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Ideas and ideals in Jørn Utzon's courtyard houses: dwelling, nature, and Chinese architecture

The international recognition of Jørn Utzon's professional career is accompanied by a growing interest in the Danish architect's courtyard housing projects. But previous scholarship had access to limited material from Utzon's professional career, compared to what is now available in The Utzon Archives. Based on a detailed study of presently accessible archival material and original interviews with Utzon's family and affiliates, this article shows that the Danish architect's courtyard housing projects closely reflected both his architectural philosophy in general and his thoughts on modern dwellings in particular. These were in turn cultivated by the ideas and ideals of Lin Yutang, Alvar Aalto, and Osvald Sirén.

Introduction

Tobias Faber's, Jens Frederiksen's, Richard Weston's, and Mogens Prip-Buus's books are the most in-depth studies of Utzon's courtyard housing projects, such as the Kingo Houses (1956–1959) and Fredensborg Houses (1965), to date.¹ But despite their unquestionable importance, these books include limited material from Utzon's professional career, compared to what is now available in The Utzon Archives.² Because Utzon was reluctant to collaborate with scholars who approached him, let alone to grant them access to his private archive,³ the authors of these books could not explore the Danish architect's architectural collection.⁴ This is also why Kenneth Frampton's, Merete Ahnfeldt-Møllerup's, and Michael Asgaard Andersen's book chapters on the work of the Danish architect only sparsely refer to material from Utzon's own collection.⁵

Based on our recent research in The Utzon Archives and our original interviews with Utzon's colleagues, friends, and family members, this article addresses the following questions to expand existing scholarship on Utzon's courtyard housing projects. First, how did these projects reflect Utzon's general architectural philosophy, and especially his ideas about modern dwelling? Second, from which specific sources did Utzon draw inspiration to design these courtyard houses? Third, what are the significant differences between Utzon's courtyard housing projects, and why? Fourth, what role did these projects play in the evolution of his artistic vision? Finally, how are the courtyard housing projects related to other important works by Utzon? Addressing these questions will help us present a theoretical framework for understanding the artistic vision and design principles of Utzon's courtyard housing

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projects in their historical context. In so doing, we will argue that Utzon's courtyard housing projects closely reflect the architect's unique perception of dwelling, nature, and Chinese architecture. This was in turn informed by the work of Chinese writer Lin Yutang (1895–1976), Finnish architect Alvar Aalto (1898–1976), and Finnish-born and Sweden-based art historian Osvald Sirén (1879–1966).⁶ Among others, the work of these three figures served as a source of aesthetic inspiration, or reaffirmed Utzon's approach.⁷ Utzon's courtyard housing design, reflecting his interpretation of perceived ideas and ideals, illuminate the housing discourse of interwar modern movements and the Danish architect's cross-cultural influences after World War II.

Lin Yutang and the artistic life

Lin Yutang was one of the most influential Chinese writers of the twentieth century. His book *My Country and My People* (1935) presented the then enigmatic Chinese people, customs, and culture to Western readers. Utzon's family confirmed that Lin Yutang's book enabled the young Danish architect to perceive the ideal Chinese models of life and art, as these were especially manifested in calligraphy, painting, and architecture.⁸ As his son Jan Utzon explained, 'Lin Yutang's words taught my father how to be a man, a father, and an artist'.⁹ Owing to his fondness for the Chinese writer, Utzon also named his daughter 'Lin'.¹⁰

Utzon's first encounter with the translation of Lin Yutang's book in Danish (1938) can be dated to 1942. The Danish architect was then working in Stockholm during the Nazi occupation of Denmark (1942–1945). In those years (1937–1945), the Chinese were fighting the Japanese Imperial forces that were allied with Nazi Germany. Utzon's patriotism reinforced his cultural and political sympathy with, and empathy for, China.¹¹ Lin Yutang's book served as the young Utzon's introduction to Chinese culture, art, and architecture, which he continued to study further throughout his career. Lin Yutang's later books *The Importance of Living* (1937) and *Imperial Peking: Seven Centuries of China* (1961) were also included in Utzon's book collection.¹²

The content of Lin Yutang's *My Country and My People* can be traced back to his 'Little Critic' columns in *The China Critic* from 1930 to 1935.¹³ Expanding on his original ideas, Lin Yutang edited and organised these essays into several thematic chapters in *My Country and My People*. In addition to introducing Chinese culture to Western readers, the book also included Lin Yutang's in-depth critique of Chinese and Western society. While he appreciated Chinese philosophy, literature, art, and architecture, and believed in their capacity to express a profound spiritual culture and its longstanding history, Lin Yutang condemned China's feudal heathenism. Likewise, while he admired Western democracy and science, he was contemptuous of its cultural decadence that was rooted in the prevailing utilitarianism of capitalism.

Lin Yutang was critical of the increasing global dominance of Western modern art and architecture, and their inhumane Cubist forms. He venerated and remained romantically attached to 'The Artistic Life' of feudal China.¹⁴

Art, calligraphy, painting, and architecture exemplified these ideals that were also relevant outside of China.¹⁵ For Lin Yutang, Chinese artists were moral figures with a strong passion for nature and distaste for urban culture. Representing sublime natural phenomena, these artworks' transcendental qualities could help one escape from the unbearable prison of city life.¹⁶ For Lin Yutang, Chinese aesthetics were exemplified in calligraphy, painting, and architecture. Combining animism, dualism, pantheism, lyricism, symbolism, mysticism, primitivism, and amateurism, they served as counterpoints to the 'inhumane' utilitarian modern Cubist forms. But even more importantly, they could regenerate modern art and architecture to serve humans' psychological needs and spiritual wellbeing.¹⁷

The impact of Lin Yutang's representation of Chinese art and architecture on Utzon is evident in the first architectural manifesto he co-authored with Tobias Faber (1915–2010) in 1947.¹⁸ Utzon and Faber rejected both the inhuman formalist approach to functionalism and the outdated historicist architectural styles.¹⁹ Directly influenced by Lin Yutang's critique of the same subjects,²⁰ they also foregrounded their anti-theoretical approach to architectural design. This was based on their personal understanding of 'people's fundamental feeling for architecture; a feeling which through the ages has always been the foundation of a true architecture'. For Utzon and Faber, '[t]he notion of architectural feeling is employed here in a dual sense; that is, the feeling that allows us both to experience architecture and to make it'.²¹ Their individualist, liberal, and empirical thoughts on architectural creation were also directly aligned with Lin Yutang's portrayal of Chinese artists as individuals who followed their own intuition and senses of natural surroundings to emancipate their art from doctrines and principles. As Lin Yutang noted,

the artist must absorb impressions from the myriad forms of nature, its insects and trees and clouds and waterfalls. In order to paint them, he must love them, and his spirit must commune with them. He must know and be familiar with their ways, and he must know how the same tree changes its shade and colour between morning and night or between a clear day and a misty morning, and he must see with his own eyes how the mountain clouds entwine the rocks and encircle the trees.²²

Faber and Utzon's manifesto culminated in twenty-seven selected images to showcase how their envisioned 'organic' and 'expressive' architecture could draw from organic forms, Nordic landscapes, vernacular buildings across the world, and Chinese architecture.²³ Taken together, these images represented Chinese building culture in a symbiotic relation with natural phenomena and primitive built forms. This also seemed to follow Lin Yutang's conceptualisation of Chinese architecture, which was derived not only from a 'primitive' culture but also from 'harmony with' and 'inspiration from nature'.²⁴ Lin Yutang's aesthetic admiration of the projecting eaves of pagodas, the colours of the glazed tiles, the walls of Imperial Beijing, and vernacular buildings in feudal China was also one of the reasons Faber and Utzon selected images on the same subjects.

Soon afterwards, Utzon published his individual architectural manifesto 'The Innermost Being of Architecture: The Flow of Becoming' for an exhibition at the

Grønningen Artists Association.²⁵ Like Lin Yutang, Utzon regarded nature as the source of architectural inspiration. He characteristically referred to 'nature's seed' as 'the innermost being of architecture'.²⁶ According to Utzon, this could be found by 'being in contact with our surroundings' and 'rehearsing our ability to grasp these differences and their effect on us'. Again, echoes of Lin Yutang's portrayal of Chinese artists' relation to nature are evident here. As Utzon noted,

We put everything in relation to ourselves. Our surroundings influence us through their relative size, light, shade, colours etc. Our condition depends entirely on whether the space in which we find ourselves is large or small.²⁷

In 1952, Utzon declared his architectural intentions in the written statement for his own house at a remote woodland in Hellebæk (1950–1952) (Fig. 1). Arguably, this article can be read as the Danish architect's reflection of Lin Yutang's emphasis on Chinese artists' pursuits of a harmony between isolated primitive life and nature. As Utzon noted,

The simple, primitive life in the country, trips into the mountains with skis or guns, sailing trips, a few weeks together with Arabs in the mountains and the desert, a visit to North America and Mexico, the lifestyle of the Indians — all this has formed the basis for the way of life my wife and I have wanted to lead, and thus for the design of the house.²⁸

Utzon's words were also closely aligned with Lin Yutang's emphasis on the importance of travelling to meet remote primitive cultures and appreciate their artistic creation.²⁹ Lin Yutang's idealisation of Chinese artistic life further served as a foundation for defining his ideal house close to nature and away from urban culture. As he characteristically noted, '[t]he charm of a house lies in its individuality'.³⁰ Utzon was certainly motivated. Despite his very limited budget, his intention to lead a reclusive life led him to select the remote site for his Hellebæk House.³¹ This resonated with Lin Yutang's description of 'spiritual baptism'³² in the hermit-like life of the great Chinese painter Huang Tzûchiu 黃子久 (Huang Ziju or Huang Kungwang, 1269–1354) in the wild mountains.

Huang Tzûchiu (Huang Ziju) often sits the whole day in the company of bamboos, trees, brushwood and piles of rocks in the wild mountains, and seems to have lost him in his surroundings, in a manner puzzling to others. Sometimes he goes to the place where the river joins the sea to look at the currents and the waves, and he remains there, oblivious of wind and rain and the howling water-spirits. This is the work of the Great Absent-Minded [Huang Kungwang], and that is why it is surcharged with moods and feelings, ever-changing and wonderful like nature itself.³³

Lin Yutang's words and the remote site of Utzon's own house at Hellebæk explain why in the Danish architect's first courtyard housing project with which he participated in the Skånska Hustyper competition (1953), each unit was defined and surrounded by high brick walls. These walls would protect and isolate the house from urban disturbance. When the surrounding of a house was more crowded, these walls were higher (Fig. 2). Inside of the

