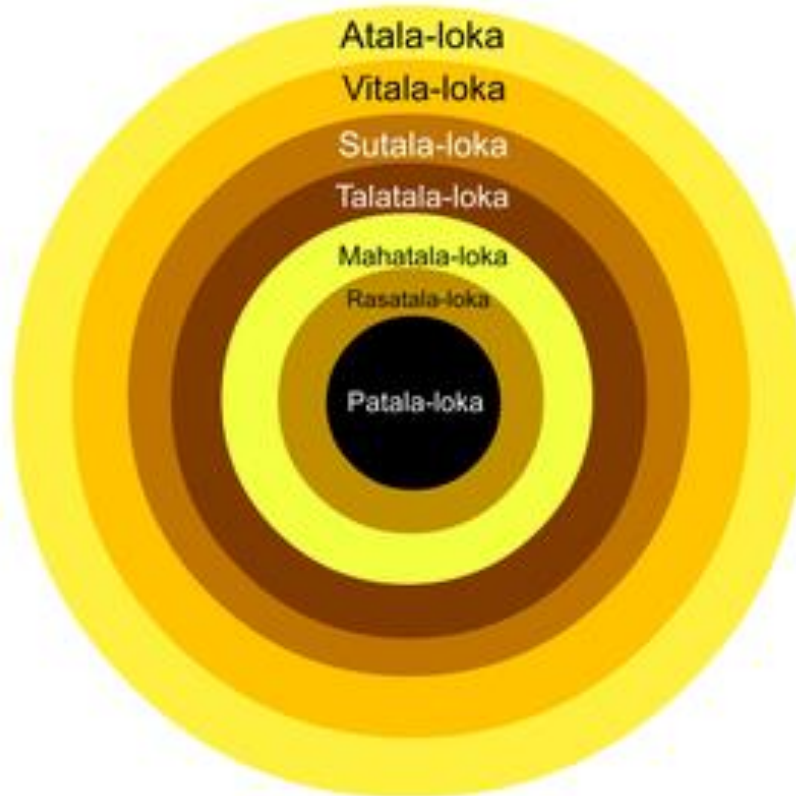
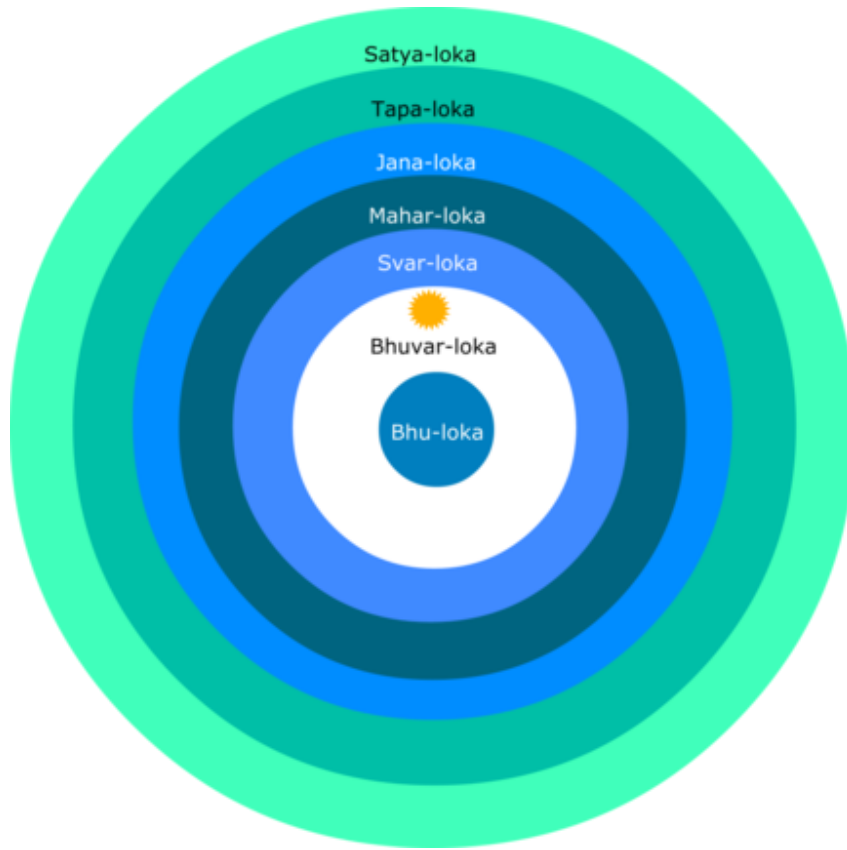
This combination of square, octagon and circle is precisely the architectural feature that we noted in the Cairo fountain. It recurs in a column in a courtyard of Durban square of Lalitpur (Patan) in Nepal (pl. 57). It is found throughout Hindu temples and also, not infrequently, in Islamic mosques in Tamil Nadu. More surprisingly, we find it in the the Bell Tower, of San Paolo fuori le mura, Rome, one of the 7 basilicas of Rome (pl. 58); the Al-Masjid al-Nabawi Minaret in Medina (pl. 59); in the Dohany Street Synagogue, Budapest (pl. 60). We find it equally in Russian Orthodox churches such as the Temple-museum of St. Nicholas in Tolmachy in Moscow⁸² or the Epiphany Church in Goncharov. Hence, a symbol relating to the Indian trimurti recurs in 3 of the world's great religions: Judaism, Christianity and Islam. There are histories of Hebrew, Islamic and Christian architecture. None of them mention this. Wow is not just about the size of the unfamiliar. It is about discovering unexpected meaning and connections in what we thought was familiar.



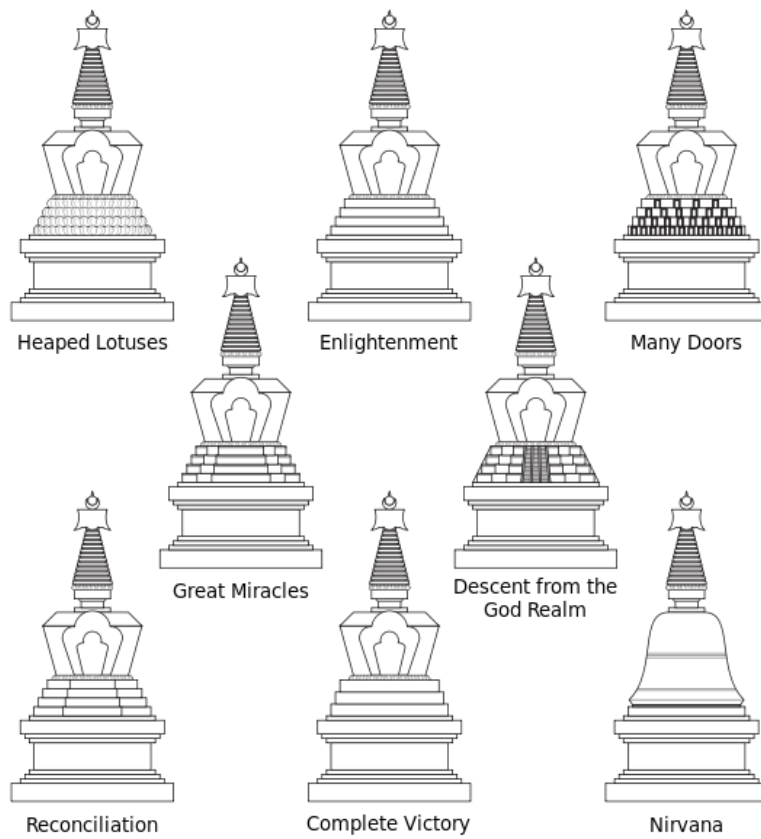
55-57. Sabil ablution fountain at Mosque of Ibn Tulun, Cairo; Shiva Linga; Pillar in Patan.⁸³



58-60. Bell Tower, San Paolo fuori le mura, Rome; ⁸⁴ Al-Masjid al-Nabawi Minaret, Medina; ⁸⁵ Dohany Street Synagogue, Budapest.



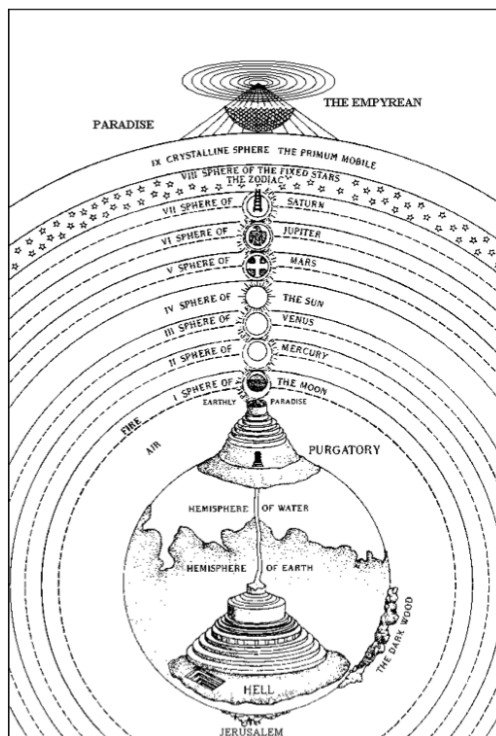
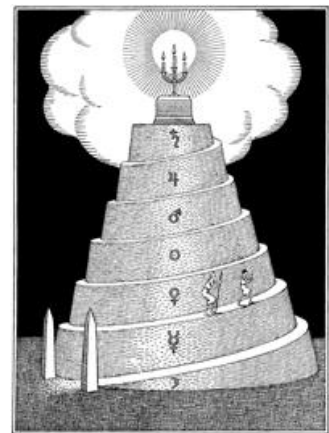
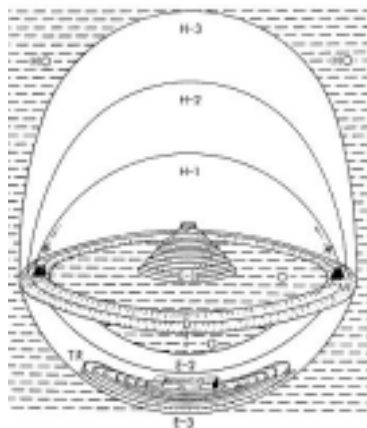
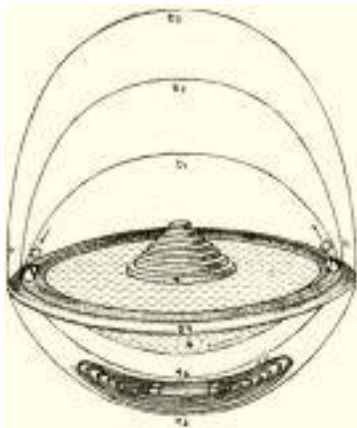
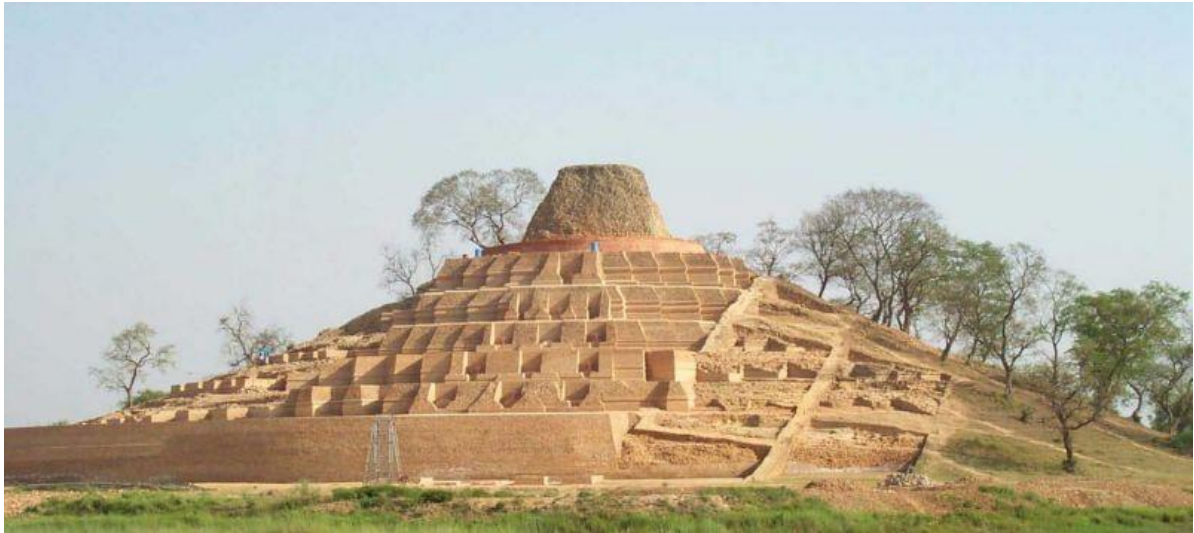
61-62. Upper and Lower 7 Lokas (places), Hinduism.⁸⁶



