

Architectural Quality in the Group Design of Historical Sacred Places and its Decline in Modern Architecture

INTRODUCTION AND THEORETICAL PREMISE

My aim is to interpret and evaluate the architecture of sacred precincts in terms of Martin Heidegger's conception of the fourfold, thus offering a special application of that idea. After having briefly explained the philosophical basis of the fourfold, I will apply it as a theoretical basis to evaluate the group design of the Temple Complex of Apollo at Delphi, Greece, and the Inner Shinto Shrine at Ise, Japan. It is furthermore argued that in modern times the secularisation of urban architecture has resulted in a loss of the fourfold, especially in group design. Individual buildings in postmodern times show little symbolic concern for the way they relate to the sky and the earth, with the notable exception of structures by Santiago Calatrava.

In his essay "Bauen Wohnen Denken"¹ Martin Heidegger states that "the world" is revealed as an interlocking fourfold (*Geviert*) which comprises the heavens, the earth, the gods and earthly beings in relation to each another. The heavens are the celestial abode of the gods as messengers of the divine, and the earth that of all animate beings, among whom only humans are designated "mortals" because they alone have consciousness of death and the need to dwell "poetically," in full awareness of Being (*Sein*).²

The fourfold is a dynamic unitary structure. It reflects the identity as well as the differences between the components. Separately, the heavens and the earth are a dyad (*Zwiefalt*): they are profoundly different as binary opposites, but because they are opposites there is a dynamic tension (*temion*) between them that keeps them in equilibrium. Yet these components are aspects of "the event" (*das Ereignis*), which implies the presencing and, at the same time, its complementary, the concealment (*Verborgenheit*) of the event. Together heaven and earth represent the totality of physical nature, both inanimate and animate. However, inanimate things (*Dinge*) are not mere objects, but "beings" (*Seiende* or manifest things) and their advent reveals their *Dasein*, a condition of being present in the here and now. This suggests that the *Zwiefalt* is also *Einfalt*, since every authentic thing not only brings heaven and earth closer together but also affirms their separateness. Mortals are not rulers over Being, they are

“thrown [geworfen] by Being itself into the truth of Being,” and furthermore, mortals do “not decide whether and how beings appear, whether and how the gods, history, and nature come forth into the clearing of Being, come-to-presence or depart.”³ It is in a space that Heidegger referred to as a “clearing” of Being that things – and works of art and architecture are things – reveal their presence and relationship. Heidegger calls this coming-to-presence of things “the happening of truth” and, as mortals, human beings must accept the stewardship of the truth of Being.⁴

Every authentic thing reveals the tension between the elements of the fourfold and results in the “erection of a world” as a manifestation of their unity. However, both the unity and the differences between heaven and earth are reflected in authentic works of architecture which form the context in which mortals, who are bound to the earth, find their fulfilment in dwelling – for which reason mortals need to build, an event which requires a clearing, or a bounded space.⁵ By creating works of architecture mortals have the ability to affirm an engagement with heaven, because the implication of dwelling on earth is that of also being under the sky.⁶

The fourfold clearly manifests in the two culturally dissimilar places of religious worship – the one Western and the other Eastern – that I have chosen for discussion. However, in one sense they are similar: both represent nature religions and in the “clearings” that their architectural structures occupy they affirm their presence and relationship as an engagement with the fourfold.

THE TEMPLE COMPLEX OF APOLLO AT DELPHI

Heidegger states that the Greek temple “embodies the world of a people” and that, like a work of art, it “erects a world”: “Standing there the edifice rests on rock. [...] It elucidates, at the same time, that on which and in which man finds his existence. We call it the earth.”⁷ The rock, which is a dense and impenetrable substance, belongs to the earth. The earth as foundation of human existence also supports the temple, which in turn, brings into view the realm of the sky in its alternating phases of night and day. In the same vein, Vincent Scully points out that the apparently stereotyped design of the classical Doric temple produced “an unmatched dialogue between oneness and separateness, men and nature, men and the facts of life, men and the gods.”⁸ The meaning of the dialogue, however, is uniquely dependent upon the geographic location and cultural meaning of the temple site, as Scully explains: “All Greek sacred architecture explores and praises the character of a god or gods in a specific place. That place is itself holy and, before the temple was built upon it, embodied the deity as a recognised natural force.”⁹

According to this criterion, one of the supreme examples of Doric architecture is the Temple of Apollo at Delphi (figures 1-2). Geographically Delphi is situated about 150 kilometres northwest of Athens, close to the northern shore of the Corinthian Gulf, on the foothills of Mount Parnassus. The temenos of the Temple of Apollo is set on the north slope of the Pleitos Torrent Gorge within a natural amphitheatre of limestone cliffs which soar precipitously to a staggering 300 metres above it, enclosing it on three sides and then opening onto the valley of Amphissa and the Gulf of Itea (figure 3). However, to the Greek builders it was mythically situated at the centre of the universe and, since remote times, was marked by an *omphalos* or navel stone (now lost).