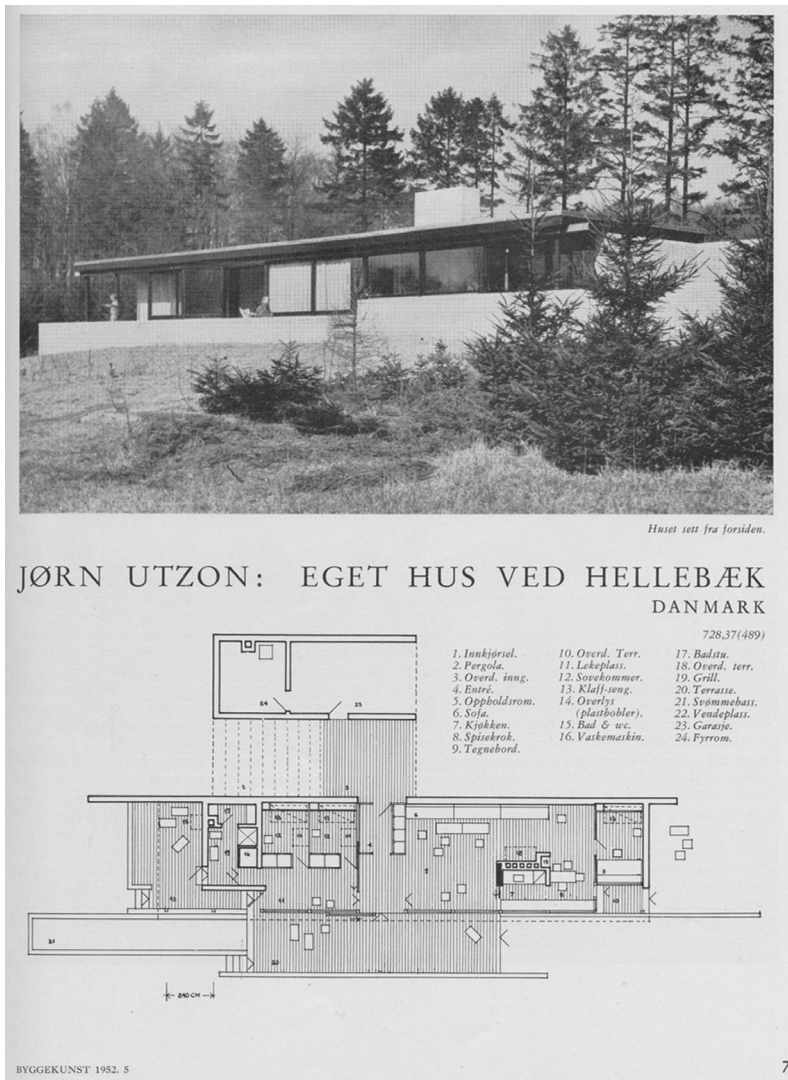
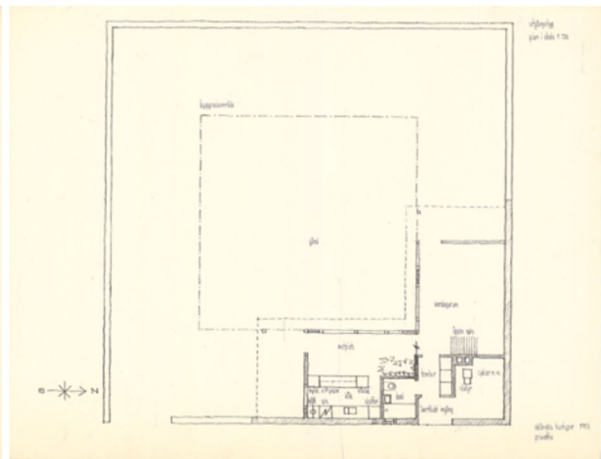
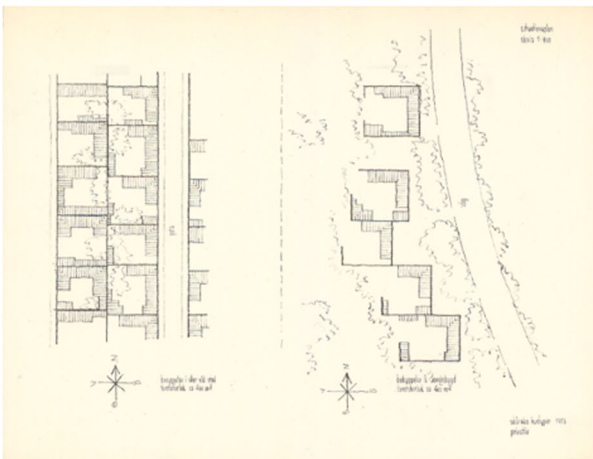
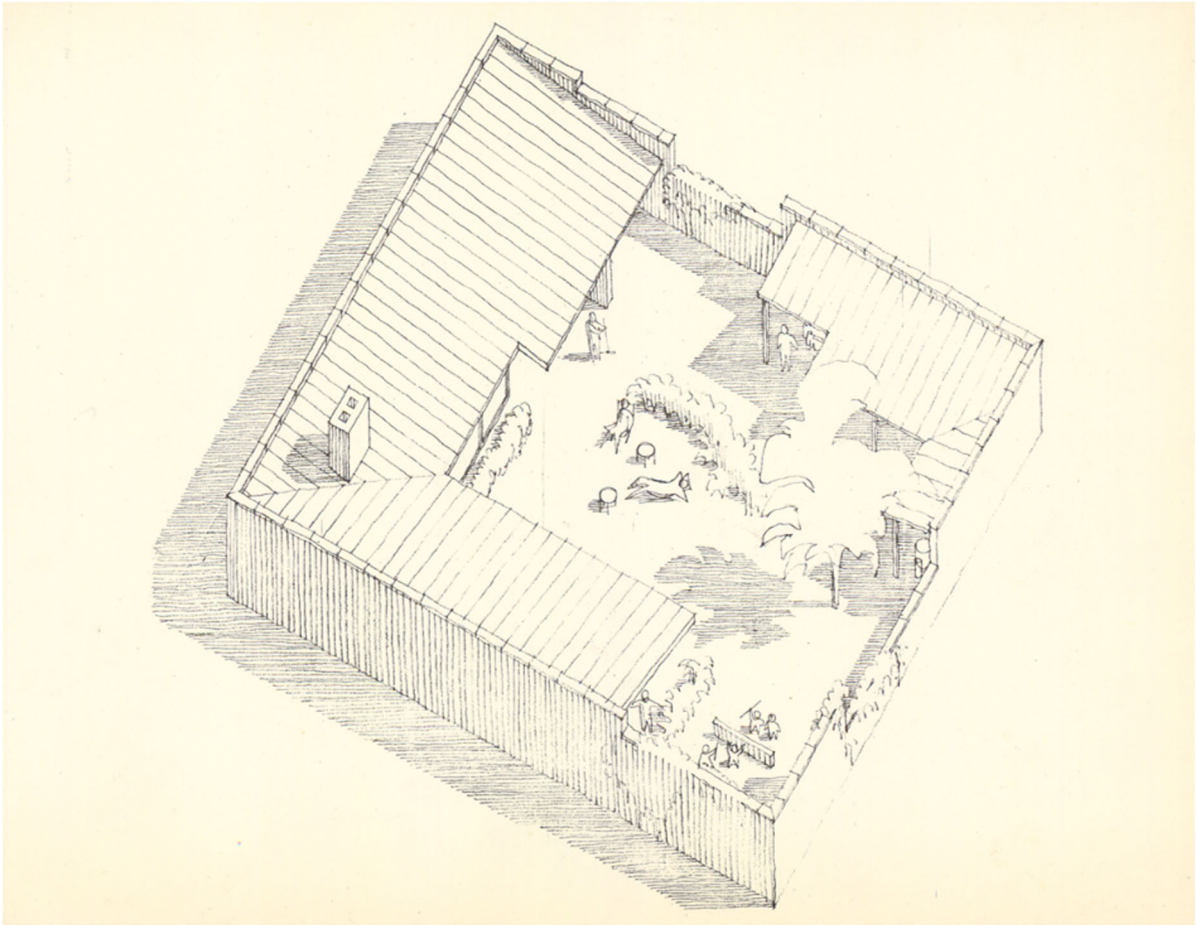


Figure 1.
Jørn Utzon, basic layout and
photograph, Hellebæk House,
1952, in Jørn Utzon, 'Jørn Utzon:
Eget hus ved Hellebæk',
Byggekunst, 5 (1952), p. 79,
courtesy of Jan Utzon

enclosed walls, a central courtyard served as a piece of land for the family to receive natural phenomena. Again, this resonates with Lin Yutang's comments on Chinese dwelling principles: 'the house and garden are not separate', and 'the house itself dwindles to a comparatively less important position in the general scheme of the home garden'. Utzon seems to have endorsed Lin Yutang's ideas about the 'garden'. The central courtyard of a housing unit is 'a given commodious space', 'a patch of earth where one can plant vegetables and fruits and sit under the shade of trees' instead of 'a lawn and geometric flower-beds'.³⁴ Populated by adults relaxing and children fighting, Utzon's sketches and perspective drawings further echo Lin Yutang's concept of 'the enjoyment of nature' in a private garden:



suppose in a future civilization every man is able to own an acre of land, then he has got something to start with. He can have trees, his own trees, and rocks, his own rocks. He will be careful to choose a site where there are already full-grown trees, and if there are not already full-grown trees, he will plant trees that grow fast enough for him, such as bamboos and willows. Then he will not have to keep birds in cages, for birds will come to him and he will see to it that there are grogs in the neighbourhood, and preferably also some lizards and spiders. His children will then be able to study nature in nature and not study nature in a glass case. At least his children will be able to watch how chickens hatch from their eggs and they need not be woefully ignorant about sex and reproduction as the children of 'good' Boston families often are. And they will have the pleasure of watching a fight between lizards and spiders. And they will have the pleasure also getting comfortably dirty.³⁵

Utzon's proposed courtyard house and its 'garden' could, therefore, be seen as his critical reaction to modern civilisation and life in an apartment. Lin Yutang had also critiqued these aspects of modern life: 'Human civilization had changed so much that space is something that the average man cannot own and cannot have',³⁶ and 'no matter what the excuse, a civilization that deprives man of land is wrong'.³⁷ Utzon's 'garden' encouraged a primitive lifestyle and highlighted a piece of 'land' which should be owned and enjoyed by a family. This corresponded to Lin Yutang's appeal for 'recovering nature and bringing nature back to the home'.³⁸ This is also why Utzon had strongly criticised the Swedish-inspired apartment design in Denmark in the late 1940s and early 1950s. His Skånska courtyard housing scheme suggested a symbiosis of land and dwellings.³⁹ This explains why every house that Utzon built for himself—the Hellebæk House, Bayview House (1963–1965), Can Lis (1971–1973), and Can Feliz (1972–1994)—was located on a remote site.

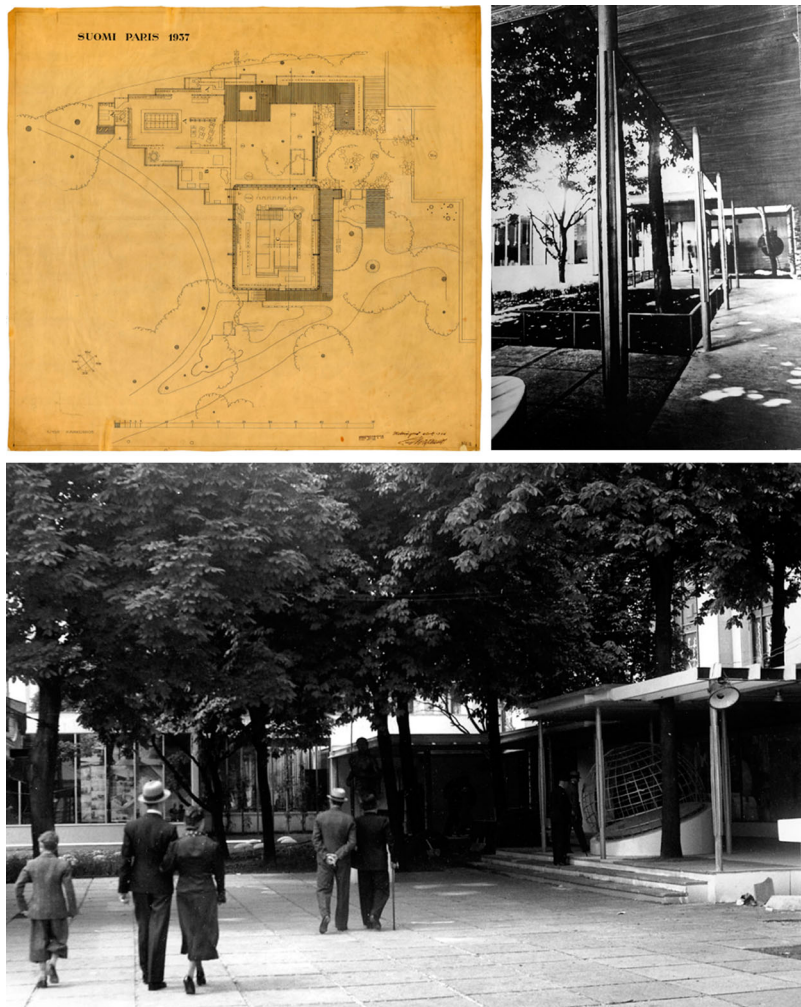
Alvar Aalto and the formation of the courtyard