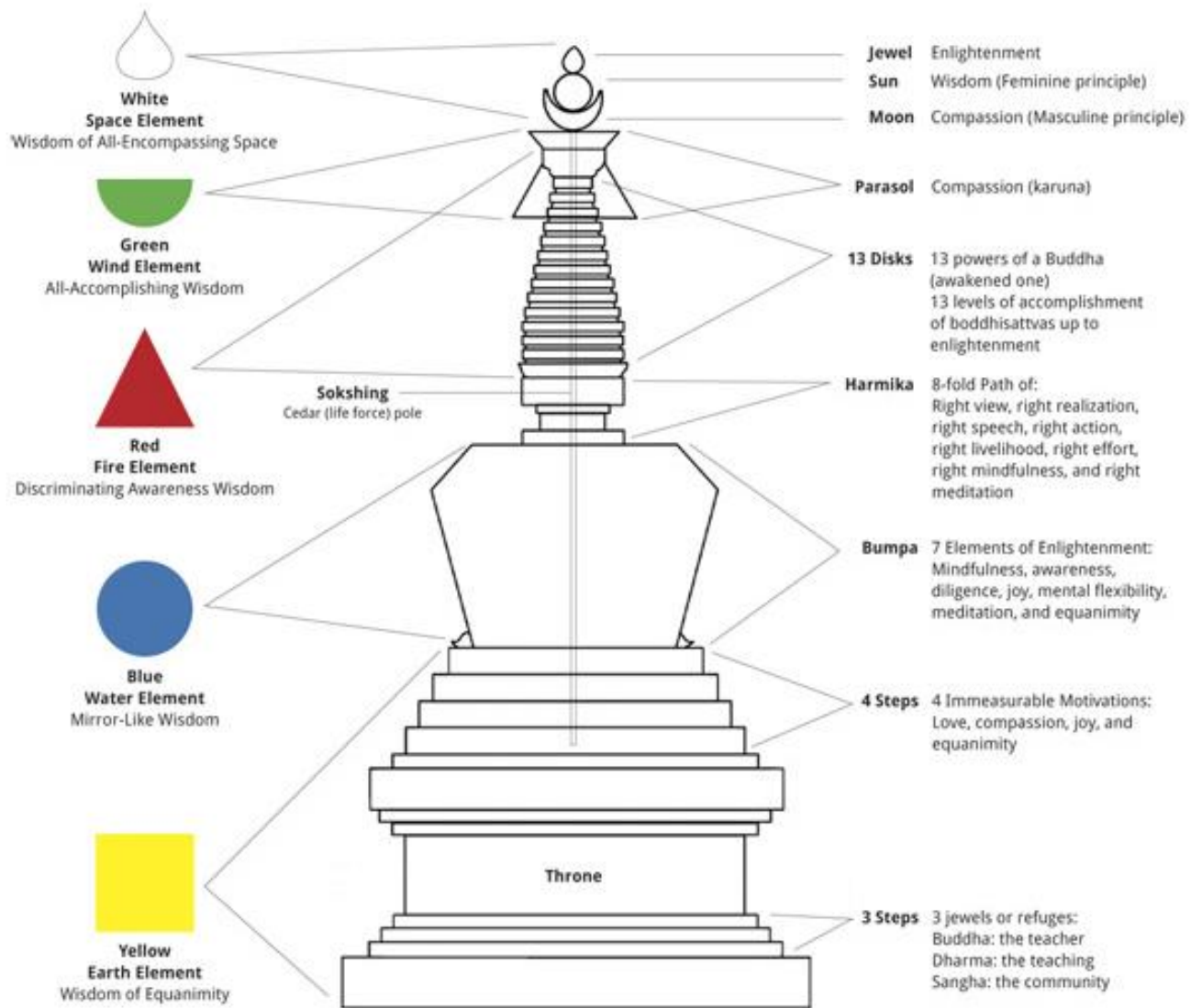
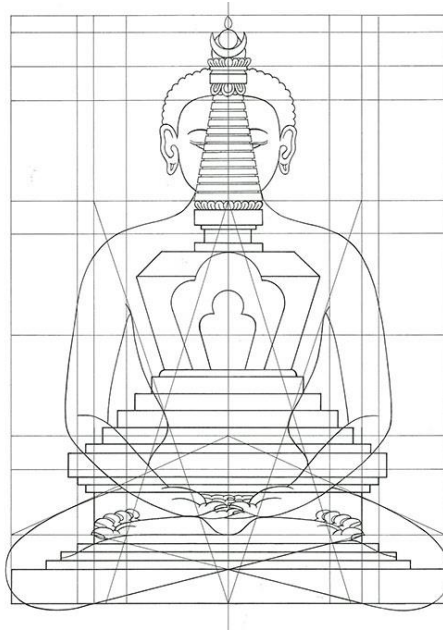
63-64. Great Stupa, Sanchi; 8 Great Stupas.⁸⁷



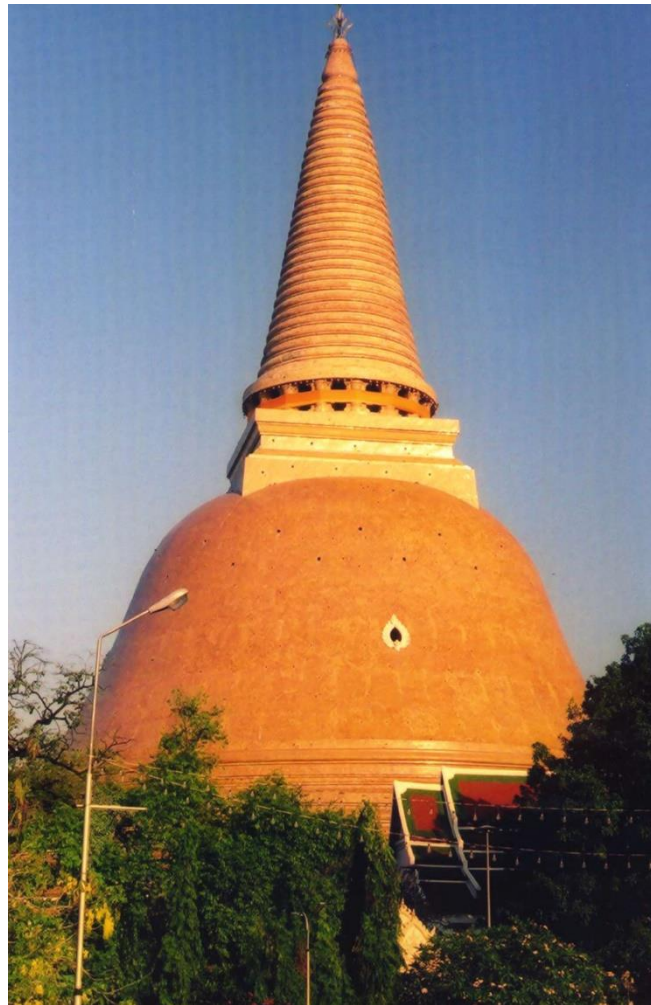
65-66. Ziggurat of Choga Zambil; Model of the Marduk Temple at Babylon.⁸⁸



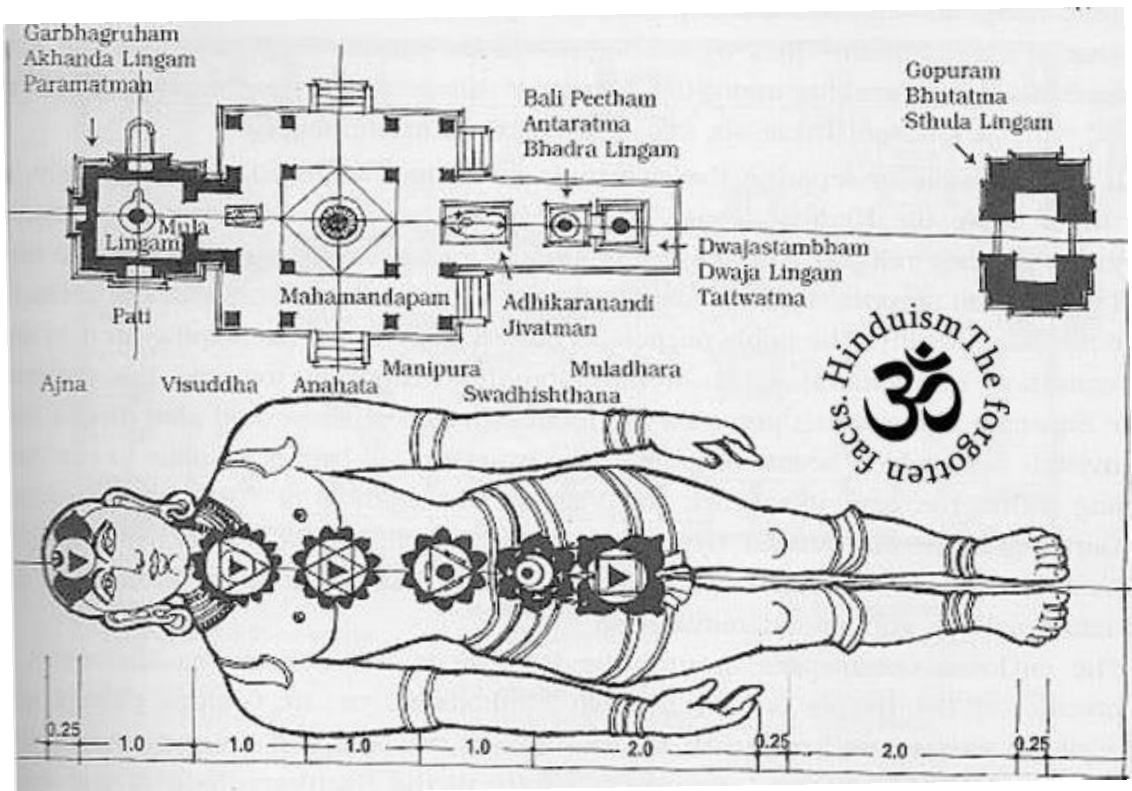
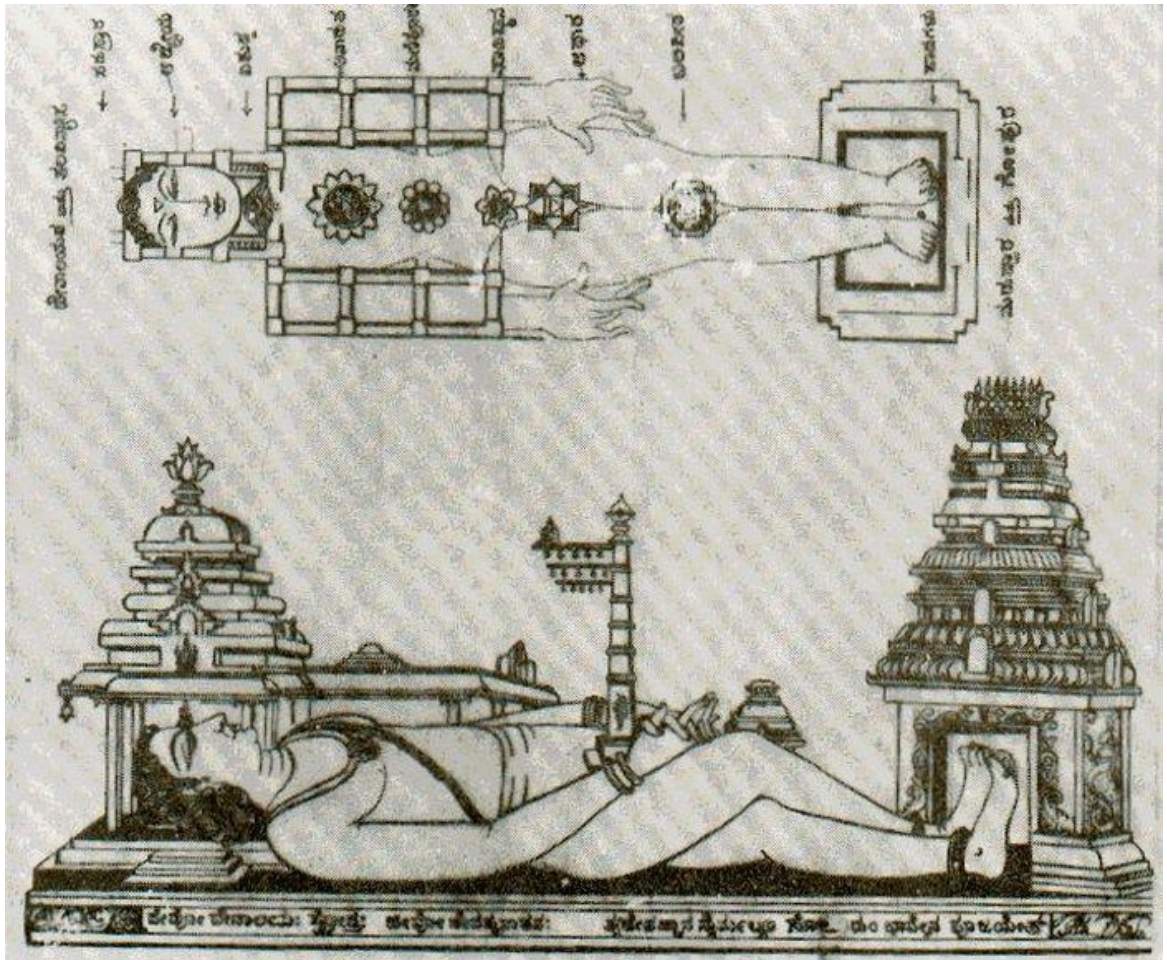
67-71: Kesaria stupa; Astapad Teerth; Triple Decker Universe of Khaldaean Astronomers; Three-part Babylonian cosmos; Planetary ziggurat; Dante, Cosmos.⁸⁹