The temple where Apollo, the god to whom it is dedicated, was invoked is situated where “the most awesome characteristics of the old goddess of the earth were made manifest,” and while the archetypal goddess presided over the interior secrets of the earth, “the temple of the young god was placed, and generally so oriented as not only to complement but also to oppose the chthonic forces.”¹⁰ Apollo was regarded by the Greeks as the god of prophecy and, most notably, embodied the noble faculty of reason. However, at Delphi, “he, too, cannot come to grips with the earth without being touched by it.”¹¹ Therefore, in the layout of his temple, the god assumes some of the darkness of the existing cavern and also its oracular power. The preexistent, pre-Apollonian site is vividly described by C Karouzos in apocalyptic terms: “It is as if the earth had been cleft asunder by some cosmogonic spasm; the valley is a vast and profound chasm [...].”¹²

The builders of the temple saw dramatic contrasts in the surrounding landscape features and endeavoured to show them to best advantage in designing the sacred way to the temple. According to Scully the Temple of Apollo and its precinct, which includes the sacred way, are so “organized as to create, out of that basic conflict, a conscious and humanly perceptible drama, in which the god’s code of ‘Nothing to excess,’ is finally to emerge in the teeth of nature’s irrational power.”¹³ Thus Apollo deposes the old way of the earth goddess by opening the new way, that of the Olympian gods. But also heaven, the element of the fourfold which is the complementary of the earth, manifests its presence at the temple. This totality can only be experienced by the visitor who enters the site and, by degrees, becomes aware of the temple, its earthly setting and the overarching bright sky, since heaven and earth seem to be in tumultuous contention, each element confirming its essence in a dramatic way but without disturbing the essential balance. When worshippers followed the processional way which meanders from below among man-made and natural objects up to the temple, “the precarious footing of human existence in nature was temporarily forgotten,”¹⁴ and upon arrival at the temple’s main façade mortal beings most probably experienced a sense of unity with the power of the god (figure 4). One may speculate that, psychologically, the ritual of approaching the god’s precinct restored a sense of balance in nature to set the worshippers’ minds at ease.

The temple was built by mortals who exerted restrained control over the topography of the site. By altering certain features of the earth and leaving others intact the builders exerted self-control, which implies the achievement of harmony between disparate elements. They neither submitted to an excess of formal order, nor to the labyrinthine darkness of the earth or the domination of the vast sky above the craggy mountain.

The total manifestation of the Temple of Apollo and its sacred precinct at Delphi is expressive of the Greek sense of democracy. The emphasis of the temple design is on open collocation of its elements so that spatially it is available to all people. Only a small *naos* was reserved for the god, but the pediment sculpture celebrates Apollo’s apotheosis of elevated beauty and moral superiority. At Delphi Apollo, an immortal divinity who, according to Heidegger, represents “unperturbed calmness”¹⁵ and hence (having conquered the chthonic goddess) the concept of complete openness or “open overtness,”¹⁶ is brought into harmony with mortal human beings as participants in the fourfold.

THE INNER SHRINE (*NAIKU*) AT ISE

The most sacred collection of Shinto sites at Ise (Mie Prefecture, Japan) collectively called *Ise Jingu*, centres on the *Naiku* (Inner Shrine) and the *Geku* (Outer Shrine), situated some four kilometres apart. A millennium ago these shrines had been in existence for almost two centuries. It is most remarkable that for more than 1,300 years, from the time of Emperor Temmu, who reigned from 672 to 686 CE, the *Naiku* (and the *Geku*) have been rebuilt in twenty-year cycles, most recently in 1993, for the sixty-first time. Jonathan Reynolds observes: “Although there are some differences between the appearance of Ise Shrine at the beginning of the 17th century and the present, the differences are not [...] extreme [...]”¹⁷ This is because the shrine buildings at *Ise Jingu* are the first great architectural achievement of the Japanese people, even though their model was the modest raised-floor storehouse. According to John Burchard the present shrine buildings are “very old and very new.”¹⁸ In 2013 they will be rebuilt for the sixty-second time (figures 5-6).¹⁹