Utzon encountered Alvar Aalto at the Royal Danish Academy of Fine Art in the late 1930s, when Aalto delivered a guest lecture at the School of Architecture.⁴⁰ This lecture must have left a strong impression on Utzon. It certainly motivated him to study Aalto's work of the late 1930s, including the Viipuri Library (1933–1935), the Finnish Pavilions at the Paris World Exposition (1937), and the New York World's Fair (1939) through his own collection of varied publications.⁴¹ In 1945, Utzon won a Danish scholarship for young talented architects to work for Aino and Alvar Aalto's practice in Helsinki. Although he only worked there from 25 October to 5 December 1945, this important experience offered Utzon a first-hand on-site experience of the Aaltos' seminal projects, including Villa Mairea (1937–1939), Sunila Pulp Mill Housing and Kokta Town Plan (1936–1939), Paimio Sanatorium (1928–1933), Turun Sanomat newspaper offices (1928–1929), and Kauttua Terrace Housing (1938–1940). Back at the Aaltos' office, Utzon worked on the plan for the Apartments at Vaasa (1944–1947), commissioned by the Strömberg Company.⁴²

Figure 2. (opposite)
Jørn Utzon, perspective, floor plan,
and site plan, Skånska Hustyper
competition for low-cost housing,
Scania, 1953, © Utzon Archives /
Aalborg University & Utzon Center

Aalto's earliest influences on Utzon's work are evident in his unrealised competition projects of the late 1940s. In some of these, Utzon had collaborated with Faber. In an interview, Faber noted that Aalto's 1937 Finnish Pavilion at the Paris International Exhibition was an important role model for him and Utzon. They used it as a main reference to design an institutional building complex which embodied representational built forms that featured a semi-enclosed central courtyard (Fig. 3).⁴³ Aalto's central court at the Finnish Pavilion, with a garden designed by Aino Aalto, taught the two younger architects how to create intimacy between the building complex and nature via an articulated garden design. For Faber and Utzon, the Aaltos' design conveyed a very important philosophical message: architecture should be a mediator for human beings to receive the splendour of nature.⁴⁴ As Utzon explained in an interview in the early 2000s,

Figure 3.
(top left) Plan drawing of Alvar Aalto's Finnish Pavilion at the Paris International Exhibition, 1937, © Alvar Aalto Museum; (top right and bottom) Jørn Utzon's photographs of Aino and Alvar Aalto's Finnish Pavilion at the Paris International Exhibition, 1937, © Utzon Archives / Aalborg University & Utzon Center



Gunnar Asplund taught Alvar Aalto that if you plant a flowering cherry tree at the foot of a flight of concrete steps, then it will be a delight to walk down those steps. I appreciated that too. And I have used it all to convey the dream that has obsessed me, of fulfilling people's desire for something good. To give people something they like.⁴⁵

Aalto's design traces are evident in Utzon and Faber's competition proposals for the Danish Royal Academy of Music in Copenhagen (1944–1945), the Crystal Palace in London (1946), and the theatre in Randers (1947) (Fig. 4). In both initial and final versions of their proposal for the Academy, the influence of Alvar Aalto's proposal for the Town Centre of Avesta in Sweden (1944) is evident. Developed in collaboration with the Swedish architect Albin Stark

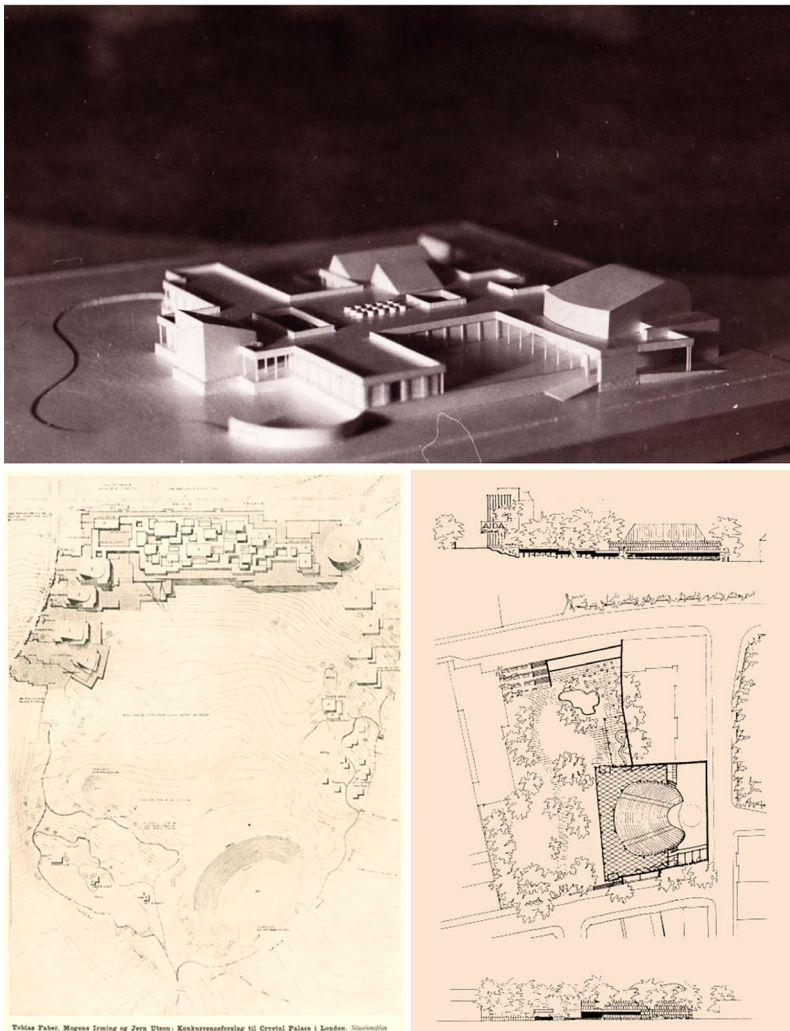


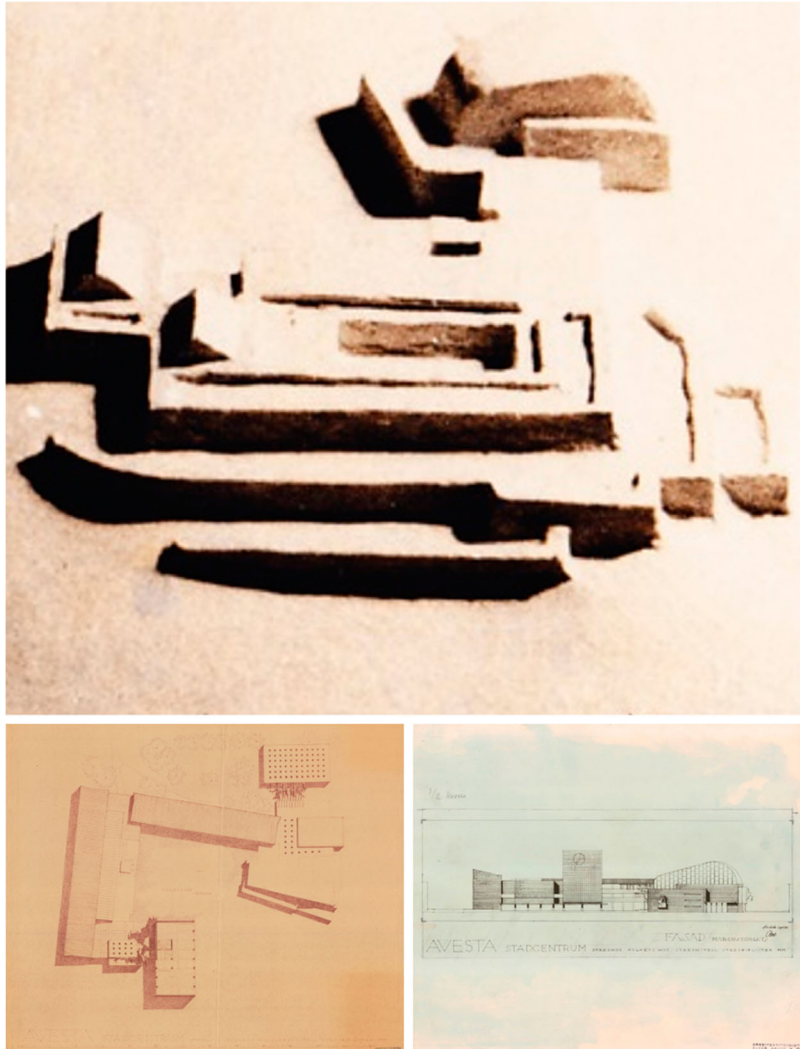
Figure 4.

(top) Jørn Utzon and Tobias Faber, competition entry for Danish Royal Academy of Music in Copenhagen, 1944–1945, © Utzon Archives / Aalborg University & Utzon Center; (bottom left) Tobias Faber, Mogens Irming and Jørn Utzon, competition entry for the Crystal Palace, 1946, in 'Konkurrenceforslag til Crystal Palace i London', *Arkitekten, Maanedshæfte, XLIX* (1947), p. 71, courtesy of Jan Utzon; (bottom right) Jørn Utzon and Tobias Faber, competition entry for the theatre in Randers, 1947, © Utzon Archives / Aalborg University & Utzon Center

(1885–1960), Aalto's project offered meaningful architectural idioms to Utzon and Faber. They utilised them to articulate the school complex by combining the curved form of the roof with the angular volume of the building (Fig. 5). Aalto's skylights, garden design, as well as the colonnade, veranda, and pavement from the Finnish Pavilion at the Paris World Exposition (1937) also found their way into Utzon and Faber's Academic project. In their later competition entry for the Crystal Palace, outdoor courts, terraces, and shaded passageways surrounded by plants were developed from similar design intentions.⁴⁶ At the same time, the whole building complex represented Utzon and Faber's exploration of various building types and structural systems. As such, it was

Figure 5.

(from top to bottom) Jørn Utzon and Tobias Faber, initial proposal for Danish Royal Academy of Music in Copenhagen, 1944–1945, © Utzon Archives / Aalborg University & Utzon Center; Aino and Alvar Aalto (with Albin Stark), proposal for the Town Centre of Avesta, 1944, © Alvar Aalto Museum



also directly inspired by Aalto's Sunila Pulp Mill.⁴⁷ Finally, Utzon's competition entry for the theatre in Randers also draws from the Aalto's earlier work. In this case, the free-form swimming pool of the Villa Mairea (1939) and the extended corridor that connects it with the surrounding garden are echoed in the layout of the proposed complex and water fountain in Randers (Fig. 6).