72-73. Stupa as meditating person; Stupa and 5 elements.⁹⁰



74-75. Stupas: Boudhanath, Kathmandu; Phra Pathom stupa, Nakhon Pathom, Thailand.⁹¹



76-77. Hindu Cosmic Man.⁹²

8. Temple as seven heavens and seven hells

In another solution, the temple becomes associated only with the seven heavens and the seven hells (or the 7 upper and lower lokas, pl. 61-62) as part of a cosmology that includes seven oceans, seven islands, seven mountains. The great monastery at Lhasa is said to reflect these heavens and hells. The great stupa at Sanchi (pl. 63) can be seen as part of this tradition. Its central pole is seen as the world axis. Its dome is called an *anda* (egg): as in world egg. Hence, once again, the building hearkens back to creation stories. The stupa evolves into an extraordinarily complicated architectural expression. There are 8 great stupas (pl. 64). In other classifications there are 108 stupas.

9. Temple as world of 7 planets

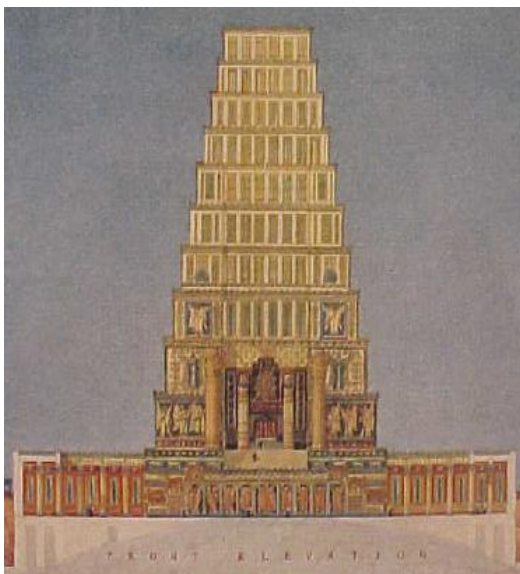
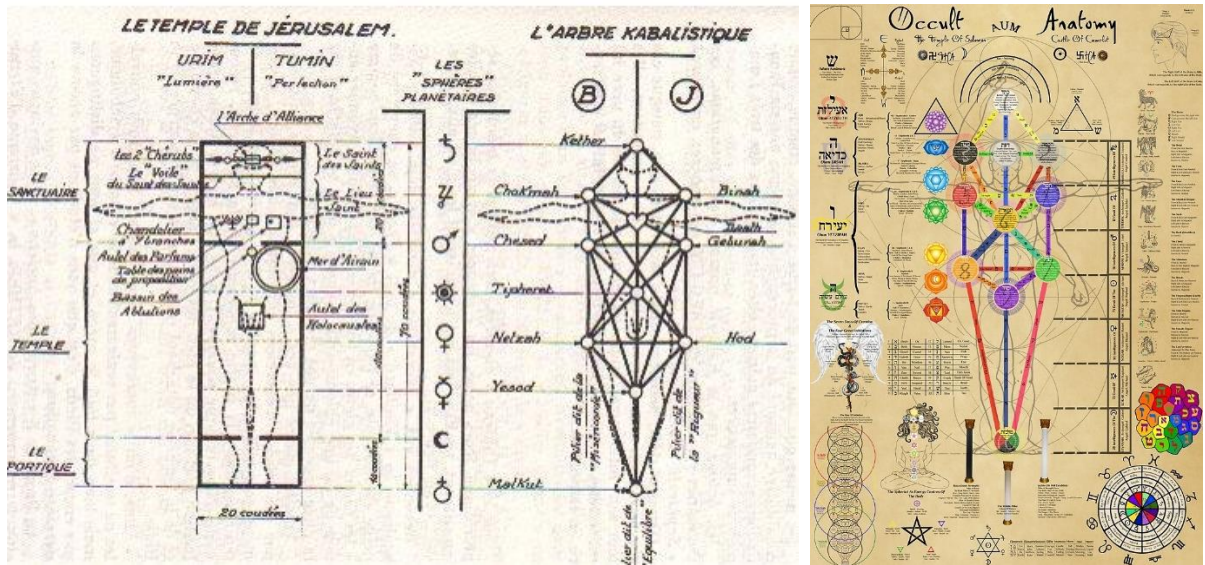
As we move West, the 7 lower places (*lokas*) disappear and the temple becomes linked with the 7 planets. In the case of the Temple of Borsippa at Birs Nimrud in Iraq, we have a detailed colour-coded description:

The basement stage assigned to Saturn, was blackened by means of a coating of bitumen over the face of the masonry; the second stage, assigned to Jupiter, obtained the appropriate orange colour by means of a facing of burnt bricks of that hue; the third stage, that of Mars, was made blood red by the use of half-burnt bricks formed of blood red clay; the fourth stage assigned to the Sun, appears to have been covered with thin plates of gold; the fifth, the stage of Venus, received a pale yellow tint from the employment of bricks of that hue; the sixth, the sphere of Mercury, was given an azure tint by vitrification, the whole stage having been subjected to an intense heat after it was erected, whereby the bricks composing it were converted into a mass of blue slag; the seventh stage, that of the moon, was probably like that of the fourth, coated in actual plates of metal. Thus, the whole building rose up in stripe of yellow, the yellow being followed by the blue. Above this the glowing silvery summit melted into the bright sheen of the sky.⁹³

The height of the ziggurats varied. Some had four stories. The Ziggurat of Choga Zambil had five (pl. 65). The model of the Marduk Temple at Babylon has 7 (pl. 66) and was presumably painted like the temple of Borsippa just mentioned. As we go further West again, we discover that a round stupa in Kesaria (pl. 67),⁹⁴ recurs as a round ziggurat (pl. 68) in Armenia in the triple decker universe of Khaldaean astronomers; in the three-part Babylonian cosmos (pl. 69) and in the planetary ziggurat (pl. 70). Still further West, we discover that Dante adopts the Armenian stupa as his version of Purgatory in his *Divine Comedy* (pl. 71).⁹⁵ Noteworthy, is that Babylonia developed three cosmologies: 1) with a square ziggurat, which began with Saturn and worked upwards to the moon; 2) with a round ziggurat, which began with the moon and worked upwards towards Saturn and 3) in the form of a candelabrum with 7 branches: at which point cosmology was no longer linked with architecture.

10. Temple as Man

A “final” variant makes man the model of the temple. Buddhism creates a stupa in the form of a meditating person (pl. 72). A more detailed version links this with the five elements and five colours (pl. 73). Earth (yellow) is followed by water (blue); fire (red); wind (green) and space (white). Earth involves 3 steps (3 jewels): teacher, teaching, community (Buddha, Dharma, Sangha) and 4 steps: love, compassion, joy and equanimity. Water involves bumba: the 7 elements of enlightenment. Next is harmika the 8 fold path. Fire entails 13 disks, 13 powers of a Buddha. Wind corresponds to the parasol: compassion (*karuna*). White entails the moon (compassion, male); sun (wisdom, female) and jewel (enlightenment). On the surface, we see a stupa, representing a person. In reality, these are stages of a person’s development from physical body to enlightened being. This is a vision of becoming, rather than a portrait of being.



78-82. Temple of Jerusalem; Temple of Solomon (Occult Anatomy), Temple of Jerusalem model; Other Models of Temple of Solomon.⁹⁶

In terms of physical constructions, the pyramids vary immensely from the great stupa at Boudhannath, Kathmandu (pl. 74) to the high reaching Phra Pathom stupa, Nakhon Pathom, Thailand (pl. 75).⁹⁷

Meanwhile, there was yet another Hindu tradition, which aligned a cosmic man directly with the construction of the temple (pl. 76-77). It was this model that was taken up by the Hebrews (pl.78). Now, under the name of occult anatomy (pl. 79), a human figure became a symbol of both the Temple of Solomon and the Castle of Camelot. In this figure, the 7 chakras, the 7 planets and the 12 zodiac signs were all aligned.⁹⁸ The resulting second temple, now destroyed, has many models (e.g. pl. 80), including some (e.g. pl. 81-82), which recall Indian gopuras.

In retrospect, we see how India created a whole range of relations between sacred buildings (temples, stupas, chortens, pagodas) and the cosmos. The West tended to adapt only a simplified subset of these solutions: increasingly buildings with technology rather than cosmology; safe but wowless. From a global viewpoint, we can see these eight solutions as a to and fro between two seemingly competing models of the universe: the circle and the square. The circle (Shiva) leads to the 7 yogas, stupas, chortens, pagodas. The square (Brahma) leads to grids, vastus, veethis, 4 faces (chatur mukha), 4 directions (chatur taq), four gardens (chatur gardens), to square temple compounds, square ziggurats; square and rectangular temples and pyramids. Examples of all of these abound on the Internet. Search engines have a single space for searches designed especially for who is and what is? They search for “objects” and ignore the associations of objects. More interesting questions require at least two search spaces. Here only three examples will be outlined.