According to legend *Ise Naiku* was founded in the reign of Emperor Suinin (249-280 CE). Suinin’s daughter, the Princess Yamato-hime, went from place to place in search of a good location for the worship of the Great Deity. When she came to the Ise area she received the following oracular message: “Since this land of Ise is a land where no turbulent tempests blow, and is a peaceful land where the twang of the bow and the hiss of the arrow are never heard, I desire to rest in this land.”²⁰ The princess then erected a shrine for the Great Deity, the Sun Goddess Amaterasu O-mi-Kami, who was worshipped as the foundress of the Japanese imperial line and guardian of the nation. This goddess has her dwelling at the main building of the *Naiku* (figure 7), in a sacred mirror, which rests in a boat-shaped container.²¹ As in many ancient mythologies, the boat can be interpreted as an archetypal symbol of rebirth, which is very apt at Ise with its cyclical renewal of building complexes.

The structural materials used at the Ise shrines are mainly cypress, cedar and thatch with metal ornamentation. There are no sculptures and no intricate spaces to fathom, but the refinement of detailing grips the attention. However, more profound meanings should be given priority in the discussion of *Ise Naiku*. This shrine embodies an architectural endeavour that makes the presence of human beings as creators of order visible to the deities who are invited to dwell in these earthly places and, in their turn, manifest their presence in an abode created by mortals. In the layout of the *Naiku* a sensitive awareness of the presence of mountains, forest and sky is retained so that the origins of the Shinto religion can still be sensed there. The trees, a waterfall and other natural features that surround the *Ise Jingu* clearings complement the architectural forms, in which there exists a harmonious relationship between elements of the earth such as stone, wood and water, and air and wind which belong to the sky.

The *Naiku* is approached by means of a wooden bridge which spans the Isuzu River; at the end of the bridge a *torii*, or gateway, announces the entrance to a Shinto sacred place. The pathway to the enclosed shrine is paved with small pebbles which cause footsteps to sound *zaku-zaku*, an audible reminder to visitors that the profane space on which they tread is demarcated as separate from the sacred space of the divinities. Throughout the *Naiku* precinct rocks are corded by ropes and white fluttering paper along either side of the path, thus enhancing their visibility while bearing witness to the care and respect Shinto worshippers lavish on natural

elements which are venerated as abodes of deities. These are the forerunners of traditional Japanese stone gardens of great artistic beauty, replete with symbolic meaning, because “in these stones and rocks the ancient Japanese saw something of the mystery dwelling within nature and natural phenomena.”²²

The arrangement of the shrine buildings on the sites within clearly defined boundaries was symbolic of how the deities ranked within the hierarchy of the supernatural world.²³ During the Nara period (645-794 CE) the *Naiku* had seventy subsidiary buildings, in addition to the main sanctuary and the east and west treasure houses. The extensive development of the site testifies to the splendour of the religious festivals of the time and the rich and varied existence imagined for the deities dwelling there. At present the shrines comprise only four rectangular buildings: the *Shoden* or main shrine building (primarily intended as a place of repose for the divine spirit), two treasure houses behind the innermost fence, and a meeting hall for priests between the second and third fences. The fence surrounding the level clearing of approximately 18 x 39 metres and the three innermost fences clearly demarcate the hierarchy of sanctity, and are reminiscent of Heidegger’s “clearing of Being” previously referred to (figure 8).

The *Naiku* complex is surrounded by four enclosures. Only the first is marked by a gateway which is open to the public. Selected people of high rank are admitted to the second enclosure, but the third and fourth enclosures are reserved for the Emperor alone, who is the high priest. The privileged pilgrim may be led by a priest to a position facing the inner shrine where he or she bows deeply and claps hands three times for the *kami*, which signifies that “reverent respect has been paid to the Emperor and the august ancestors of the Japanese nation.”²⁴

In the persistence of an architectural pattern one may identify a supreme example of how mythologising thought can imbue an established concept with timeless validity. Since the Ise complex became the prototype for all Shinto sanctuaries elsewhere in Japan, one may say that the repetition of the same basic design and layout pattern reveals acceptance by Japanese Shinto believers that the unity of human beings and the divinity is authentically manifest in the shrine architecture. It therefore comes as no surprise that Tange expresses his awareness of the meaning of the established shrine layouts and their periodic restructuring in mythical terms, referring back to the intentions of the original builders: “When the Japanese people try to glimpse the divine, this form becomes the symbol. Or perhaps one should say that the Japanese see in this form the divine. The energy that sustained the creation of this form was also the energy that welded the Japanese into one people; it reflects their primordial essence.”²⁵