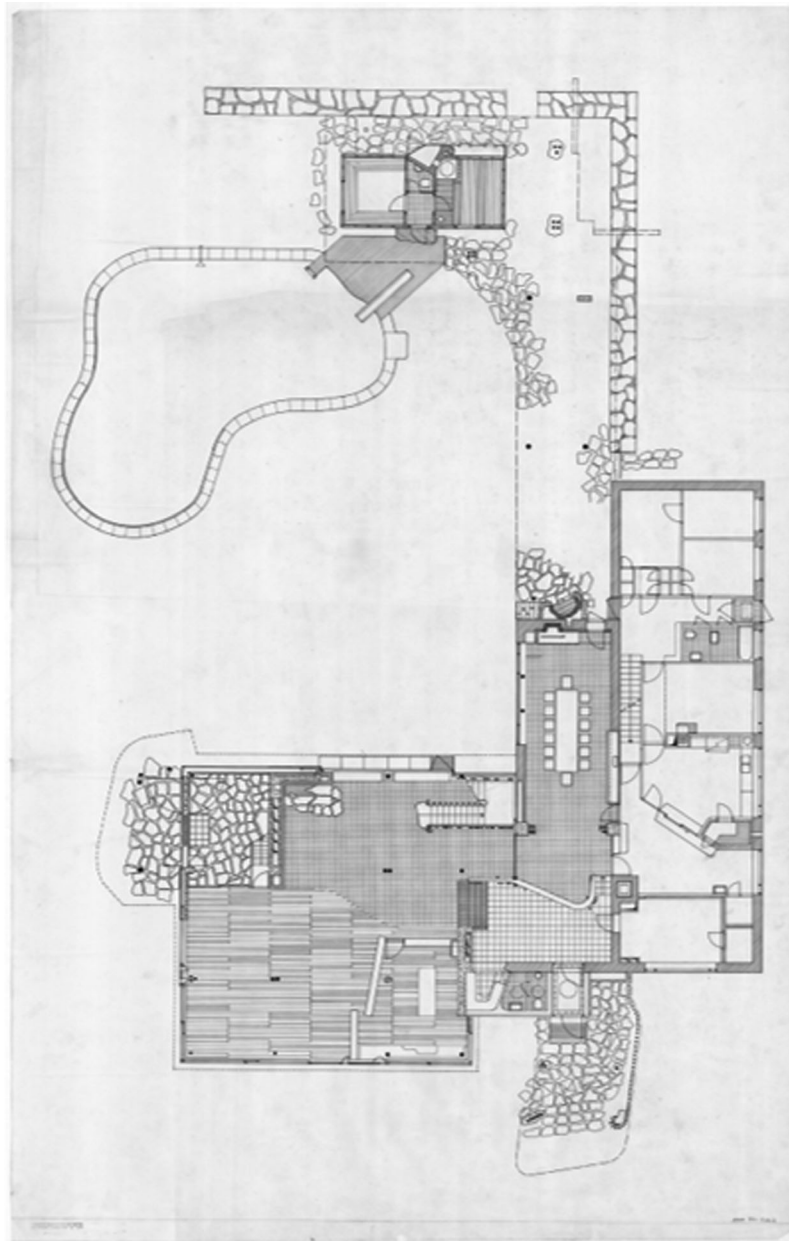


Figure 6.
Aino and Alvar Aalto, ground floor
plan showing the free-form
swimming pool in the backyard,
Villa Mairea, 1939, © Alvar Aalto
Museum

Figure 7. (opposite)

Alvar Aalto's Säynätsalo municipal office (1949–1952) was designed with a square central court which was defined by the indoor corridor with large openings, sloped roof, and in-situ concrete walls with brick and tile cladding, © Alvar Aalto Museum

In the early 1950s, Utzon studied Aalto's Säynätsalo municipal office (1949–1952) both on site and through his collection of photographs and related publications.⁴⁸ Aalto's project featured a square central court that was defined by the indoor corridor with its large openings, sloped roof, and in-situ concrete walls with brick veneer and tile cladding (Fig. 7). The court included cultivated plants, a water fountain, and tile, stone, and brick pavements. Aalto's work in Säynätsalo inspired Utzon's courtyard housing projects for the Skånska Hustyper competition (Fig. 2).⁴⁹ Alluding to Aalto's forms, Utzon's Skånska housing unit was a miniature of the central court at Säynätsalo, with its characteristically square layout and the square central courtyard that was surrounded by the rooms and walls.

But Aalto's Säynätsalo municipal office did not only provide a set of architectural idioms for Utzon. Perhaps more significantly, it inspired him to articulate the form of the roof. The tiled sloped roof of Utzon's Skånska courtyard houses alluded to the Danish vernacular forms and directed the dynamics of spaces towards the central court. This articulated roof form also made Utzon's Skånska courtyard houses very different from his own house at Hellebæk, which featured a Miesian flat roof and projecting eaves (Fig. 1). After the Skånska Hustyper competition, the roof became a very important architectural feature in Utzon's designs. His competition entries for the Langelinie Pavilion (1953) and the Sydney Opera House (1957) featured the most expressive roof forms of his early career (Figs 8 and 9).

In addition to the expressive roof form, the Skånska project was also exceptional for its staggered arrangement of housing units. Despite their differences, the interior layouts and site conditions of Utzon's courtyard housing projects from the 1940s to the 1960s consistently followed a staggered plan arrangement for housing units (Fig. 10). As such, his housing units sensitively responded to the surrounding landscape and urban context at an intimate human scale. At the same time, this arrangement organised the building complexes in a series of representational clusters. Utzon utilised them to represent the shapes of organic forms and allude to primitive human settlements.⁵⁰

The staggered plan, one of the characteristic architectural idioms in Utzon's early career, seems to have been directly received from Aalto's work in the 1940s.⁵¹ In the mid 1930s, projects such as the Aaltos' own house and studio (1936) (Fig. 11), the Finnish Pavilion at the World Exposition in Paris (1937), and the competition entry for the Tallinn Art Museum (1937) (Fig. 12) showcased the architects' use of the staggered plan. This resulted from their interest in Japanese architecture, and especially Tetsuro Yoshida's representation of the staggered plan of the Katsura Imperial Palace (Fig. 13). Because Utzon was also interested in Japanese building culture, he received Yoshida's book *The Japanese House and Garden* (1935) as a gift from the Aaltos in 1945.⁵² Utzon's study of the Katsura Imperial Palace and Aalto's work culminated in projects such as his competition entry for the Forest Pavilion in Hobro Wood (1946), the Central Railway Station in Oslo (in collaboration with Arne Korsmo, 1947), the Business School in Göteborg (1948), and the early scheme for his own house at Hellebæk. In all these projects, he consistently applied a staggered

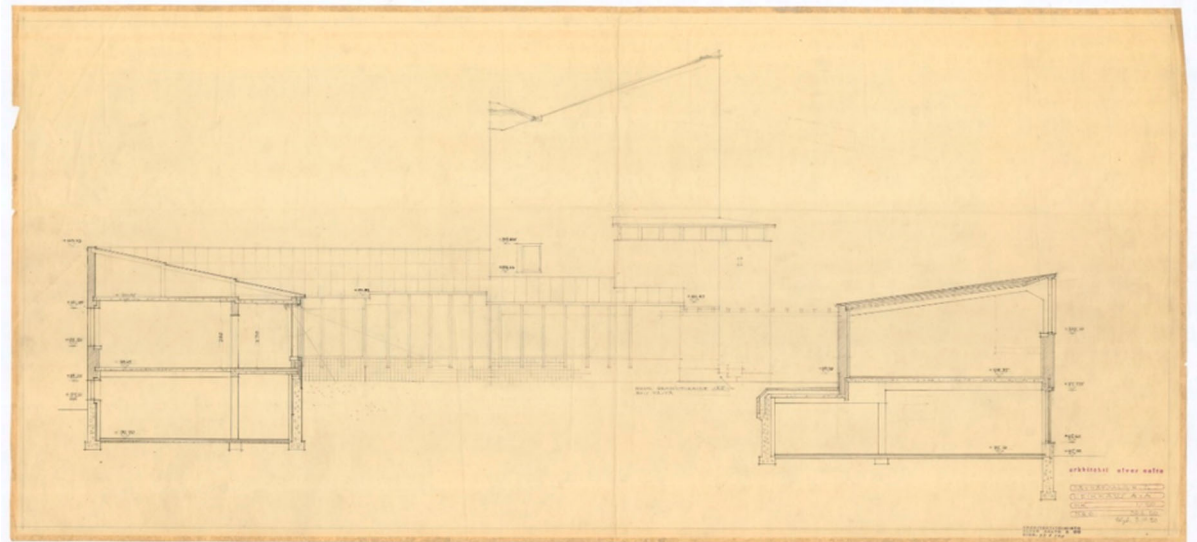
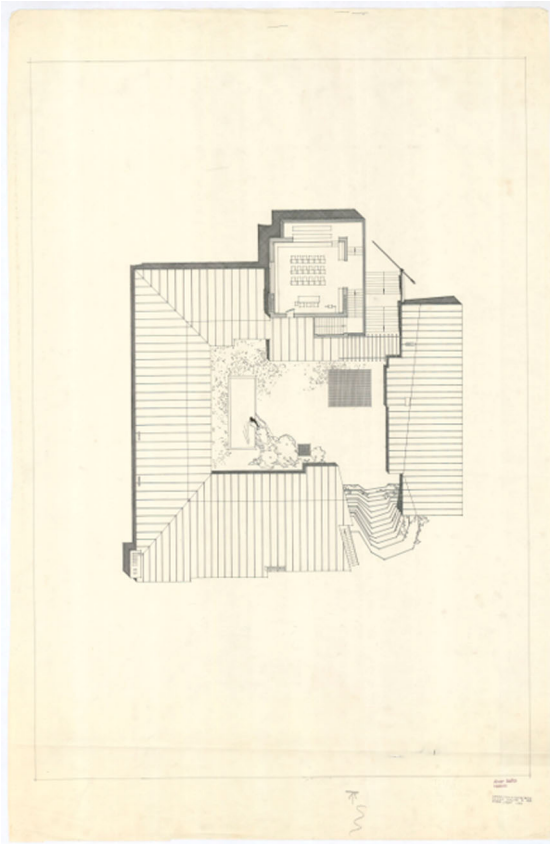
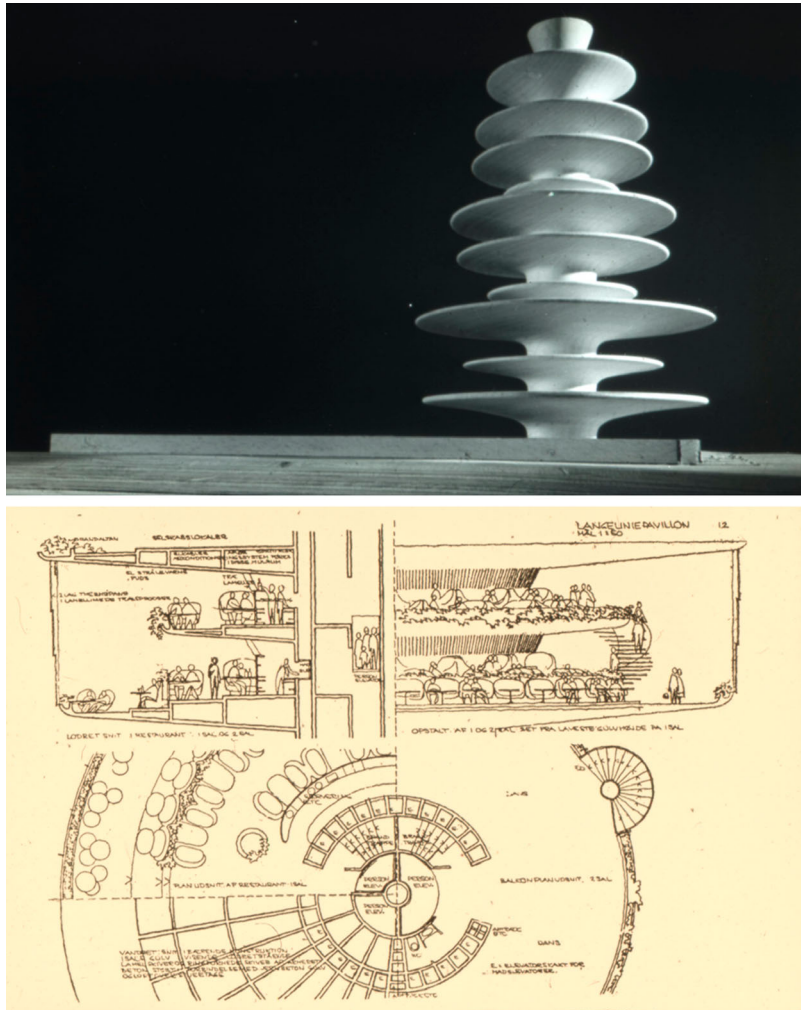


Figure 8.
Jørn Utzon, competition entry for
the Langelinie Pavilion in
Copenhagen, 1953, © Utzon
Archives / Aalborg University &
Utzon Center



plan with a series of representational architectural elements that turned the building complex into a synthetic and organic whole (Fig. 14).⁵³

In the early 1950s, Aalto utilised the staggered plan in various urban planning projects. In his planning proposal for Säynätsalo in Finland, the staggered plan was formed by a series of buildings sensitively responding to a diagonal axis of the existing urban grid and the orientation of neighbouring buildings. In 1948, Utzon applied a similar strategy in his competition entry for the development of Vestre Vika in Oslo (Fig. 15).⁵⁴ He then used this project as a precedent for his Skånska Hustyper competition entry.⁵⁵ In the 1950s, he repeatedly applied this typical composition in his courtyard housing projects in Kingo (1956), Bjuv (1956), Lund (1956–1957), and Fredensborg (1959–1965).