10.1.Time

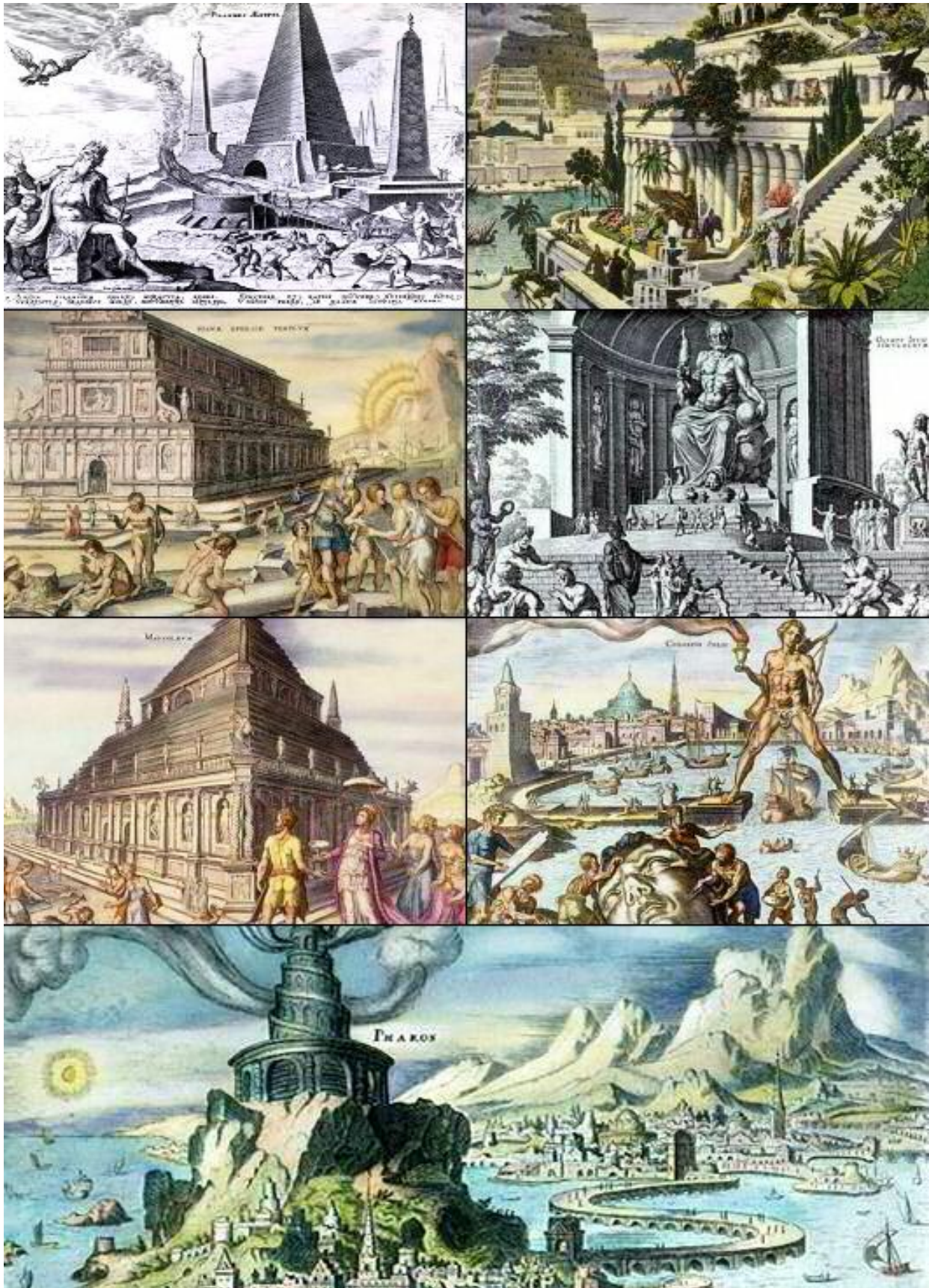
With today’s search engines I can ask Boudhannath Stupa, Kathmandu date. But I may want to know the history of stupas. When was the first? How did they evolve? How many kinds are there? What are related structures? Can I see this development on a map?

10.2.Space

If I begin with Boudhannath stupa and click Google maps I can find it on a map. But where are the other stupas in Kathmandu, Nepal, India, Iran, etc.? A next step would be to see these chronologically so that I can watch on a map how stupa construction spreads. This could then be refined: only stupas under 5 meters; only stupas over 10 meters; or which are of the 8 great stupas or how many of the 108 stupas? Or the question could be more complex. Show how round sacred structures spread through Nepal. Or how grid type structures spread from India to Egypt spatially and chronologically?

10.3.Media

Wiki has a heading: Taj Mahal replicas and derivatives.⁹⁹ But what about Taj Mahal models in marble, wood, glass or as decorations? What if we could ask for temporal, spatial and media co-ordinates for any (sacred) monument? Or when we look at the gardens of Taj Mahal or other monument, we can see its underlying geometry, grid system etc. in the manner of an x-ray. What if, when looking at a building, I could see all related drawings, preparatory and later? That would be a step towards search engines with a wow, and indeed towards wowology as a science.



83. Seven Wonders of Ancient World.¹⁰⁰

11. Seven Wonders¹⁰¹

Curiously enough there is no list of 7 wows of the world. There are several lists of 7 wonders: of the ancient world, of the industrial world, of the modern world and of the natural world.

11a. Seven Wonders of Ancient World¹⁰²

On the surface the list of ancient wonders is very impressive (pl. 83):

Greece	Statue of Zeus at Olympia
Egypt	Great Pyramid of Giza Lighthouse of Alexandria
Turkey	Temple of Artemis at Ephesus Mausoleum at Halicarnassus Colossus of Rhodes
Iraq	Hanging Gardens of Babylon

On closer inspection it entails only four countries: Greece, Egypt, Turkey, Iraq. Even within these four countries the choice begs questions: why only the Great pyramid, and not all three with the sphinx and the amazing underground boat designed to take souls upstream along the Nile? Why not Karnak or Abu Simbel or the Library at Alexandria? Why not Ephesus, Miletus or Pergamon the altar, which so inspired the Germans that they brought it to Berlin? Looking further, why not Athens or Rome? The temple of Diana is impressive, but what about the temples at Selinunte and Agrigentum?

What about earlier cities in Turkey such as Göbekli Tepe,¹⁰³ which goes back at least to 8,800 B.C. and is one of the earliest documented circular cities? As a Tepe, Göbekli belongs to a whole series of raised fortified cities sometimes called mound, hill, Höyük, Tall, Tappa, Tappeh, Tapu, Tel, Tell, Tepe, Teppe, Terp and includes famous cities such as Arbela (Erbil) in Iraq, which is said to date to 148,000 B.C.¹⁰⁴ Why is there no mention of Persian monuments such as Persepolis, Indian monuments or Chinese monuments? Needed are lists of wonders according to the Greeks, Romans, Byzantines, Achemaenids and other empires.

11b. Seven wonders of the industrial world¹⁰⁵

On the surface the seven wonders of the industrial world again seem logical:

Great Britain	Bazalgette's London sewers 'Great Eastern' (ship)
United States	Bell Rock Lighthouse Transcontinental Railway Brooklyn Bridge Panama Canal Hoover Dam

Seen chronologically is it really true that five of the seven were American? The Panama canal was important. But what about the Suez Canal? What about Germany, France, Italy and Luxembourg in terms of industrial innovation?



84-85. Seven Wonders of the World (Modern).¹⁰⁶

Other versions of the new wonders include the Empire State Building, The Golden Gate Bridge and the CN Tower (pl. 84).

11c. New Seven Wonders¹⁰⁷

Then there are the seven new wonders (pl. 85). The good news is that seven countries are now included:

Brazil	Christ the Redeemer
China	Great Wall
India	Taj Mahal
Italy	Colosseum
Jordan	Petra
Mexico	Chizen Itza
Peru	Macchu Picchu

But, again there are reasons for reflection. Christ the Redeemer belongs to the 20th c. (1931) but, in the meantime, is the smallest of the world's tallest statues (pl. 90-91). Meanwhile, other wonders are older. The Taj Mahal was 1631-1648. Machu Picchu was 1450-1460. Chizen Itza goes back to 832. The remaining three go back to B.C. and hardly new wonders of the world.

11d. Seven Natural wonders.¹⁰⁸

Finally, there are the seven natural wonders. Here again the good news is that are seven countries:

Australia	Great Barrier Reef
Brazil	Guanabara Harbour of Rio de Janeiro
England	Northern Lights
Mexico	Parícutin
Nepal	Mount Everest
United States	Grand Canyon
Zimbabwe	Victoria Falls

Then there are competing lists: e.g. the seven Natural Wonders (CNN);¹⁰⁹ the new wonders of nature;¹¹⁰ top 10 strange mysterious places;¹¹¹ 39 natural wonders;¹¹² 1000 amazing places¹¹³ or the wierdest place on earth.¹¹⁴ And again there are questions. Why should England be particularly linked with the Northern Lights rather than Scotland, Finland, Norway, or even Greenland, Canada or Russia? In the past years, Victoria Falls has been running dry due to climate change.¹¹⁵ Why not choose the Iguazu Falls, which is perhaps the most dramatic of 15 falls in Brazil?¹¹⁶ The great barrier reef is important. But what of Uluru (Ayers Rock), which plays a central role in the myths of the Aborigines? Everest may be the highest mountain, but what of Mount Kailash, which is the most important mountain for the Hindu, Buddhist, Jain, and Bon religions? The harbor of Rio may be impressive but what of the Amazon? Paracutin is impressive but what of the 153 km. of underground rivers in Mexico?¹¹⁷ We probably need a series of lists: 7 wonders of the world, 7 wonders for each of 195 countries in the world.¹¹⁸ Perhaps we should have top 10, top 20, top 50 and top 100 to help make us aware that the wonders of the world are not mainly along the west coast of Turkey but everywhere in the world. We need more lists of inspiring, most inspiring, awe- and absolutely inspiring.¹¹⁹



86-87. Nubian Pyramids; Chinese pyramid in Xian.¹²⁰

11e. Pyramids

We have already noted how the 7 wonders focus only of the pyramid of Giza. But the problem goes deeper. Egypt is said to have produced 120 pyramids. Google maps under Egypt pyramids shows some. But which search query will give me a list of these? By contrast, there are 255 pyramids in Sudan (pl. 86):

The first of those estimated 255 pyramids was erected at the site of El-Kurru, which holds the tombs of King Kashta and his son Piye (Piankhi)... While Egypt had needed some three millennia to build its roughly 120 pyramids, the Nubian pyramids of Sudan had been built in the time span of just a few centuries. Compared to the Egyptian ones, Nubian pyramids differ considerably. They are built of stepped courses of horizontally situated stone blocks and their height ranges from approximately 20 to 98 feet.¹²¹

Which search query will provide me with a chronological list of their appearance, let alone of a chronological list that shows their spatial-temporal evolution? Or to go back to the 120 pyramids of Egypt, how do the pyramids of Giza relate to the pyramids of Djoser¹²² or of Darshur?¹²³

Or to expand the horizons: it is well known that there are an estimated 1000 pyramids,¹²⁴ amongst 60,000 structures¹²⁵ in Central America:

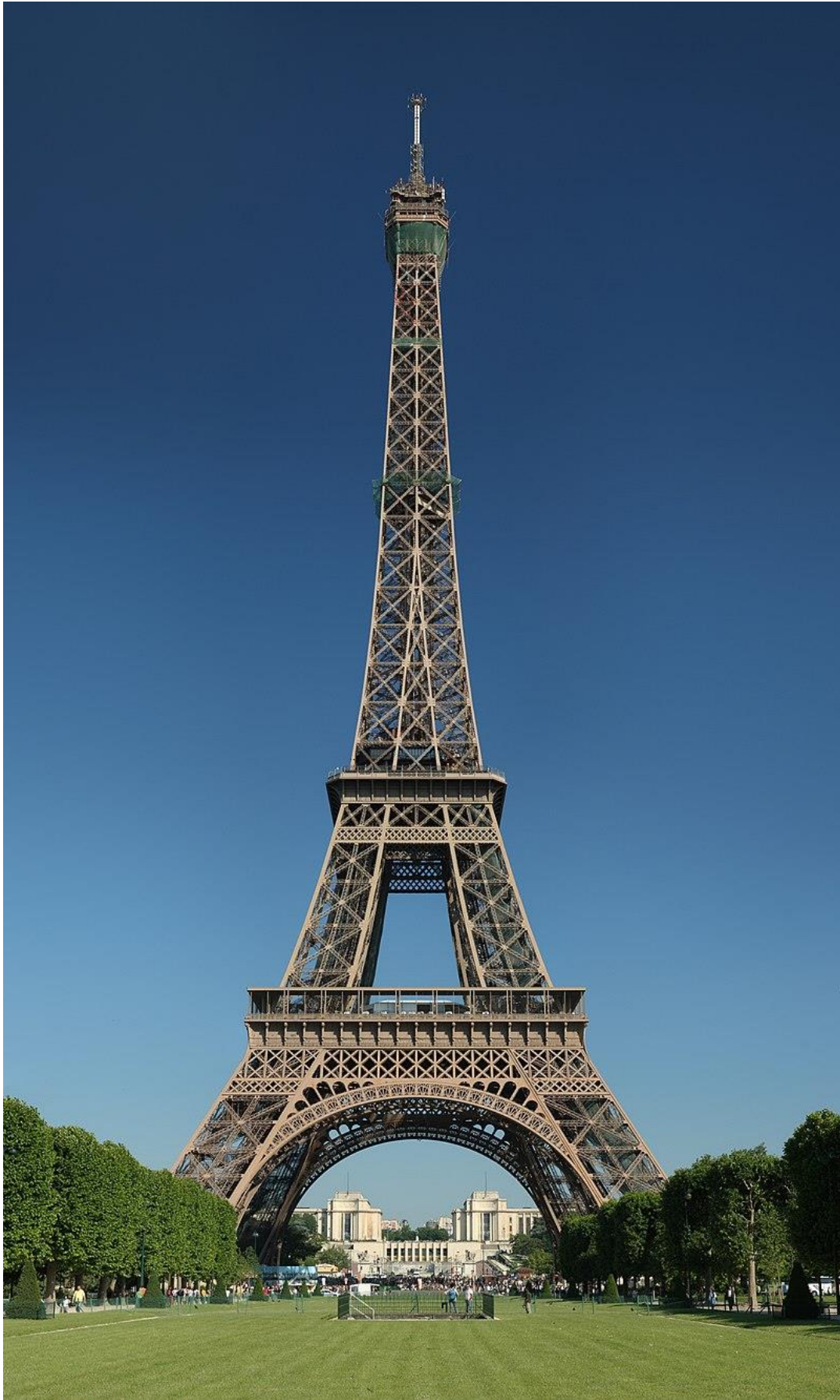
Despite the towering reputation of Egypt's Great Pyramids at Giza, the Americas actually contain more pyramid structures than the rest of the planet combined. Civilizations like the Olmec, Maya, Aztec and Inca all built pyramids to house their deities, as well as to bury their kings. In many of their great city-states, temple-pyramids formed the center of public life and were the site of holy rituals, including human sacrifice. The best-known Latin American pyramids include the Pyramid of the Sun and the Pyramid of the Moon at Teotihuacán in central Mexico, the Castillo at Chichén Itzá in the Yucatan, the Great Pyramid in the Aztec capital of Tenochtitlan, the Pyramid at Cholula and the Inca's great temple at Cuzco in Peru.¹²⁶

Meanwhile, it is well known that there may well have been at least 100 pyramids in Xian (pl. 87). Even a simple list of these is nay impossible to find on the Internet. A list in chronological or geographical order does not seem to exist. And this once again points to the shortcomings of our contemporary systems. If we type a naïve question such as pyramid Uzbekistan we are rewarded with an answer.¹²⁷ But the moment we embark on more difficult questions: e.g. the evolution of pyramids in central Asia both temporally and spatially, the system cannot keep up. The truth is our systems are designed for isolated answers, not answers which reflect historical, spatial, cultural, medial answers. Our systems find objects, not associations.

Which brings us back to wowology: the quest is not simply an isolated statistic. The quest is for context: not simply an object but all its associations. My colleague and friend, Carl Smith, would call this contextology.¹²⁸ But ultimately, it is more: it is not just context, it about understanding the reasons why things are as they are. We should be able to search for pyramids and trace how it spread within a given country, see how the concept spreads across various countries, see how the sizes of pyramids vary in the process. In so doing, a history of pyramidology, would lead us towards a real concept of wowology.



88. World's tallest museum: Mole Antonelliana, Turin (1863-1889, 167.5 meters).¹²⁹



89. Eiffel Tower (1887-1889, 300 meters).¹³⁰



90-92. Tallest statues, Mumbai planned tallest statue for Chhatrapati Shivaji (212 m.).¹³¹



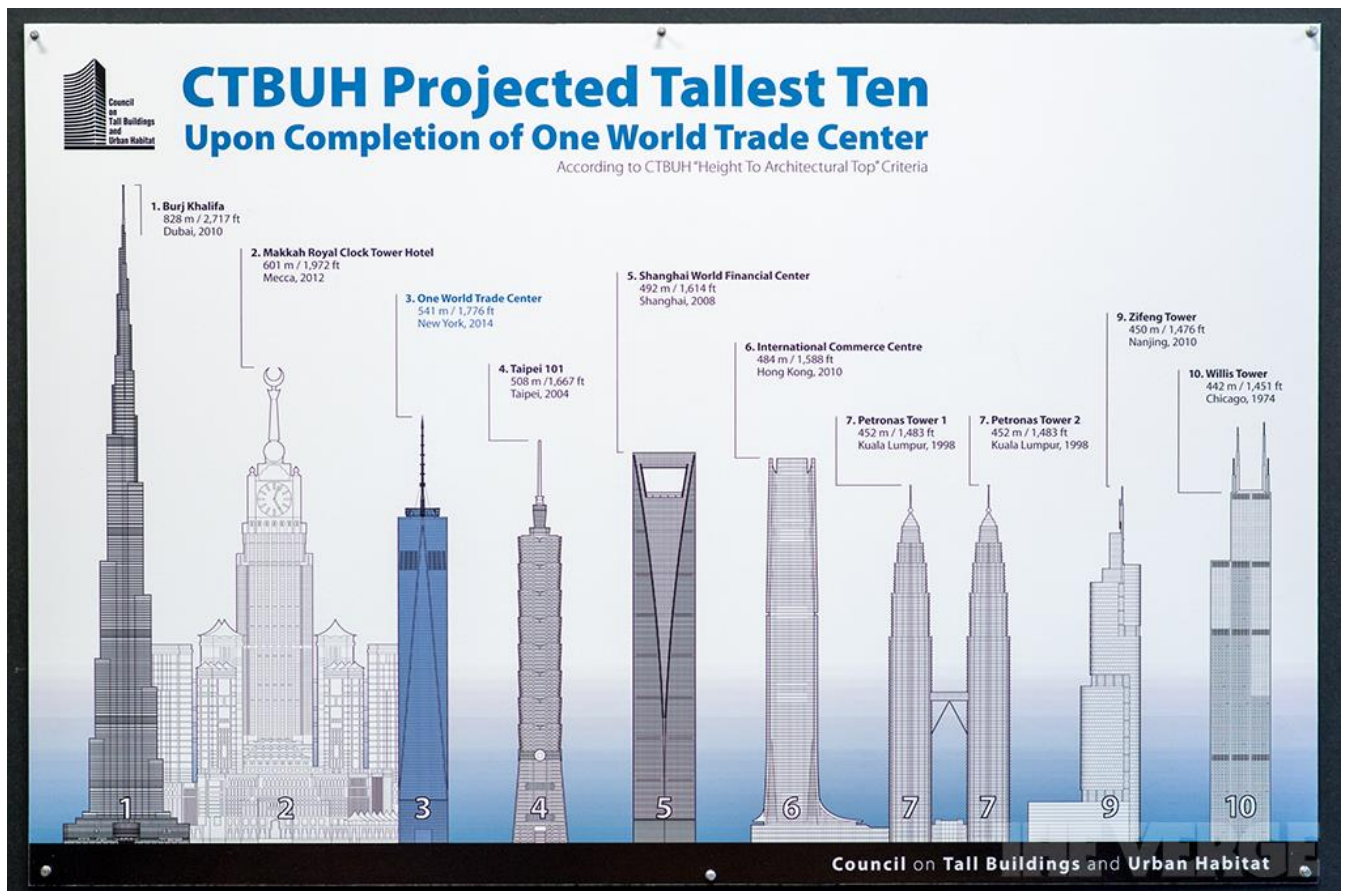
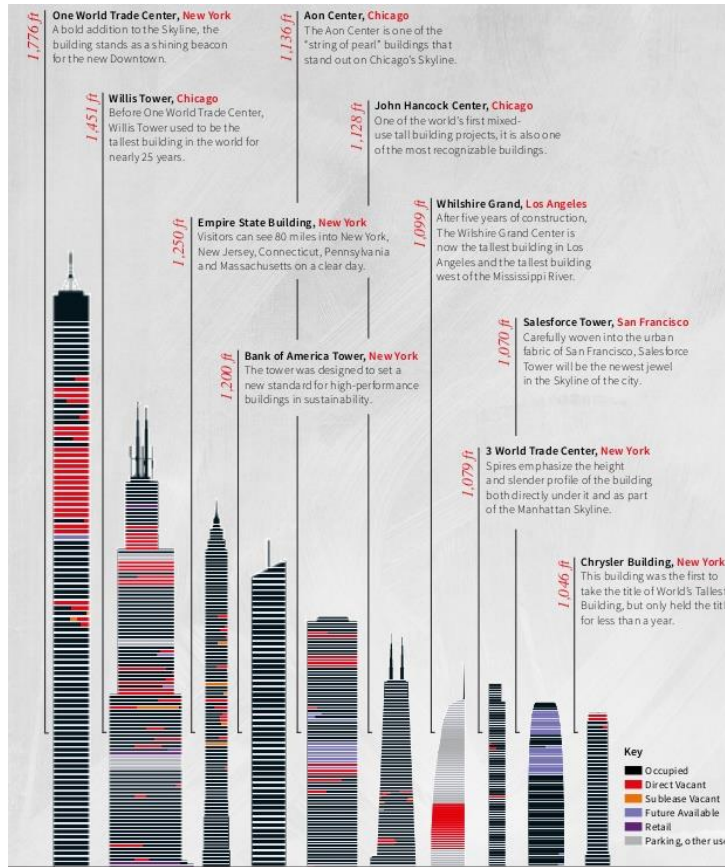
93-94. Colossus of Rhodes, (33 m.) Future statue of Ram in Ayodya (251 m).¹³²



95-96. Nav Vrindavan Dham being built in Mysore; Srikrishna Leela Theme Park being built at Vaikunth Hill in Bengaluru.¹³³



97. Vrindavan Chandrodaya Mandir (210 m.).¹³⁴



98-99. Tallest buildings in America; Tallest buildings in the World.¹³⁵

12. Modern Towers

Traditionally there were two main reasons why buildings tended to remain relatively low. A first was geographical: in countries such as Italy, Spain or Portugal, which were earthquake prone, high buildings posed unnecessary dangers. The second reason was technological: until the advent of modern steel, and concrete, tall buildings simply did not have the sturdiness to be reliable at greater heights. By the second half of the 19th century, advances in technology increasingly removed this second constraint. Accordingly, in 1863, the city of Turin began work on the Mole Antonelliana, initially planned as a synagogue, which became the world's highest museum of cinema in 1879 (pl. 88, 167.5 m.). Meanwhile, in France, the Eiffel Tower which was begun 24 years later, but finished in the same year as the Mole, set a new standard (pl. 89, 300 m.). 44 years later, Empire State Building (1931, 381 m.) again set a new standard.