At Ise *Naiku* (and Ise *Geku*) the fourfold is in perfect balance. The natural and the supernatural worlds are brought close together, but in such a way that each retains its separate identity. This manifests in their clearly bounded space, because the demarcation of a boundary is a prerequisite for building and dwelling. Betty Rogers Rubenstein makes the point that “although human hands have tended each stone, and care has been lavished on each pebble [at Ise *Jingu*], nature rules here – not humans.”²⁶ Humans both revere and control nature. Since the layout of the shrine buildings and their precinct enclosures are basically symmetrical, they reflect Japanese thought and design which are said to be characterised by extreme formality that contrasts with the natural forms of the environment. However, nature excludes neither humans nor divinities, but is inclusive of all that is mortal and transcendental.

Even though heaven and earth are different they belong together and are, so to speak, locked in a dynamic equilibrium. In their unity they reflect the eternal cycles of nature. Likewise, the Ise shrine structures – which do not change visibly over time because they are periodically rebuilt and belong to the cycles of nature which reveal, as Noboru Kawazoe says, a “simultaneous opposition and accord.”²⁷ This view echoes Heidegger’s insight regarding a cosmological fourfold of *Zwiefalt* and *Einfalt*.

LATER RELIGIOUS BUILDINGS

While both the Shinto shrines and the Greek temple reveal a close relationship with nature, many modern places of worship such as churches tell a different story. St. Peter’s Basilica in Rome, the most renowned of Christian sacred places, is located in an urban setting in the Vatican enclave, where its dome, designed by Michelangelo, is the most important landmark of the city. However, its interior evokes a spiritual cosmos of light and brilliance which excludes the natural world of sky and earth. The same trend is evident in all domed religious edifices, including mosques.

MODERN ARCHITECTURE

In modern times, especially in the West, religion has lost its meaning as a factor in the built environment. The existence of God or the divinities in the realm of the sky is no longer an influence on the design of urban buildings, not only of secular buildings but also of religious places which have lost their sacred appeal. The same loss of value extends to the earth which is no longer considered to be a place where *genii loci* dwell. Furthermore, one has to search far and wide for examples of architectural group design – that is, buildings that are placed adjacent to each other in a processional approach and collectively manifest the fourfold as a unitary feature. Individual freestanding buildings by renowned architects have become the norm in the secular urban world. The design of these masterpieces most often shows little symbolic concern for the way they are linked to the sky or rise from the earth – for example, the InterActive Corp’s building in Manhattan by Frank Gehry (figure 9).

In respect of the earth-sky relationship I consider some buildings by Santiago Calatrava to be exemplary. His projects show an awareness of linking up urban places, as in the case of the extension to the Milwaukee Art Museum, originally designed by Eero Saarinen in 1957 where, according to Joseph Giovanni, “[h]e deliberately sited the spectacle at the terminus of Wisconsin Avenue in order to reconnect the city to its abandoned waterfront.”²⁸ The spectacle, of course, refers to the *brise-soleils* in the form of fin-shaped purlins which operate like the independent feathers on a bird, taking flight on the Quadrati Pavillion of the extension to the museum.

A second example is the new Satolas Airport TGV Station in Lyon, begun in 1987 and opened in 1994 (figure 10). The main hall, flanked by two symmetrical wings sheltering the platforms, soars to a height of 38 metres. It takes on a triangular form, bounded on the airport side by a concrete structure with two balconies cantilevering into the central space. In contrast to the anchoring concrete structures which conjoin the earth at the triangle’s three corners, the roof structure metaphorically resembles a steel bird spreading its protective wings over the

central hall. The architect's main motifs are clearly present in the wing structures, as Barbara Shortt explains: "Calatrava's main structural obsessions are folded plates and girders, and torsion [spiralling stress] rings. These are statically determined structures, forms generated from moment diagrams."²⁹ The monumental building thus acquires a lightness so that, in form, only the roof structure recalls Eero Saarinen's heavy concrete TWA terminal as a visual image of a bird in flight.