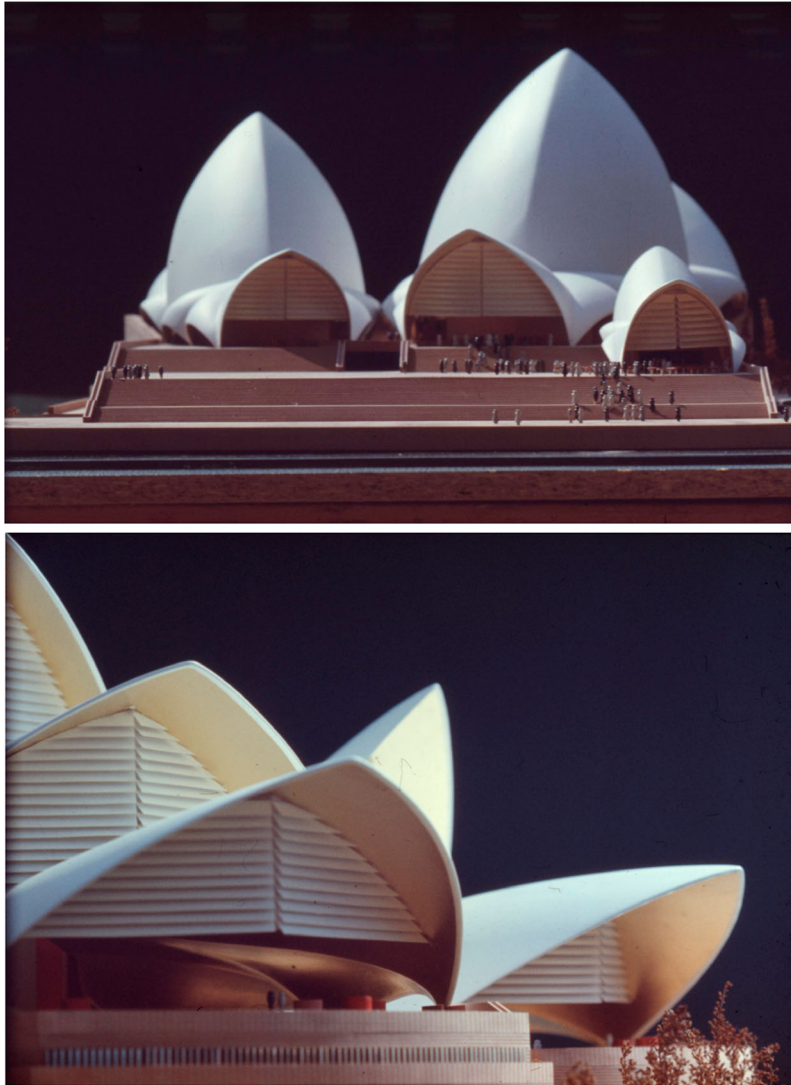
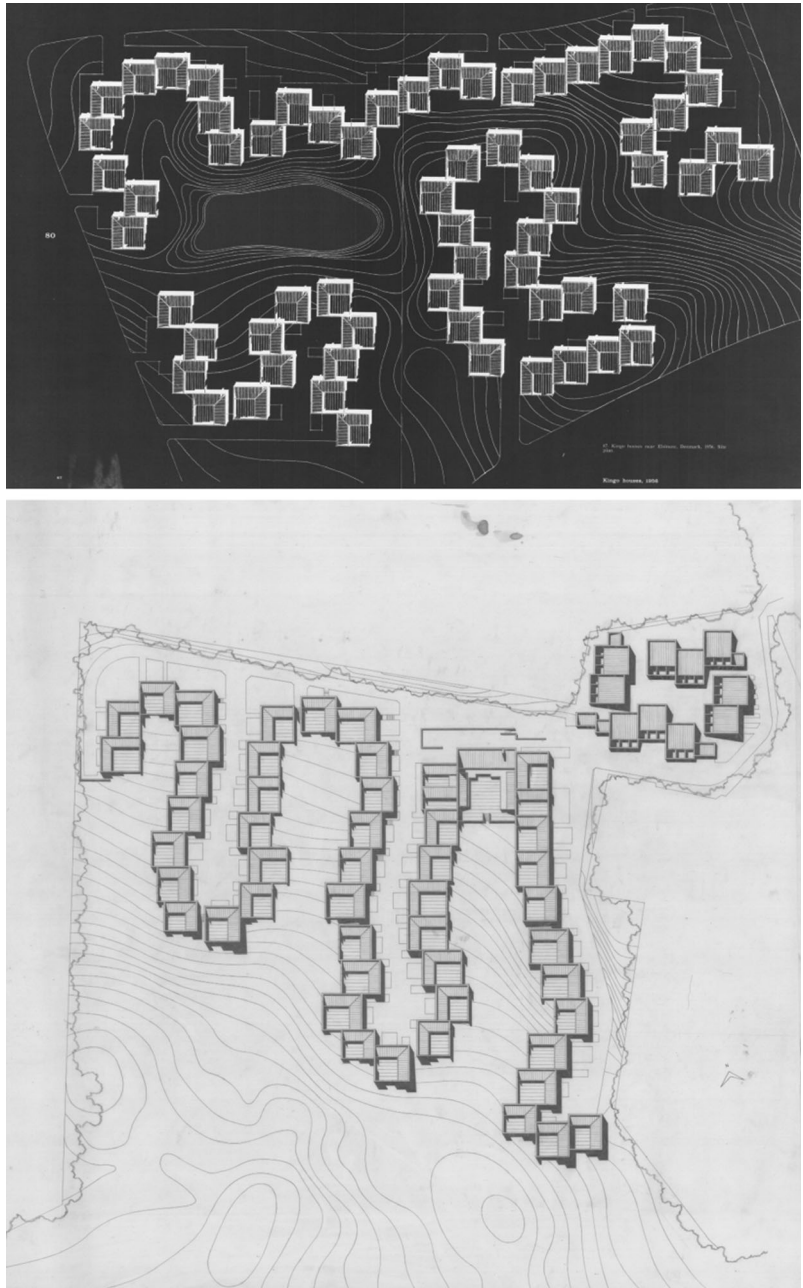


Figure 9.
Jørn Utzon, photographs of the first
model of the Sydney Opera House,
1957–1958, © Utzon Archives /
Aalborg University & Utzon Center

Osvald Sirén and Chinese architecture

Faber was with Utzon in Stockholm during the war. In an interview, he recalled that 'compared with Sweden, Denmark was more isolated at that time. So, in Stockholm, Utzon and I discovered real China together!'.⁵⁶ This is also when they studied Osvald Sirén's early works on Chinese architecture.⁵⁷ After the end of the war, Utzon and Faber met Sirén in Copenhagen. They discussed Chinese architecture, especially in relation to Chinese dualism and its metaphorical representation of nature.⁵⁸ Sirén gave Utzon his book *The Golden Pavilion* (1919) as a small token of their friendship.⁵⁹ In 1957 and 1958, the Danish

Figure 10.
(from top to bottom) Jørn Utzon,
Kingo courtyard housing complex,
Elsinore, 1956; Jørn Utzon,
courtyard housing complex,
Fredensborg, 1959–1965, © Utzon
Archives / Aalborg University &
Utzon Center



architect respectively planned his trips to Japan and China, based on Sirén's books.⁶⁰

Sirén argued that monumental earthwork was the outstanding element of Chinese building culture. He presented two case studies to demonstrate his

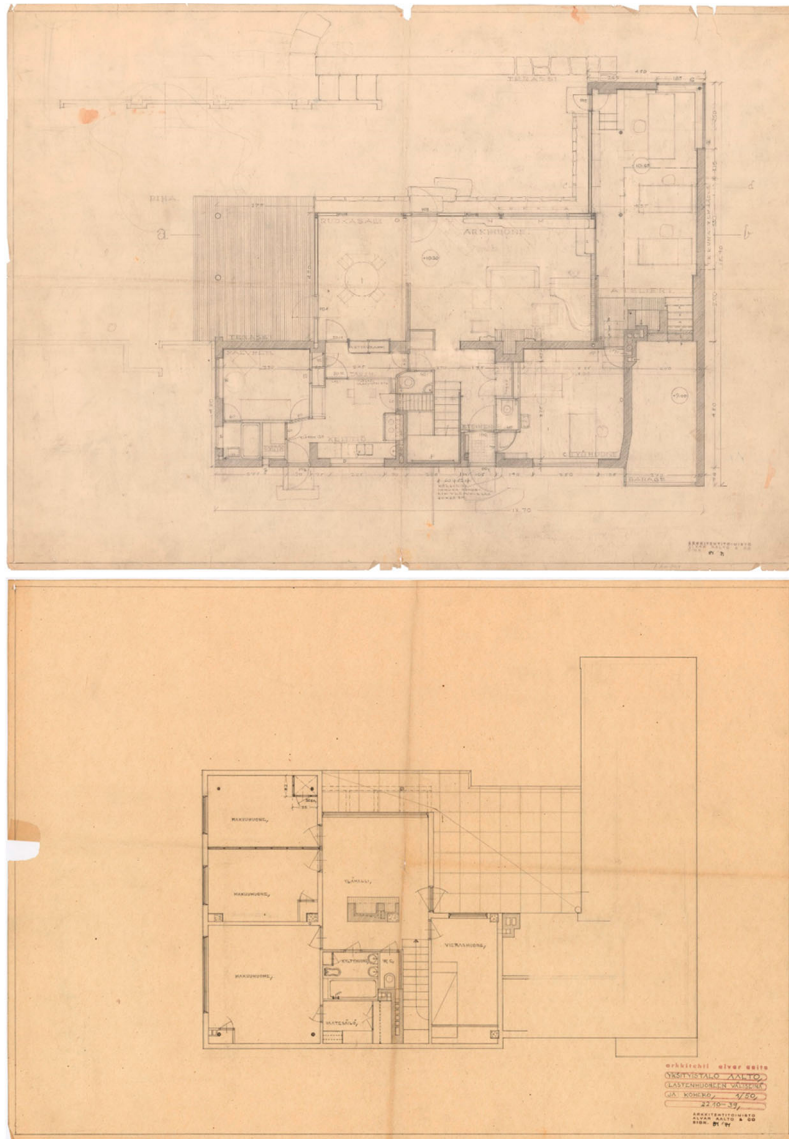
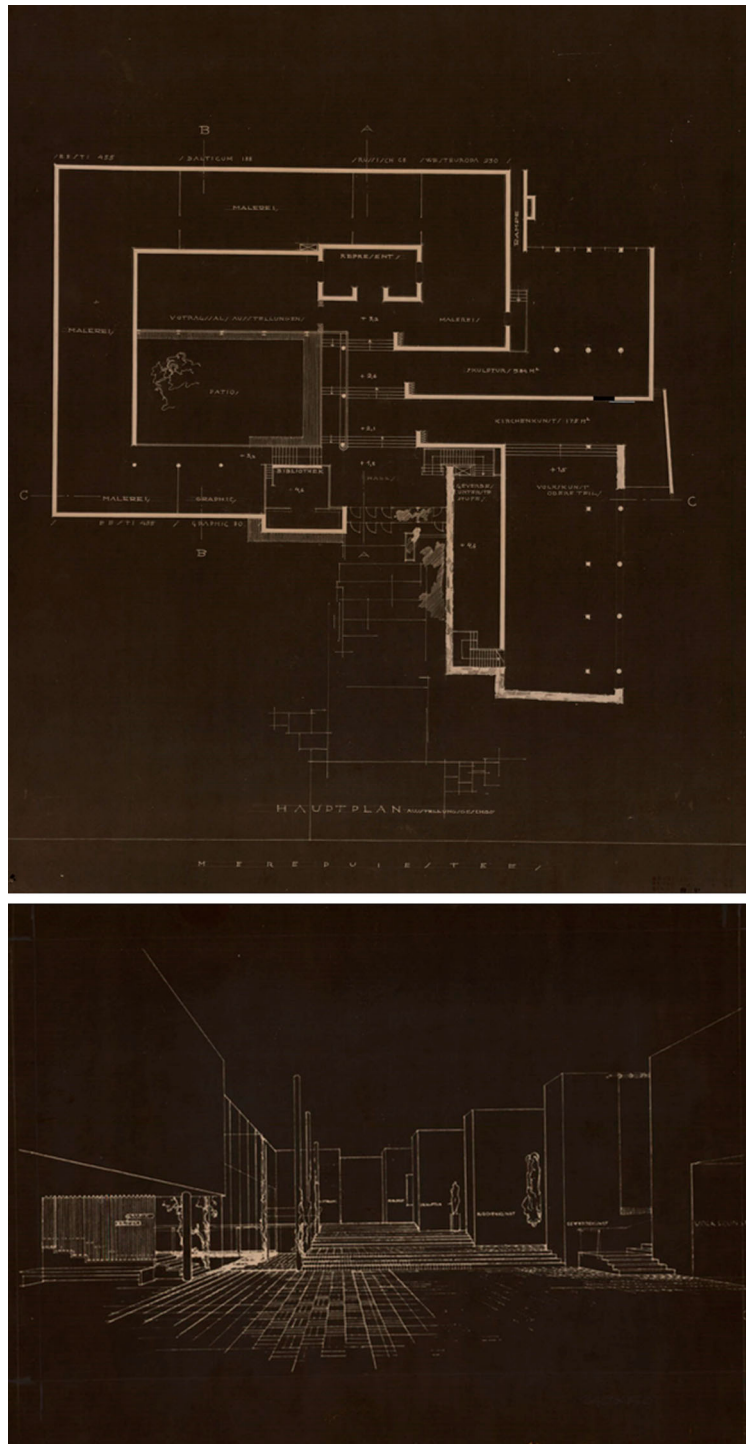
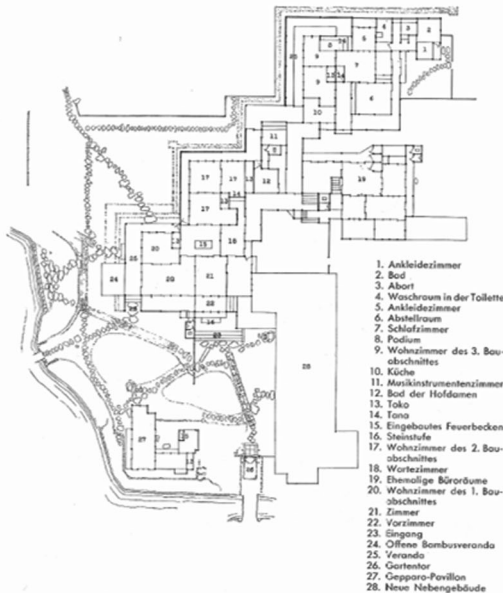