In terms of statues, the Statue of Liberty (1886, 46 m) was a record. The statue of Christ the Redeemer (1931, 30 meters), perched on a mountaintop marked another record. But the latter 20th century introduced unprecedented changes. In the past 70 years, the highest statue has "grown" to 182 meters: Statue of Unity (pl. 90-91). A planned statue of Chhatrapati Shivaji Maharaj in Mumbai will be 24 meters higher (pl. 92, 212 m.). In Antiquity, the Colossus of Rhodes (pl. 93, 83, 33 m.) was one of the 7 wonders of the world. Today, a planned statue of Ram in Ayodya (pl. 94, 251m.) will be nearly 8 times that height. In 1890, the completion of the Spire in Ulm made this the tallest church in the world.¹³⁶ That is still the case but it will soon be displaced by the Vrindavan Chandrodaya Mandir in Bihar, Northern India (pl. 97, 210 m.). It is the tallest of eight new Indian churches (pl. 95-96).

When I was a boy in the 1950s and 1960s, the Empire State building was still a wow. Today, by American standards, the Empire State is still significant. It is number three of the top 10 in the United States (pl. 98). By world standards, however, the Empire State is passé:¹³⁷ it is no longer one of the top 10 buildings of the world (pl. 99). The One World Trade Center, New York (541 meters, although only 417 meters without its high spire) and the Willis Tower, Chicago) are the only two American players in the top 10.

Today the Burj Khalifa in Dubai, and the Petronas Towers in Kuala Lumpur (numbers 1 and 7 respectively on a list of top 10) are a wow. Two buildings in Mumbai (pl. 100-101) point to new standards. The planned 700 meter, Shenzhen Tower near Hong Kong is a mega wow¹³⁸ (pl. 102) and yet Dubai's Creek Tower by Calatrava at 1700 meters is another 1000 meters higher (pl. 103): a mega mega wow.¹³⁹ In a recent version, all of the top 10 are in the Middle East or Asia.¹⁴⁰ Indeed, from this viewpoint, the world is reduced to 8 countries: UAE, Saudia Arabia, India, Malaysia, China, Japan, Taiwan and Thailand.¹⁴¹ In 2020, China will have 21 of the 50 tallest skyscrapers in the world.¹⁴²

If we had wowology, we would at least be aware where the highest buildings were, reflect how/why Europe, the Americas and Africa dropped out of the race,¹⁴³ and begin to explore which factors unleash the imagination. Of course, highest is not everything, and we could explore how others achieved wow with only a fraction of the height: Eiffel Tower (324 meters), Kailash Temple (53 meters), or the Taj Mahal (50 meters).¹⁴⁴ In any case, whereas the earlier masterpieces combined the physical with a metaphysical framework, the new skyscrapers are mainly physical. In a manner of speaking, they lack soul. They may impress by their size, but leave other dimensions wanting.



100. World 1, Mumbai. 1,450 feet, (442 meters).¹⁴⁵



101. India Tower, 2,300 feet (718 metres), Mumbai (begun but not completed).¹⁴⁶



102. China's 700 meter tower in Shenzhen near Hong Kong (planned).¹⁴⁷



103. Dubai's 1700 meter Creek Tower by Calatrava (planned).¹⁴⁸



104-105. Ryungong Hotel (105 stories), Pyongyang, Dubai Ziggurat.¹⁴⁹



106-107. Modern Pyramids:le projet triangle; LAR's pyramid project.¹⁵⁰



108-109. Tower of Babel, Proposed Azrieli Tower, Tel Aviv.¹⁵¹



110. Modern plan for Tower of Babel by Minoru Nomata.¹⁵²

13. Modern pyramids and towers of Babel

One might have expected that the new frontiers of architecture would also be dramatic new frontiers of the imagination. To some extent this is true. But, paradoxically, something else is also happening. Models of the past, as if they were truly archetypes, play an increasing role. In Antiquity, the pyramid at Giza was considered one of the 7 wonders of the world. Today the pyramid recurs as Ryungong Hotel, Pyonjang (pl. 104, 105 stories), as the Dubai Ziggurat (pl. 105), planned to house 1 million people; le projet triangle (pl. 106) and the LAR's pyramid project (pl. 107).

In the *Old Testament*, the Tower of Babel was a symbol of man's having gone too far. In the images of the 7 wonders it appears in the background of the hanging gardens of Babylon (pl. 74, top right), but is not mentioned. In the 16th and 17th centuries, visions of the Tower of Babel by Pieter Breghel (1563) and Lukas van Valkenburgh (1594),¹⁵⁴ became increasingly dramatic in Kircher (pl. 108), a trend which has continued in our day with drawings by Evgeny Kazantsev.¹⁵⁵ A proposed Azrieli Tower in Tel Aviv, which has been linked with a future third temple, goes further (pl. 109), as does a plan by the Japanese architect Minoru Nomata (pl. 110). And yet plans for the future take us into a completely different realm. An early version for the Japanese X-seed 4000 project predicted that the "behemoth building would measure 3,123 feet tall with a 6 square-kilometer footprint, and could accommodate five hundred thousand to one million inhabitants" (pl. 111-112).¹⁵⁶ This would make it 733 feet higher than the nearby Mount Fuji (12,390 feet). Some claim this was merely a publicity stunt,¹⁵⁷ but then there is the Tokyo Tower of Babel, which foresees a height of 10,000 meters and which, "if ever built would house roughly 30 million people within and take 100-150 years to build."¹⁵⁸

14. Mountains and clouds

Thus far we have chosen towers and ground plans related to architecture of enduring monuments, even if natural disasters and war threaten this intention. Our final examples are about something altogether more fleeting, often a matter of minutes or even seconds, namely, clouds.¹⁵⁹ These momentary examples will risk seeming frivolous, playful, imaginative and utopian, but will also illustrate the presence of wow in another dimension.

Nephology "is the science of clouds, which is undertaken in the cloud physics branch of meteorology."¹⁶⁰ Our concern here is to explore very briefly a specific kind of cloud called lenticular cloud (*altocumulus lenticularis*) in Harold's Cross Dublin (pl. 113) and a HandPan (pl. 114). Unsurprisingly such clouds appear in stories of UFOS. Other examples are so fanciful and fantastic that they look directly planned for an utopian scene (pl. 115-116).

This remarkable utopian feature appears the more striking in the context of mountains. Mount Klyuchevskaya Sopka is the most sacred mountain in Siberia. In clear weather, it has an almost perfect pyramidal form (pl. 117). With lenticular clouds, Klyuchevskaya Sopka looks even more utopian, magical, mythical, mysterious (pl. 118). Mount Shasta in California is sacred in the eyes of North American Indians. When surrounded by lenticular clouds (pl. 119- 120) it looks sacred, mysterious, mythical, magical. Such words apply equally to Mount Fuji, which is the best known of Japan's sacred mountains. Simple versions have a simple cloud cap over the snow cap (fig. 121). Other versions have at least three. Remarkably there are photos showing 1, 2 and even 5 layers, as if clouds could be added as on a layer cake (pl. 122-123).

Sceptics insist that the 5 layers are fake,¹⁶¹ and this, of course, is something that should be determined. But this should not distract us from the deeper lessons to be learned. In theory, the subject is well covered. Google has 2,620,000,000 hits for weather, 4,460,000,000 hits for clouds and even 1,310,000 for lenticular clouds.¹⁶² And yet when we have more particular questions: Where are three ring clouds in North America, spatially and chronologically? present day search engines are useless.

Organized properly we should be able to have a history¹⁶³ of each mountain of the world: in terms of clouds, plants, snow fall: an historical version of Google maps, in which the knowledge that we have of the world in libraries is linked directly to objects in the world.¹⁶⁴ We already have live web cams for many mountains.¹⁶⁵ Why not for every mountain?¹⁶⁶ Having an historical google maps would have two very different applications. First, it would allow scientists and scholars to study the phenomena and lead to new statistics and better predictions. Second, it would be a new repository for wow and wonder: photographs which spark and unleash our imagination, which remind us of the miracle of being alive and increase our joy and hope. The images would function as utopia pills: helping us see the marvelous and dream of new variants. And perhaps we should go further.

14. Wowology

Our world is becoming polarized between distraction and security, both of which are leading to uniformity. On the one hand, there are ever more places to distract us, to make us forget: theme parks, fun parks, amusement parks (12 in the Netherlands alone).¹⁶⁷ Worldwide there is Disneyfication¹⁶⁸ (cf. McDonaldisation, Wal-Martisation), which goes far beyond exporting US mass culture “with an overarching sense of uniformity.”¹⁶⁹ Disney is taking traditional stories, legends, fairy tales¹⁷⁰ and molding them without their tribal diversity (e.g. Pocahontas, Mulan, Moana).¹⁷¹ The film *Avatar* (2009), theoretically set in a distant world, is based on Zhangjiajie national forest park,¹⁷² and the peaks of Wulingyuan were used for the valley of Mo’ara.¹⁷³ Disney has made Pandora: the world of *Avatar*.¹⁷⁴ Ultimately it is a theme park substitute that distracts us from the unique, real, natural wonders of China.

On the other hand, the world is increasingly designed to be safe, preventative: against terrorism, violence, riots, even protests. There are ever more rules. In airports and public places, there is now a near science of being non-descript, of being boring and unrecognizable. In Rotterdam, a man was recently arrested, and later freed, for waving at some pretty ladies.¹⁷⁵ Satellites and drones observe us. Cameras are everywhere in the name of security and prevention of terrorism. Mobile telephones track us. Even birds and bees in the air and whales in the sea are tagged. Some would have a chip implanted in each of us. We, or rather, they record everything 24/7, not because it is interesting, but in order to record deviations from the norm and for purposes of control. The Internet of Things (IOT) is heralded as a next step.

14.1. IOT

The Internet of Things (IOT) is the latest solution being thrust on us by industry: a solution to problems we never knew we had, nor needed. The IOT is about controlling objects, appliances such as refrigerators, locks on doors, heating devices so that we can control them at a distance – opening up the nightmare scenario where hackers could do the same thing. The euphemism is about making things smart and intelligent. The reality is making everything trackable, controllable through a binary on/off choice; about material/physical things without their

metaphysical associations; about humans as bodies without mind and spirit. In this scenario, IQ is replaced by ID so that humans can be treated as/reduced to objects.

14.2. IOBMS

Rome church in Google maps gives 18 hits. It is claimed that there are at least 900 churches in Rome.¹⁷⁶ Needed is a comprehensive system: an Internet of Body, Mind and Spirit (IOBMS). The same mania now used for observing, spying and recording¹⁷⁷ can be used to reveal diversity, the uniqueness of the world, uniqueness of humans; uniqueness of their expressions; increase knowledge and understanding. Four briefest of scenarios follow.