The motif of the superstructure of a building resembling a bird in flight is superbly exemplified in the proposed transit station at the World Trade Centre site in Manhattan, New York City (figure 11), which the architect based on a mental image of a child releasing a bird. Cathleen McGuigan describes it as follows: "Calatrava's seemingly delicate steel-and-glass terminal sprouts immense wings that supposedly can flap down gently, creating an opening along the crest of the roof and sheltering the surrounding plaza. It's as if an enormous dove of peace were to alight in the ruins of lower Manhattan."³⁰

Quite literally, Calatrava invokes the sky in the movement of the roof elements of his buildings while they are firmly anchored in the earth, which is a static element.

CONCLUSION

In the different epochs of the long history of mankind all architecture – especially in sacred places – has been instrumental in symbolising their builders' world-views. This is evident from the brief analyses of disparate places of worship discussed in this article in which the presence of the elements of Heidegger's fourfold is elucidated. The act of building in a clearing where the unity of the heavens, the earth, the gods (or God in monotheistic religions) and mortals may manifest has historically been mankind's affirmation both of its physicality and spirituality. The architecture of nature religions exemplifies more than mere functionality and physical construction, especially in the sense that Burchard emphasises – that it is not physically difficult to reach the Ise shrines, but that "[t]he spiritual journey is longer."³¹ Similarly, it is not difficult to reach the temple at Delphi, but the spiritual journey to the attainment of Apollonian ideals is also longer than the physical, albeit attainable.

The Greek and Shinto sacred precincts are centres of wholeness where the components of the fourfold are brought together in harmony and equilibrium. In contrast, the Christian church contains an interior space of supplication where wholeness is sought, but wholeness of a different kind in an essentially otherworldly relationship. Hence the world that the Christian God, and other divinities of world religions, seem to be disdaining is the broken cosmos of *Seinsvergessenheit* (forgetfulness of Being) as postulated by Heidegger.³² In the modern secular and technological culture mortals demand the prerogative of imposing their will on all things, which they primarily conceive in materialistic terms. In our era, "thinking in the form of rational and scientific thought [has taken] precedence over both beings and Being."³³ To remedy the failure of architecture produced in modern times, the perennial message of the meaningfulness of dwelling "poetically," in full awareness of Being, should again be heeded and environments in which mortals may truly dwell "poetically" and spiritually need to be recovered.

- 1 John D Caputo, in "Being, Ground and Play in Heidegger," *Man and World*, 1970, 3(1): 35, lucidly describes *das Geviert* as follows: "The world is not a static structure but a process, the process of the four together. The four depend upon one another in order to be themselves; a change in one is 'reflected' in a change in the other. [...] In the idea of the 'gods' Heidegger overcomes the concept of God as the first cause; the gods are messengers of the divine, guiding and advising human activity. The view of man [sic!] as a 'mortal' exceeds any sociological or biological understanding of man and takes him as a being who sees ahead into death and takes over that possibility in his life. In the foursome [more generally referred to as fourfold], the 'heavens' are viewed not astronomically but as that which charts the course of time and bestows light upon men. The 'earth' is taken not in its molecular make-up but as what sustains and supports men. Should we change one of the four we disrupt the rest."
- 2 Martin Heidegger, "Bauen Wohnen Denken," in *Vorträge und Aufsätze*, 3rd ed. 1967 (Pfullingen: Neske, 1954).
- 3 JJ Kockelmans, *On the Truth of Being: Reflections on Heidegger's Later Philosophy* (Bloomington: Indiana University Press, 1984), 36.
- 4 Martin Heidegger, "Der Ursprung des Kunstwerkes," in *Holzwege* (Frankfurt: Klostermann, 1950), 33.
- 5 Martin Heidegger, "Hölderlin and the Essence of Poetry," in *Existence and Being* (Indiana: Regency/Gateway, 1949), 274.
- 6 See Heidegger, "Bauen Wohnen Denken."
- 7 Heidegger, "Der Ursprung des Kunstwerkes." The full quotation reads: "Standing there the edifice rests on rock. This resting on the rock makes the rock yield the secret of its unwielding and yet uncompelled power of holding and sustaining. Standing there the edifice withstands the storm raging above and thus reveals the very nature of the storm in its force. The shining splendour of the stone, apparently so bright only by the grace of the sun, actually makes apparent the light of day, the vast realm of the sky, the darkness of the night. The firm towering of the temple makes the invisible space of the air visible. The unperturbed calmness of the structure stands out against the mounting waves of the sea and makes their uproar apparent by contrast. [...] The Greeks very early called this rising and appeasing in itself as a whole Physis. It elucidates, at the same time, that on which and in which man founds his existence. We call it the earth." (33)
- 8 Vincent Scully, *The Earth, the Temple and the Gods: Greek Sacred Architecture* (New Haven: Yale University Press, 1962), 4.
- 9 *Ibid.*, 1.
- 10 *Ibid.*, 100.
- 11 *Ibid.*, 100.
- 12 C Karouzos in M Andronicos, *The Greek Museums: Delphi* (Athens: Ekdotike Athenon, 1975), 6. The full quotation reads: "It is as if the earth had been cleft asunder by some cosmogonic spasm; the valley is a vast and profound chasm [...]. And as soon as we reach the foot of the Phaedriades, at the exact spot of the Kastalian Spring, we are faced with something that appears like the chasm of chasm: the two rocks are separated by a tremendous gorge, narrow and impassable[:] the Arkoudorema [...] as it is known today which continues all the way down to the slope, deep into the thicket."
- 13 Scully, *The Earth, the Temple and the Gods*, 100.
- 14 *Ibid.*, 112.
- 15 Heidegger, "Der Ursprung des Kunstwerkes," 63.
- 16 H Jaeger, "Heidegger and the Work of Art," *Journal of Aesthetics and Art Criticism*, 17 (1958), 64.
- 17 Jonathan Reynolds, "Ise Shrine and a Modernist Construction of Japanese Tradition," *The Art Bulletin* 83:2 (June, 2001), 339, n. 21.