Figure 11.
Aino and Alvar Aalto, ground floor
plan (top) and upper floor plan
(bottom) of the Aaltos' own house
and studio, Munkkiniemi, Helsinki,
1936, © Alvar Aalto Museum

point: the Chinese walls and the sacrificial altars. For Sirén, the Chinese walls were 'more than an ordinary architectural monument' or 'defence structures'.⁶¹ They 'impart[ed] a unified and monumental architectural character' and constituted a fundamental feature of Chinese villages, cities, and territory.⁶² Sirén argued that the Chinese sacrificial altars or terraces were 'closely related to the walls' and 'perpetuated the most primitive form of religious architecture in China'.⁶³ He emphasised their 'architectural appearance' and their significant role in the religion of Imperial China.

Figure 12.
 Aino and Alvar Aalto, competition
 entry for the Tallinn Art Museum,
 1937, © Alvar Aalto Museum





28 Grundriß des Kaiserlichen Katsura-Palastes, Kyôto, 1589–1643

31

33 Erster Bauabschnitt – mit offener Bambusveranda – des Kaiserlichen Katsura-Palastes
34 Blick in den Garten von der Bambusveranda des Kaiserlichen Katsura-Palastes

35

The fact that there are still such open-air altars and that the sacrifices were continued during the whole run of Chinese history, in spite of many sweeping religious innovations and reforms, is in itself a remarkable proof of the fundamental importance of these places to the Chinese people. These altars typified, so to say, the emperor's position as the spiritual head of the people, and the great sacrifices which were performed here, either by himself or by his representatives, were the means by which the life of the nation was brought in harmony with the guiding powers and the inherent laws of nature.⁶⁴

Sirén's notion of monumental earthwork resonated with Utzon. In the first manifesto he co-authored with Faber in 1947, he reproduced Sirén's photograph of the city wall and gate tower of *Yongdingmen* 永定門 [the Gate of Eternity] of Imperial Beijing (Fig. 16). For Utzon and Faber, this structure shared a common foundation with their architectural designs. Both drew their inspiration from organic forms and natural phenomena. As Utzon noted in a caption to Sirén's photographs of a terrace-like Chinese wall, 'Chinese wall, whose individual strength is so great that, even the highly-detailed tower is controlled by the wall, and the tower adapts and enriches the whole'.⁶⁵

This was not the first time that Utzon had expressed his affinity for Chinese earthwork. Even before 1947, his intention to incorporate walls and terraces

Figure 13.

(from left to right) 'The site plan of Imperial Katsura Palace, Kyoto, 1589–1643'; 'View from the open bamboo veranda of the Imperial Katsura Palace', in Tetsuro Yoshida, *Das Japanische Wohnhaus* (Tübingen: Ernst Wasmuth, 1935), p. 31; p. 35

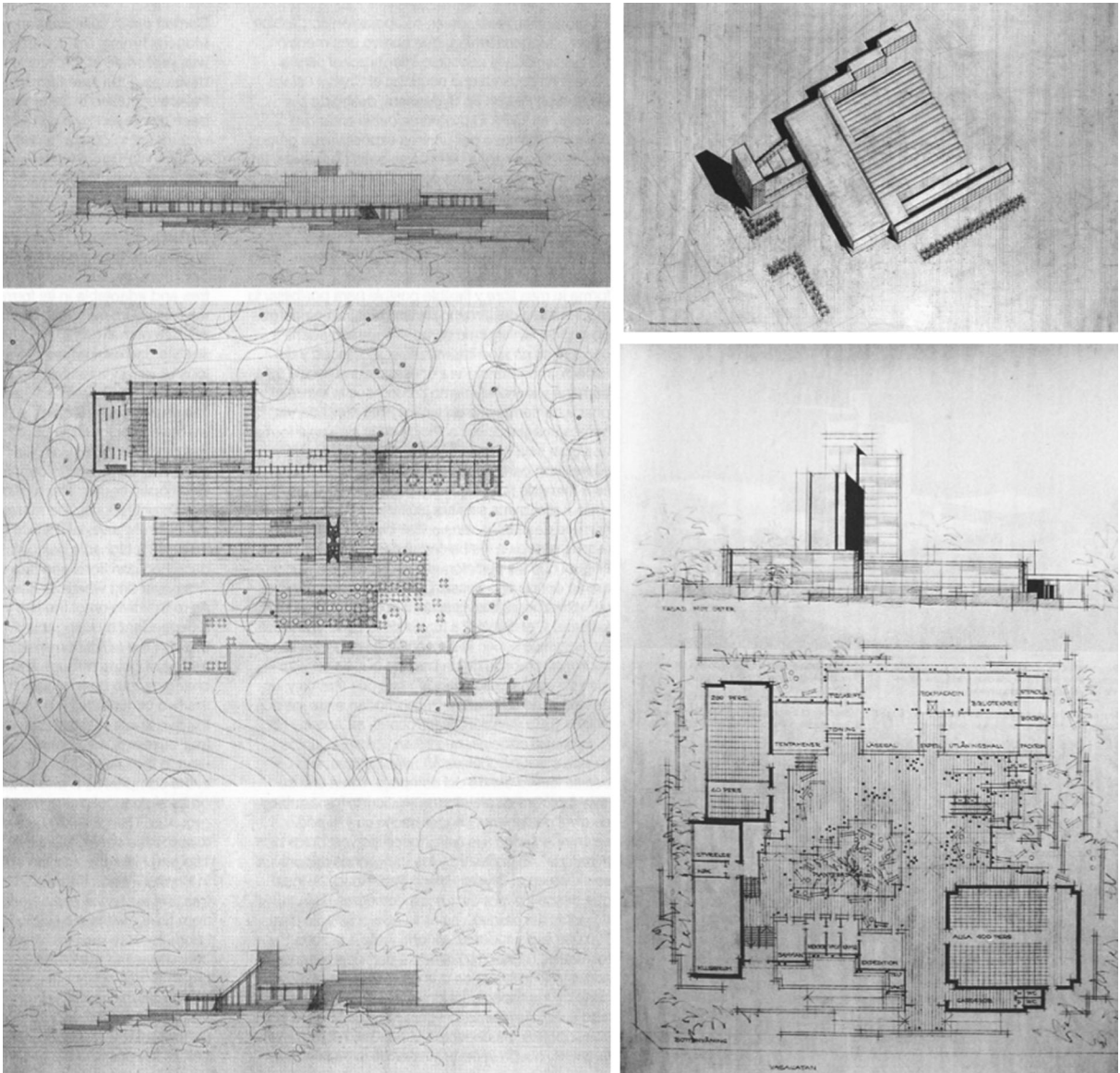


Figure 14.
(top) Jørn Utzon, competition entry
for the Forest Pavilion in Hobro
Wood, 1946; (bottom left) Jørn
Utzon (with Arne Korsmo),
competition entry for Central Railway
Station, Oslo, 1947; (right) Jørn
Utzon, competition entry for Business
School in Göteborg, Sweden, 1948,
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in his designs was clear. His competition entries (in collaboration with Faber) for the Aalborg Convention Centre (1945) (Fig. 17) and the Crystal Palace (1946) used walls as major design elements. The Aalborg project featured a series of bastions reminiscent of the fortified city walls in Imperial Beijing. In the Crystal Palace project, the main buildings were set on an urban-scale podium that strongly resembled the combination of city walls and gate towers in Imperial Beijing. For Utzon and Faber, the uniformity and monumentality of walls