14.2.1. Reading Books

Reading manuscripts/books silently has been the custom for some 1600 years.¹⁷⁸ Imagine having a light pen, which can read words and letters. Now every letter and word potentially becomes an object which can be linked with dictionaries, encyclopaedias, articles and books. I see the word of an exotic city such as Almaty or Astana. The pen linked to a tablet and the Internet provides me with pictures, wiki articles and more. But this is only the beginning. I am reading Dante's *Inferno*. The pen can show me footnotes and translations without requiring that I go to the back of the book or consult a translation in another book. It can also show me illustrations by Giovanni di Paolo, Botticelli or Gustave Doré or by other painters. This could give going to hell a whole new meaning. The process can also be reversed. I am standing at Angkor Wat and see the Churning of the Ocean (pl. 28-29). I point my camera at it, which recognizes the scene, outlines the story and connects me with the passage in the Mahabharata.

14.2.2. Viewing Paintings

I am looking at Piero della Francesca's Annunciation in London. Again, the camera can provide identification and basic information. Potentially it can also show me layers invisible to the eye through infrared reflectography; it can show me preparatory drawings, copies, related paintings. It can also show me reconstructions of the work in its original context.

14.2.3. Sightseeing

The camera can also be my silent virtual guide when I visit new places, or it could "talk" to me like a Baedeker version of Alexa. Some versions already exist to explain basic facts about sites such as the Eiffel Tower. In future, each monument, every stupa, even the smallest statue, symbol, sign, letter or even the leaf of a plant or tree now becomes an object waiting to increase our knowledge. I see not only the monuments, but their underlying structure: their geometry, their grid systems.

14.2.4. Research

The potentials of new kinds of maps have already been mentioned (pp. 54, 60 above).¹⁷⁹ What if all colosseums (and related amphitheatres) were linked and searchable chronologically. Then we could trace how the Roman building becomes a model for others in Verona, Arles, Nimes, Pula and even El-Djem in Tunisia. If we could link all (sacred) buildings, their plans, grids and geometries, then we could explore how the square (vastu, ziggurat, pyramid) and round models (stupa, colosseum) gradually spread; how the linking of civilizations between East and West occurred. We could start with all the simplicity of an o and a □ (= +) and explore how this uniformity leads to the magnificent diversity of (sacred) architecture: physical, then also mental and spiritual associations: e.g. how ziggurats are linked with planets and colours.

14.2.5. New Utopias

Etymologically utopia means no place. Traditionally utopias have too often been associated with impossible and unrealistic visions or dreams. The new observation technologies can become tools to make us aware, to marvel, to experience wonder and more. Should we call it wowology, wonderology, mirabiliaology? We need them all to understand our present, our future, our utopias, our dreams, our inner magic, our humanity, the ineffable.¹⁸⁰



112-113. Lenticular Cloud (*altocumulus lenticularis*) in Harold's Cross Dublin and a HandPan.¹⁸¹



114-115. Lenticular Clouds.¹⁸²



116-117. Mount Klyuchevskaya Sopka in clear weather and with lenticular clouds.¹⁸³



118-119. Mount Shasta with Lenticular clouds.¹⁸⁴



120-121. Mount Fuji with lenticular clouds.¹⁸⁵



122-123. Lenticular Clouds over Mount Fuji.¹⁸⁶

Notes

- 1 Plate 1. Belovodje: http://img0.liveinternet.ru/images/attach/c/6/91/323/91323380_19399513.jpg
- Plate 2. Atlantis http://minos-minal-omfalos.blogspot.com/2015/12/the-atlantis-isle-of-flames-frank_26.html
- 2 Renzo Piano: <http://www.galinsky.com/buildings/kpntelecom/index.htm>
- 3 Architects of Rotterdam buildings: <https://www.dezeen.com/2016/01/20/17-architecture-projects-helping-transform-rotterdam-netherlands/>
- 4 Acknowledgements for the images are found in the notes.
- 5 Mirabilia Journal: <https://www.revistamirabilia.com/about>
Looking for mirabilia in Google images shows a number of knick knacks and trivial decoration which quickly reveals that the search engine does not know Latin.
- 6 Guinness World Records, History: https://www.guinnessworldrecords.com/60/through_the_years.html
- 7 Guinness: <https://www.guinnessworldrecords.com/60/records-over-the-years.html>
- 8 Wow Creative Studio, Tokyo: <https://www.w0w.co.jp/>
- 9 List of circular cities: https://en.wikipedia.org/wiki/List_of_circular_cities
- 10 Influenceology: <https://www.influenceology.com/>
- 11 Wow Ads: <http://www.wowads.com.au/>
- 12 Catchy Ads: <https://nl.pinterest.com/pin/489696159466011577/>
Best Ads: <https://blog.hubspot.com/marketing/best-advertisements>
- 13 Plate 3. Atlantis, Sci Fi and Fantasy Wallpapers: <https://gallery.mobile9.com/cl/45546/futuristic-utopian-city-wallpapers/2/>
Plate 4. Atlantis, Dubai: https://www.hotelscombined.nl/Hotel/Atlantis_The_Palm.htm
- 14 Plate 5. Round city of Arkaim: <https://corfu.circular-city.com/2018/10/circular-city-future-is-now.html>
Plate 6. Round City of Darabgard: Ibid: <https://corfu.circular-city.com/2018/10/circular-city-future-is-now.html>
Plate 7. Round City of Mari: <https://www.pinterest.es/pin/459296861989921931/?lp=true>
Plate 8. Round City of Baghdad: <https://www.ancient-origins.net/ancient-places-asia/round-city-baghdad-0011898>
- 15 Plate 9. My Circle City: https://external-preview.redd.it/FncvU-TUZmu-J4kHj5_rs3q1932thxw39CCIZC_R6lw.jpg?auto=webp&s=dfd7bdda6f27169b9ab2bff60fcbc996dd8ec27a
- Plate 10. Yvan Feusi, Dreamstate Australia, 2017. <https://www.behance.net/>
- 16 Plate 11. Gaëlle Seguillon - Xandar city: <https://www.pinterest.es/pin/461056080585361054/?lp=true>
- Plate 12. Grand Cancun first Net Zero Energy Eco Resort: <https://nl.pinterest.com/mrudu2421/poster/>
- 17 Plate 13. Jack Pritchard Photography, Spider Rock, Canyon de Chelly:
<http://www.jackprichettphotography.com/-/galleries/nature-landscapes/dramatic-landscapes/-/medias/79019d05-1623-4df4-af64-379e0f40548d-grand-butte-utah-and-indian-paintbrush-in-bloom>
- 18 Protagoras: <https://en.wikipedia.org/wiki/Protagoras>
- 19 Plate 14. Adam's Peak, Sri Lanka: <https://www.withlocals.com/experience/hike-the-adam-s-peak-and-catch-the-sunrise-ac6a7853/>
- 20 Plate 15. Fanjingshan, China: <https://imgur.com/gallery/HABHH42>
- 21 Plate 16. Mount Kailash: <https://www.tibetravelexpert.com/tibet-ngari-mt-kailash-region-tourist-attractions/>
Plate 17. <https://i.pinimg.com/originals/3d/10/a3/3d10a3193e223d8df3735e9aaeb3742e.jpg>
- 22 Plate 18. Kailasa Temple, Ellora Caves:
https://www.google.com/search?q=kailash+temple&newwindow=1&sxsrf=ACYBGNQbyJaNtx0si3wwUaURFUbsdKNbDQ:1579331252543&source=lnms&tbn=isch&sa=X&ved=2ahUKEwi7jKmyy4znAhXDKFAKHfJED3kQ_AUoAXoECA4QAw&biw=2048&bih=1034#imgrc=3GWFcJZsJ-zpIM:&spf=1579331258120
- Plate 19. Kailasa Temple: https://funalive.com/articles/most-amazing-kailash-temple-in-ellora-caves-maharashtra-india_13D.html
For more images see: <https://www.ancient-code.com/ancient-kailasa-temple-exposed-60-mind-bending-images-temple-carved-mountain/>
- 23 Plate 20. Mount Meru: <https://www.esquiremag.ph/life/travel/mt-meru-filipinos-a1757-20190626-lfrm2>
- 24 Plate 21. Mount Meru (Sumeru) Tanzania, Africa: <https://www.kilimanjarobudgetsafaris.com/wp-content/uploads/2016/05/mount-meru-trekking-tanzania.jpg>
Plate 22. Java: <https://www.flickr.com/photos/mhanif/2738344172>
- 25 Plate 23. Jain Temple, Uttar Pradesh:
https://en.wikipedia.org/wiki/Mount_Meru#/media/File:Jambudweep_Rachna.tif
Plate 24. Cambodian Style Prang as Mount Meru:
https://commons.wikimedia.org/wiki/File:Wat_Buddhasawan,_Ayutthaya_c01.jpg

26 Plate 25: Mount Meru as Building: Temple of Dawn, Wat Arun, Thailand:

<https://oddiviser.com/thailand/bangkok/temple-of-dawn>

27 Plate 26. Mount Meru in Buddhist Cosmology.

<https://i.pinimg.com/originals/65/25/ee/6525ee459328883785861275b2b51b7b.jpg>

28 Spider Rock: <https://scenicusa.net/100209.html>

29 Four Worlds of creation: <https://www.navajorug.com/blogs/news/spider-rock-center-of-the-navajo-nation>

In the Navajo creation story, the first world was small and pitch black. There were four seas and an island. In the very middle of the island was a single pine tree. Ants, dragonflies, locusts and beetles lived there and made up the Air-Spirit People of the first world.

The second world was known as blue, where life was given to Spider Woman & Spider Man. Only their inner spirits or souls were made. Their physical bodies were made later to contain their spirits when they evolved into future worlds.

In the third world the holy ones advised Spider Woman that she had the capabilities of weaving a map of the universe and the geometrical patterns of the spirit beings in the night sky. At first she did not know what they meant, and was not told how it could be done. Curiosity became her energy and driving force to learn to weave as the holy ones instructed.

On a beautiful day when she was out on the land, exploring and gathering food, she came upon a small young tree. She touched it with her right hand and wrapped her fingers around one of its branches. As she was letting go, a string streamed out the center of her palm and wrapped around the tree branch. She was not quite sure what the string was. At first she shook her hand to release the string, but it would not break free. She thought if she kept wrapping the string around the branch it might let go.

Spider Woman started maneuvering and manipulating the string into various shapes. At this particular moment, she knew this was the weaving the holy people instructed her to do. Immediately she broke the string with her left hand without hesitation. She sat and thought carefully about how to use her new gift. For the rest of the day she sat close to the tree and wrapped the string into various patterns on other branches of the small tree.

The holy ones heard about Spider Woman's new talent and came to visit her. During the visit the holy ones instructed Spider Man to construct a weaving loom and also create the tools used in the various processes of weaving. At this time Spider Woman began to sing the weaving songs, given to her by the holy ones. The songs empower the weavings and the weaving tools.

Dineh (Navajo) of today live in the fourth world, known as the "Glittering World". Young weavers are instructed to find a spider web in the early morning, glistening with sunlight and sparkles. They are told to place the palm of their right hand upon the spider's webbing without destroying or damaging the web. At that moment Spider Woman's gift of weaving enters the young weaver's spirit, where it lives forever.