- 18 John Burchard, "Ise: Prototype of Japanese Architecture," in *Ise: Prototype of Japanese Architecture*, ed. Kenzo Tange and N Kawazoe (Cambridge, Mass.: MIT Press, 1965), 9.
- 19 Yasutada Watanabe, *Shinto Art: Ise and Izumo Shrines*, trans. Robert Ricketts (Tokyo and New York: Heibonsha/Weatherhill, 1974) explains the effect of the continued reconstruction on viewers: "In place of the new timbers sported by a recently reconstructed shrine, the viewer is enjoined to imagine the sanctuary as it once was. In other words, while the buildings themselves may have changed, Shinto shrines are built to retain the intent and basic design of the original architecture; it is this ancient structure as it once existed that the viewer is required to imagine." (26)
- 20 Stuart DB Picken, *Essentials of Shinto: An Analytical Guide to Principal Teachings* (Westport, Connecticut: Greenwood Press, 1994), explains the essence of the cult at Ise as very simple: "It stressed four principles: (1) the authority of the Grand Shrine [the *Geku*], (2) the sanctity of the Imperial Regalia, (3) the self-awareness of Japan as *kami no kuni* (land of the *kami*) and (4) the expression of reverence by prayer, purity, and honesty." (309)
- 21 Tange, "Ise: Prototype of Japanese Architecture," 37.
- 22 *Ibid.*, 25.
- 23 *Ibid.*, 34.
- 24 Betty Rogers Rubenstein, "St Peter's and Ise Jingu: A Comparative Study in Religious Architecture," *Dialogue & Alliance*, 2:2 (1989), 84.
- 25 Tange, "Ise: Prototype of Japanese Architecture," 51.
- 26 Rubenstein, "St Peter's and Ise Jingu," 81.
- 27 In Tange, "Ise: Prototype of Japanese Architecture," 167.
- 28 Joseph Giovanni, "An Icon: Santiago Calatrava's Soaring Milwaukee Art Museum Embodies a City's Aspirations," *Architecture*, 92:5 (May 2003), 53.
- 29 Barbara Shortt, "Aerodynamic Transit," *Architecture*, 83 (August 1994), 80.
- 30 Cathleen McGuigan, "Calatrava Takes Flight," *Newsweek* (23 February 2004), 50.
- 31 John Burchard, quoted in Tange, "Ise: Prototype of Japanese Architecture," 8.
- 32 See Heidegger, "Der Ursprung des Kunstwerkes."
- 33 Kockelmans, *On the Truth of Being*, 62-3.