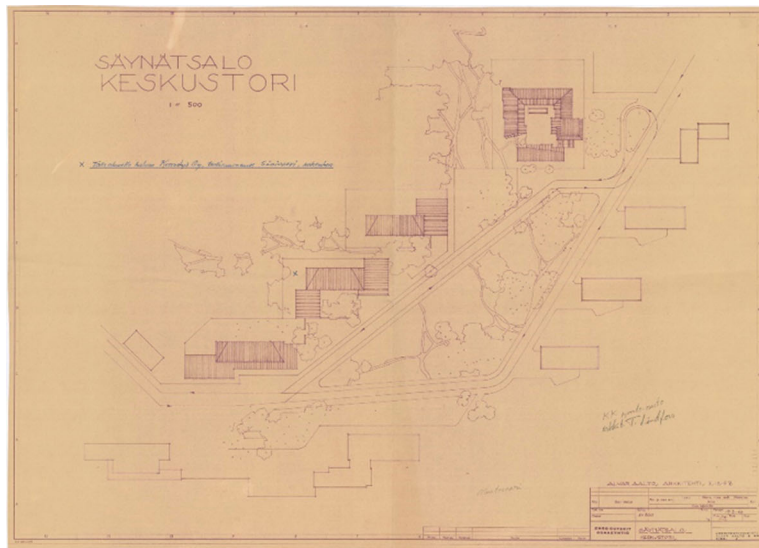


Figure 15.
(from top to bottom) Alvar Aalto,
planning proposal for Säynätsalo,
1942–1951, © Alvar Aalto
Museum. Utzon meticulously
studied the staggered plan shaped
by a series of representational
buildings that sensitively responded
to the diagonal axis of the road and
the orientation of each building;
Jørn Utzon, planning scheme for
the low building complex in Vestre
Vika, Oslo, 1948, © Utzon Archives
/ Aalborg University & Utzon Center

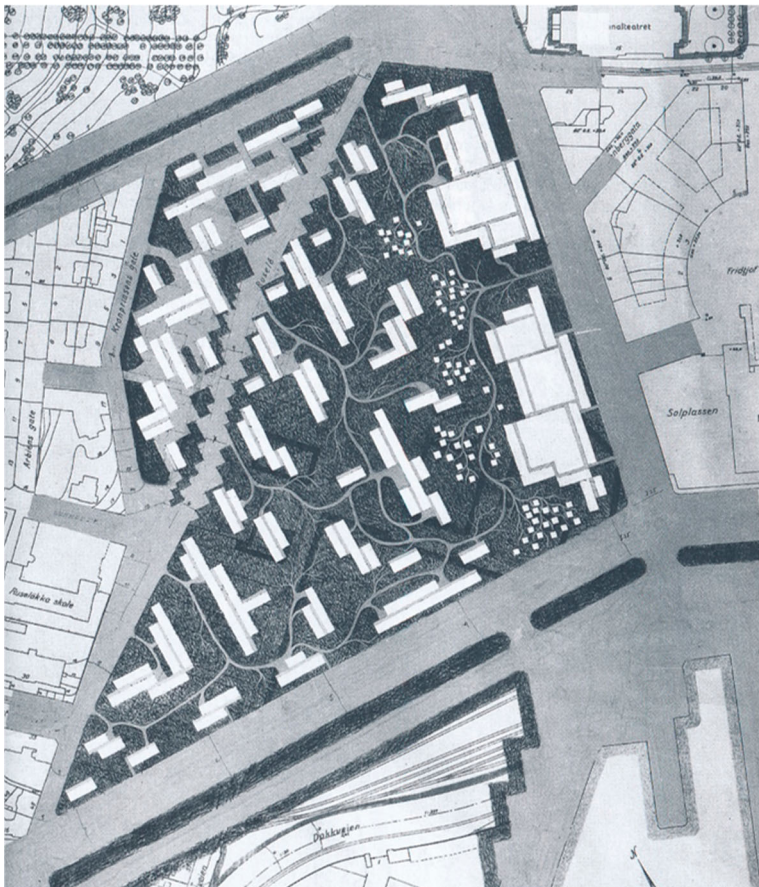
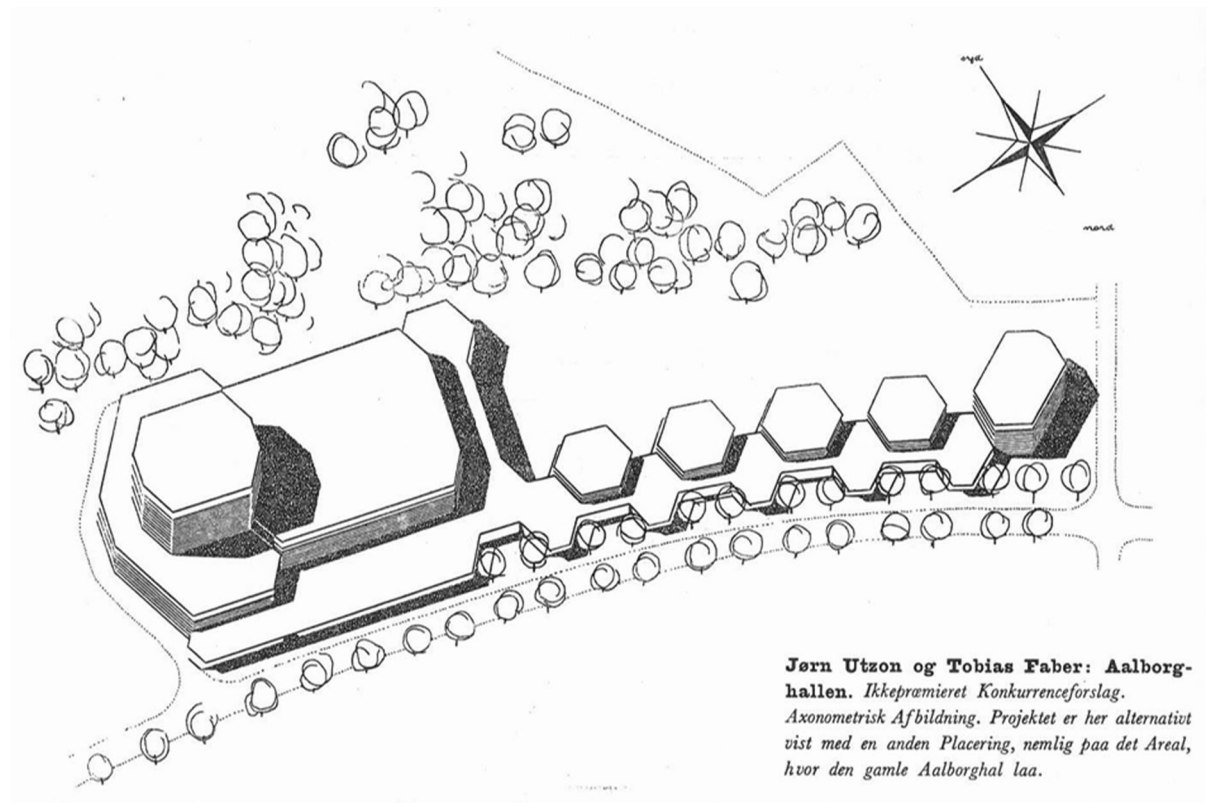




Figure 16.
Osvald Sirén, the city wall and gate tower of Yongdingmen 永定門 [The Gate of Eternity] of Imperial Beijing, in Osvald Sirén, *The Walls and Gates of Peking: Researches and Impressions* (London: John Lane, 1924), unpaginated, courtesy of The Museum of Far Eastern Antiquities, Skeppsholmen, Stockholm, CC-BY-NC-ND

generated a sense of strength that consolidated the expressivity of the proposed building and its site.⁶⁶

A similar design intention can also be traced in Utzon's own house at Hellebæk (Fig. 1). For this project, Utzon was clearly inspired by his on-site studies of Frank Lloyd Wright's Herbert Jacobs House 2 (1944–1948) and Ludwig Mies van der Rohe's Farnsworth House (1945–1951).⁶⁷ But the load-bearing brick walls, brick-paved floor, and podium also reflected Utzon's pursuit of expressive monumentality in traditional earthwork. Similar features can be traced in Utzon's realised courtyard houses. At Kingo, the central court was defined by loadbearing brick walls and featured a brick-paved floor (Fig. 18). Combined with the tiled roof, these contributed to the uniformity of architectonic forms. They emphasised the housing unit as a synthetic whole as in traditional earthwork, such as the vernacular houses in Morocco.⁶⁸ At the same time, the continuous walls that were articulated by the staggered arrangement of housing units also defined and protected the communal garden from its urban surroundings, alluding to the monumental scale of city walls in Imperial China.



From the work of Dutch Sinologist and historian of religion Jan Jakob Maria de Groot's *The Religious System of China* (1892–1910), Sirén drew a conceptual framework for aligning Chinese architecture with his own theosophical beliefs.⁶⁹ De Groot described Chinese religion in terms of 'animism', 'an animated Universe' that was 'creating [not created] by the operation of its Tao, and composed of two souls', the 'Yang and Yin'.⁷⁰ For De Groot, 'the Yang represents light, warmth, production, and life, as also the celestial sphere from which all these blessings emanate; the Yin is darkness, cold, death, and the earth'.⁷¹ Sirén directly followed this animist and dualist interpretation in his work. He presented Chinese architecture as a synthesis of the creative forces of Yin and Yang.

One may trace in their architectural activity just as well as in their pictorial and decorative arts a striving to express something of the life-impetus, the movement or the creative forces (Yin and Yang) which they found everywhere, though such endeavours are, indeed, modified by practical and constructional ideas.⁷² Still aligned with De Groot's dualist interpretation, in his book *Pictures from China*, Sirén further explained Yin and Yang as two combined and contrasting elements.

Figure 17.
Jørn Utzon and Tobias Faber,
competition entry for the Aalborg
Convention Centre, 1945, in
'Konkurrencen om en ny
Aalborg-hal', *Arkitekten*,
Maanedshæfte XLVII, Aargang,
København (1945), p. 120



Figure 18.
Jørn Utzon, Kingo Houses,
photographed by the architect in
1959, © Utzon Archives / Aalborg
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For the Chinese, Yang is the positive creative principle. It represents light, heat, sun, and all the concepts with productive power in both spiritual and material respects. The opposite principle is Yin, which is negative, representing darkness, the earth, the moon, a suspension, or an absorbing force that opposes, the power of positive energy. The Yang principle is symbolised by the dragon, Yin

by the tiger; the colour of the former is orange, the latter is green or deep blue. When these two basic elements are brought into harmony, happiness and prosperity prevail in the Middle Kingdom and people live in peace.⁷³

Early in his career, Utzon understood China through Sirén's dualist approach and his conceptualisation of Chinese architecture as a Yin-Yang creation. In 1952, Utzon referred to Chinese dualism as this was expressed in architectonic juxtaposition to explain his use of the contrasting loadbearing yellow brickwork for the walls and podium against the black painted timber frame for the roof form at his house in Hellebæk.

In traditional Chinese architecture, the constructions are all visible; the elements have been divided up into male, bearing, and female, borne, and this system is also carried through in the treatment of colour.⁷⁴

The central axis and bilateral geometric composition whose symmetry was embodied in contrasting components of Utzon's Hellebæk House can be read as Utzon's interpretation of Sirén's dualism (Fig. 19). Discussing his Middelboe House in 1955, Utzon again foregrounded a similar idea.