30 Uluru: <https://ulurutoursaustralia.com.au/guide-to-uluru/>

31 8 Sacred Mountains Tibet: http://www.china.org.cn/top10/2014-07/20/content_32989740.htm

32 10 Sacred Mountains, Mongolia: <https://sacredland.org/mongolias-ten-sacred-mountains/>

33 Adam's Peak: <https://edition.cnn.com/travel/article/sri-lanka-adams-peak/index.html>

34 Fanjingshan, China: <https://imgur.com/gallery/HABHH42>

Cf. <https://en.wikipedia.org/wiki/Fanjingshan>:

Fanjingshan is considered a sacred mountain of Chinese Buddhism,[3] ranking just below the Four Sacred Mountains of Buddhism. It is considered the bodhimaṇḍa (or *daochang*)—a spot in which one reached enlightenment—of the Maitreya Buddha.[2] The influence of Buddhism reached Fanjingshan by the Tang dynasty at the latest, especially after Hou Hongren (侯弘仁) constructed the Zangke Road (牂牁道) in 639 AD, which facilitated transport in the mountainous region, and local gazettes record the construction of several temples in the area.[2] More temples were built during the ensuing Song and Yuan dynasties.[2]

Buddhism greatly prospered during the Ming and Qing dynasties, when the cult of Tianguan Maitreya (天冠弥勒) became dominant in Fanjingshan. The Bozhou rebellion in the late 16th century caused great damages to Fanjingshan's temples. After suppressing the rebellion, the Wanli Emperor ordered the monk Miaoxuan (妙玄) to rebuild the Golden Peak and the Cheng'en Temple (承恩寺). Many other temples were constructed in the area, ushering in the golden era for Buddhism in Fanjingshan.[2] Most temples during the Ming and Qing dynasties belonged to the Pure Land and the Linji sects of Buddhism.[2]

In the turmoil that toppled the Qing dynasty, many temples were destroyed by marauding armies and bandits, and few monks remained in the Republic of China era.[2] After further destructions during the Cultural Revolution, Buddhism has enjoyed a renaissance since the 1980s. Many old temples have been rebuilt and new ones constructed, including the Cheng'en Temple, Huguo Chan Temple (护国禅寺), Great Golden Buddha Temple (大金佛寺), and Longquan Temple (龙泉寺).[2]

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- In 2010, the Fanjingshan Buddhist Cultural Park was opened, with a Golden Hall that houses a five-meter-tall statue of the Maitreya Buddha made with 250 kilograms (550 lb) of gold and thousands of gems. It is said to be the largest gold Maitreya statue in the world.[2][5]
- 35 Forbidden Mountains: <https://www.worldatlas.com/articles/the-forbidden-mountains-of-the-world.html>
- 36 Mount Kailash: https://en.wikipedia.org/wiki/Mount_Kailash
- 37 Ibid: Mount Kailash: https://en.wikipedia.org/wiki/Mount_Kailash
- 38 Ibid.
- 39 Kailasa Temple: <https://allthatsinteresting.com/kailasa-temple>
- 40 Plate 27a. Nava Kailash Temple:
https://en.wikipedia.org/wiki/File:Panoramaic_View_of_Nava_Kailash_Temple.jpg
- 41 Mount Meru in Buddhist Cosmology.
<https://i.pinimg.com/originals/65/25/ee/6525ee459328883785861275b2b51b7b.jpg>
- 42 Mount Meru, British Library: <https://www.lionsroar.com/the-view-from-mount-meru/>
- 43 Nava Kailasam: https://en.wikipedia.org/wiki/Nava_Kailasam
- 44 108 Shiv Mandars: https://en.wikipedia.org/wiki/Kalna,_India
- 45 Plate 27b. Nava Kailash Temple:
https://en.wikipedia.org/wiki/File:Panoramaic_View_of_Nava_Kailash_Temple.jpg
- 46 108: <http://www.shivashakti.com/subha.htm>
- 47 108 beads: http://www.archimedes-lab.org/numbers/Num70_200.html
- 48 108 beads: <http://www.ridingthebeast.com/numbers/nu108.php>
- 49 108 list:
http://new.sumscorp.com/index.php?id=249&statement=get_obj&id_object=129058&session=ZW5nbGlzaDtlbmdsaXNoO05ldyBNb2RlbHM7MTI0MzQxOzE3OzA7MDtJbnRlcm1lZGlhdGU7MDtsb29rdXA-
- 50 Plate 28. Churning of the Ocean of Milk, 1700 Bhagavata Purana San Diego Museum of Fine Arts, San Diego, California, USA: <http://www.pandorawordbox.com/image.php?image=011630936>
- Plate 29. Churning of the Ocean of Milk, Angkor Wat: <http://ttnotes.com/churning-of-the-ocean-of-milk.html>
- 51 Samudra manthan: https://en.wikipedia.org/wiki/Samudra_manthan
- 52 Kumbha Mela: https://himalayanacademy.com/media/books/kumbha-mela_ei/web/ch28.html
- 53 Old Norse Poem: https://en.wikipedia.org/wiki/Samudra_manthan
In this Old Norse poem, a sacred mead is prepared by cooperating gods and giants (who might respectively correspond to Devas and Asuras), with the gods ultimately winning the drink; the serpent Jörmungandr takes the place of Vasuki, although its role in the story is different
- 54 Javanese Legends: https://en.wikipedia.org/wiki/Mount_Meru
- 55 New Zealand Volcano: <https://outlook.live.com/mail/deeplink?version=2020011305.09&popoutv2=1>
- 56 Angkor Wat: https://en.wikipedia.org/wiki/Angkor_Wat
- 57 Angkor Wat was part of something larger: <https://www.livescience.com/23841-angkor-wat.html>
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- 73 Brahma also is a four faced god. Perhaps the early Jains focused on Brahma before he lost his popularity.
- 74 Ibid: http://www.kamit.jp/03_jaina/6_ranakpur/ran_eng.htm: Chaturmukha:
- Originally in Persian gardens, however, buildings surround a garden, not the contrary. The method of setting four-faced building in the center of Chahar Bagh is an application of Indian chaturmukha form to Islamic architecture. That is, they changed the Persian system of four 'Iwans' (half exterior space behind a large opening of pointed arch bordered by square frame) that were opposite to each other around a courtyard into a structure of four 'Iwans' that were combined back to back with each other, turning it into an extroverted four faced shrine form.
- In this context, we realize that the chaturmuka-type created by Jainas played an important role within Greater India. There are a lot of examples of chaturmuka-type, but considering the richness of space produced by the plan of four-faced shrine, the temple at Ranakpur seems second to none.
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Saudia Arabia	
Jeddah	Jeddah Tower
Mecca	Makkah Royal Clock Tower Hotel
India	
Mumbai	World 1 India Tower
Malaysia	
Kuala Lumpur	KL 118
China	
Canton	Canton Tower
Dalain	Greenland Center
Heifei	Evergrande IFCI
Hong Kong	International Commerce Centre Shenzen Bionic Tower
Nanjing	Zifeng Tower
Shanghai	World Finance Centre
Suzhou	Suzhou Zhongnan Center
Tianjin	China 117 Tower (Goldin Finance 117)
Wuhan	Greenland Center
Japan	
Tokyo	Tokyo Sky Tree
Taiwan	

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162 Google hits on 4 January 2020.
163 Obviously, we cannot have a history of events that happened prior to modern recording devices, although in some cases sketches, drawings, paintings may be available. Even so if we started today within a century we would have a very impressive record.
164 Cf. the author's "The New Book of Nature", eARCOM 07. Sistemi informativi per l'Architettura Convegno Internazionale, Con il Patrocinio di UNESCO. Ministero dei Beni Culturali, CIPA, Regione Marche, Ancona-Portonovo Hotel La Fonte, 17-18-19 Maggio 2007, Ancona: Alinea Editrice, 2007, pp. 659-669.

http://www.sumscorp.com/img/file/2007_New_Book_of_Nature.pdf

165 Mountain Cams: <https://www.resortcams.com/mountain-cams/>

166 Some will say that would be too much of a good thing: overkill. And yet, in Maastricht, the BBC, Weather Underground and Accu Weather typically offer three different predictions, sometimes contradicted by looking out the window. Useless overkill?

167 Amusement Parks: <https://www.holland.com/global/tourism/discover-holland/kids-attractions/amusement-parks.htm>

168 Disneyfication:
<https://www.tandfonline.com/doi/abs/10.1179/1477963313Z.00000000014?journalCode=yorg20>

169 Disneyfication:
<https://www.tandfonline.com/doi/abs/10.1179/1477963313Z.00000000014?journalCode=yorg20>

170 Fairy Tales: https://en.wikipedia.org/wiki/List_of_Disney_animated_films_based_on_fairy_tales

171 Moana: <https://www.youtube.com/watch?v=Rx358xqLw3Y>

172 Zhangjiajie National Forest Park: https://www.tripadvisor.nl/Attraction_Review-g494933-d505450-Reviews-Zhangjiajie_National_Forest_Park-Zhangjiajie_Hunan.html#photos;aggregationId=101&albumid=101&filter=7&ff=106003962

173 Wulingyuan:
https://en.wikipedia.org/wiki/Pandora_%E2%80%93_The_World_of_Avatar#/media/File:Wulingyuan_1.jpg

174 Pandora: https://en.wikipedia.org/wiki/Pandora_%E2%80%93_The_World_of_Avatar

Pandora history: <https://www.vulture.com/2017/07/disney-world-pandora-avatar-theme-park.html>

175 Beautiful Ladies: <https://www.theguardian.com/world/2019/dec/20/rotterdam-street-harassment-catcall-court-appeal>

176 Churches of Rome: <https://www.quora.com/How-many-churches-are-there-in-Rome-of-all-denominations>

177 If I have a poor picture of something the web can find me a higher resolution image to show me more details.

178 Silent Reading: <https://qz.com/quartz/1118580/the-beginning-of-silent-reading-was-also-the-beginning-of-an-interior-life/>

179 Today, if I open Google maps for Maastricht and type Pizza hut, all appear nicely. Churches, Romanesque Churches and Gothic Churches provide some results. Round churches takes me to the south of England. Searching by centuries (11th, 12th, 13th) functions somewhat. Dominican churches takes me to the Dominican republic rather than churches of the Dominican Order.

180 See the excellent article by Willard van de Bogart, Aspiring toward the ineffable through electronic music: https://www.researchgate.net/publication/338187389_Aspiring_toward_the_ineffable_through_electronic_music_Introduction

181 Plate 113. Lenticular Cloud over Harold's Cross:
https://en.wikipedia.org/wiki/Lenticular_cloud#/media/File:Lenticular_Cloud_over_Harold's_Cross_Dublin_Ireland_30-6-15.jpg

Plate 114. Hand Pan: <http://www.handdrumsandhandpans.com/2014/12/handpan-in-sky-lenticular-clouds.html>

182 Plate 115. Australian Lenticular Clouds: <https://www.buzzfeed.com/simoncrerar/crazy-aussie-weather>

Plate 116. Lenticular Clouds: https://www.reddit.com/r/oddlysatisfying/comments/8dalyd/lenticular_clouds/

183 Plate 117. Klyuchevskaya Sopka:
https://en.wikipedia.org/wiki/Klyuchevskaya_Sopka#/media/File:Ključevskaja_za_východu_slunce.jpg

Plate 118. Klyuchevskaya Sopka with clouds:
https://en.wikipedia.org/wiki/Klyuchevskaya_Sopka#/media/File:Ключевской.jpg

184 Plate 114. Mount Shasta: https://www.tripadvisor.com/LocationPhotoDirectLink-g32755-d5085106-i143482300-Mt_Shasta_Sisson_Museum-Mount_Shasta_California.html#143482300
This photo of Mt. Shasta Sisson Museum is courtesy of TripAdvisor

Plate 119. Mount Shasta: <https://1320frequencyshift.com/2012/02/14/subterranean-cities-and-the-time-shift/>

185 Plate 120. Mount Fuji lenticular cloud: <https://weheartit.com/entry/338344117>

Plate 121. Lenticular Clouds on Mount Fuji: <https://www.aerotime.aero/aerotime.extra/23079-extraordinary-lenticular-clouds-mount-fuji-mountain>

186 Plates 122-123. Lenticular Clouds on Mount Fuji: <https://www.aerotime.aero/aerotime.extra/23079-extraordinary-lenticular-clouds-mount-fuji-mountain>