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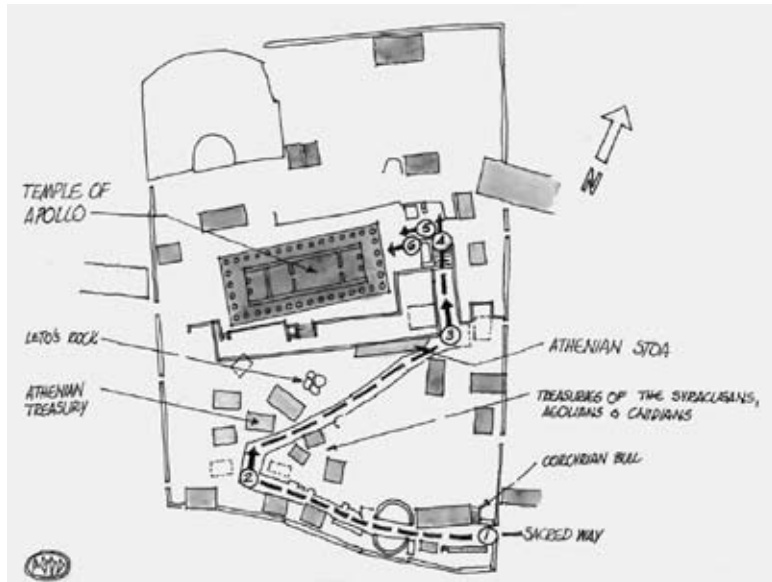


Figure 1: Plan of the precinct of the Temple of Apollo at Delphi.
 (Drawing courtesy of Arthur Rapanos.)



Figure 2: Reconstructed view of the Temple of Apollo and auxiliary buildings at Delphi.
 (Drawing courtesy of Arthur Rapanos.)



Figure 3: Ruins of the Temple of Apollo at Delphi.
(Photograph courtesy of Arthur Rapanos.)



Figure 4: Façade of the Temple of Apollo at Delphi.
(Drawing courtesy of Arthur Rapanos.)

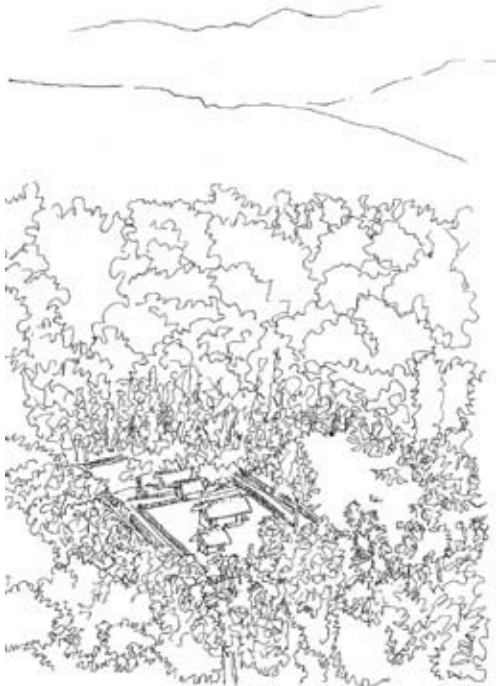


Figure 5: Aerial view of the *Naiku*.
(Drawing courtesy of Arthur Rapanos.)

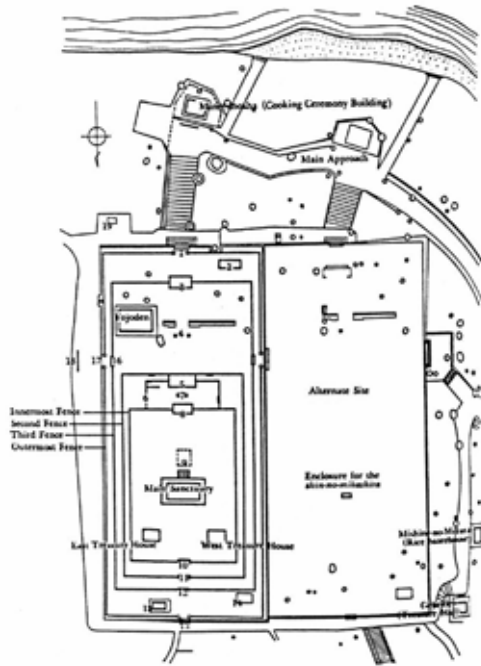


Figure 6: Site plan of the *Naiku*,
showing its alternative site.
(Drawing courtesy of Arthur Rapanos.)

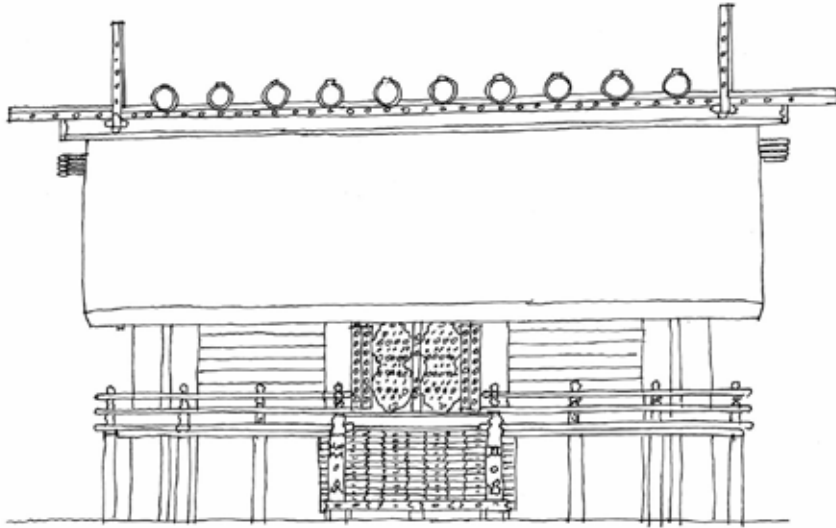


Figure 7: Side elevation of the main *Naiku* sanctuary building.
(Drawing courtesy of Arthur Rapanos.)

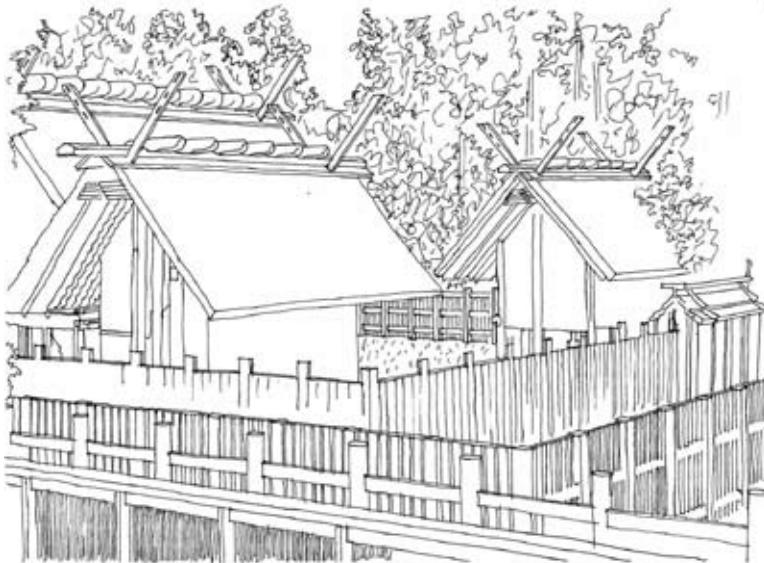


Figure 8: *Naiku* buildings surrounded by four enclosures.
(Drawing courtesy of Arthur Rapanos.)



Figure 9: The InterActive Corp's building in Manhattan by Frank Gehry.
(Photograph by Estelle Maré.)

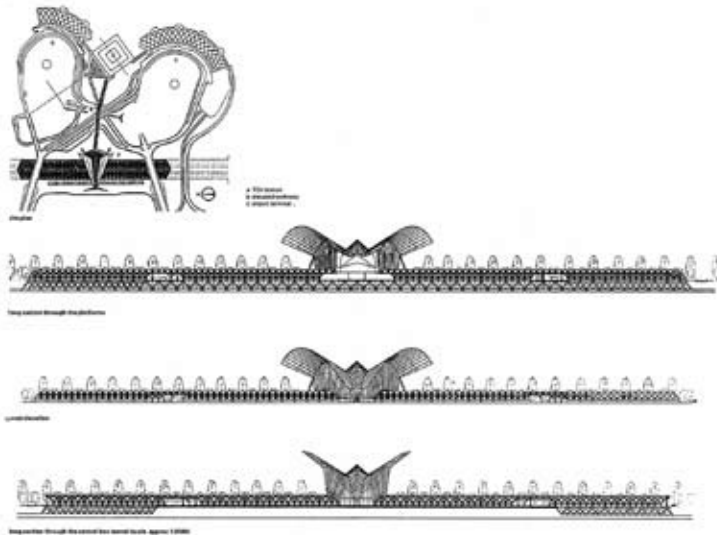


Figure 10: Diagrammatic representation of the new Satolas Airport TGV Station, Lyon.
(Redrawn from *Lotus International*, 1995, no.86 by Estelle Maré.)



Figure 11: Santiago Calatrava's proposed transit station at the World Trade Centre site in Manhattan, New York City (Newsweek, February 23, 2004, p. 50).