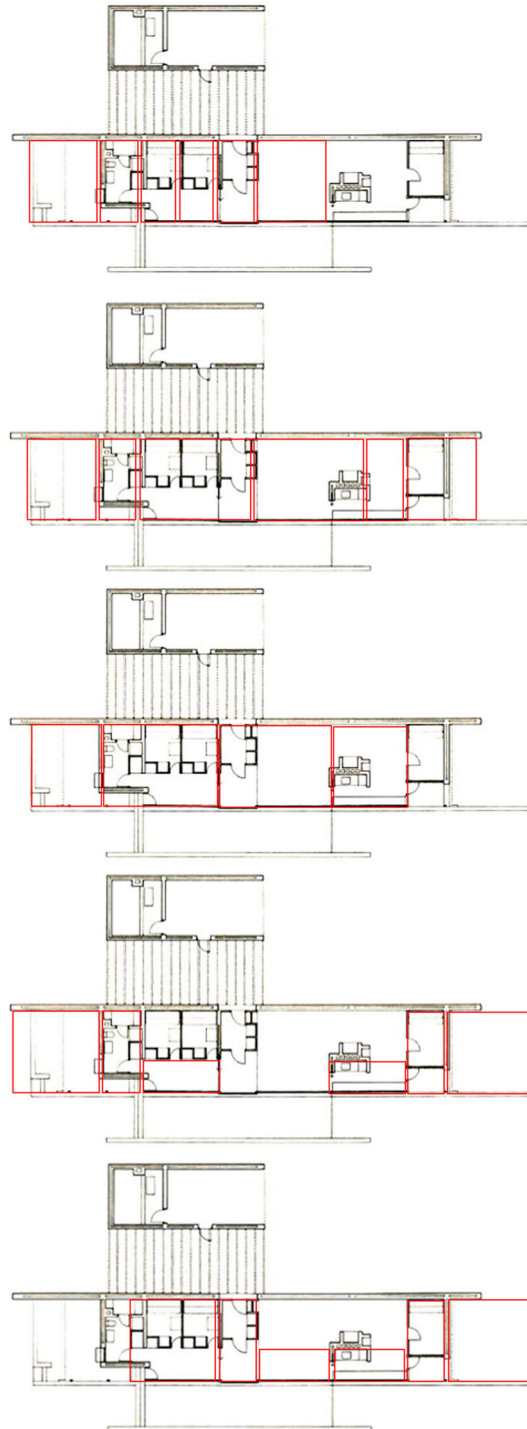
The constructive elements have been stressed by strong colours: black and red together with the very distinct reinforced-concrete construction emphasizing the relation between the carrying and the carried elements.⁷⁵

The upper-floor plan of Utzon's Middelboe House features a diagonal-symmetric layout (Fig. 20) that is aligned in principle with his earlier Hellebæk House. The Chinese dualist principle differentiated Utzon's courtyard housing projects from their precedents in the Western canon, such as Wright's Usonian houses.⁷⁶ In his Skånska Hustomer project, the interior was divided into public/served and private/serving sides. In his Kingo Houses, the corridor in the public wing was aligned with the openings, and the one in the private wing was aligned with the wall (Fig. 21). The garage in the public wing also mirrored the master bedroom in the private wing. In the more sophisticated diagonal symmetric layout of his Fredensborg Houses, the bathroom in the private/serving wing mirrored the fireplace in the public/served wing (Fig. 22). At the same time, the kitchen and dining area where food was consumed mirrored the vegetable garden where food could be produced.

The courtyard, transformed

Although Utzon's courtyard housing projects varied in terms of their floor plans and details, their underlying planning principle was similar. The Kingo Houses project epitomises Utzon's design intentions (Fig. 10). The Danish architect interconnected the housing units to formulate an urban-scale courtyard as a communal space that also protected and preserved nature, symbolised by the central lake and landscaping. Tall pine trees were also carefully planted and preserved in the outskirts of the building complex to reinforce the boundary between the project's community and the urban environment. This intention to isolate the Kingo housing complex from its urban setting directly echoed Lin Yutang's writings. The staggered plan that was composed of interconnected housing units

Figure 19.
Diagram showing a series of
comparable spatial cells in the main
building of Jørn Utzon's own house
in Hellebæk, drawn by Chen-Yu
Chiu



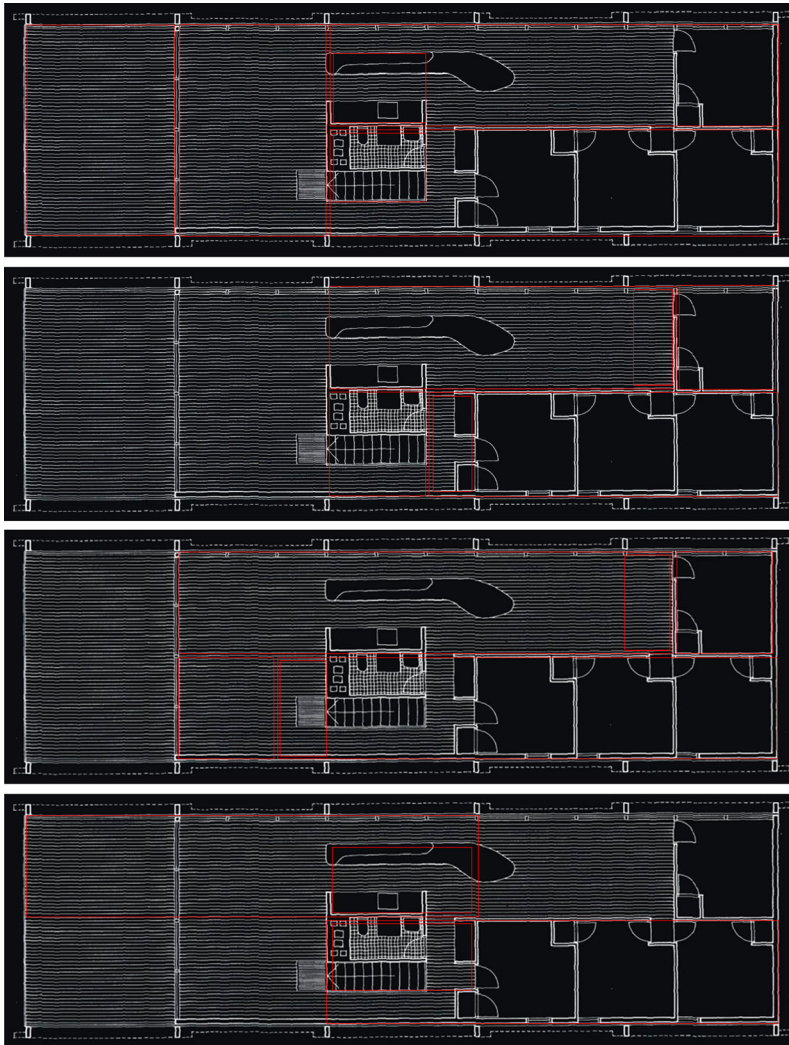
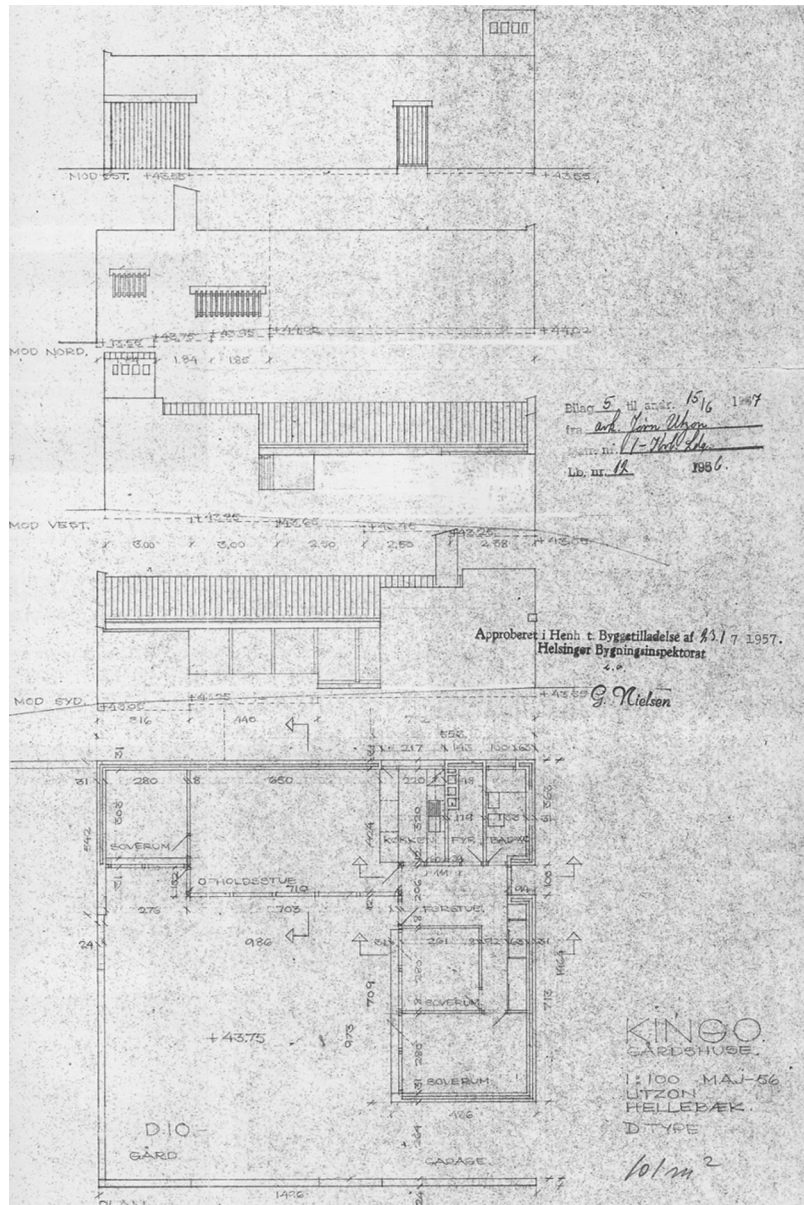


Figure 20.
Plan of Jørn Utzon's Middelboe
House (1955), presenting dualist
settings between spaces with
similar proportions, drawn by
Chen-Yu Chiu

was Utzon's reinterpretation of Aalto's personal architectural idiom. Finally, the monumentality and uniformity of the linear layout of interconnected housing units that defined a place for the project's community resonated with Sirén's account of Chinese cities and city walls.

The courtyard was a fundamental concept for several projects that featured in Utzon's 'Platforms and Plateaus' publication in 1962.⁷⁷ Based on their building types and programmes, these projects can be divided into two groups: (a) institutional and communal buildings, such as the competition entry for the High School in Højstrup (1958–1962); the Copenhagen World Exhibition in Amager (1959), and the Social Centre for Housing complex in Fredensborg (1959) (Fig. 23); (b) residential projects, such as the Banck House (1958) and the Herneryd House in Helsingborg (1960–1962) (Fig. 24). These projects

Figure 21.
Jørn Utzon, drawings, Kingo
Houses, 1956, © Utzon Archives /
Aalborg University & Utzon Center



were significant not only because they were the seminal works of Utzon's practice, but also because they enabled him to test and revise the 'courtyard'.

In the first series of projects, Utzon's courtyard layouts featured a central axis that was combined with processional movement within an iconic roof/earth-work juxtaposition. This was derived from Utzon's study of Chinese architecture, especially after his pivotal trip to China in 1958.⁷⁸ Before and after this trip, Utzon had already developed an understanding of Chinese monuments

Figure 22.

Jørn Utzon, plans of the courtyard housing complex in Fredensborg, 1959, © Utzon Archives / Aalborg University & Utzon Center

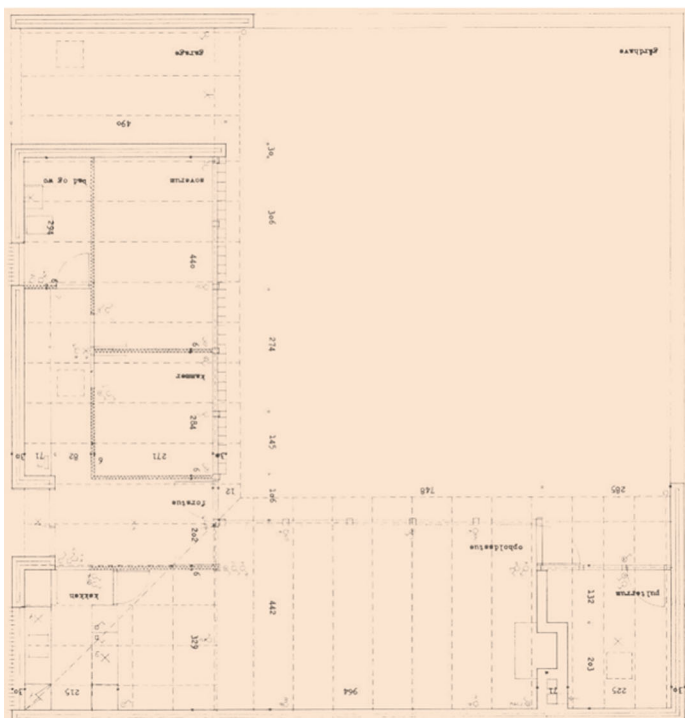
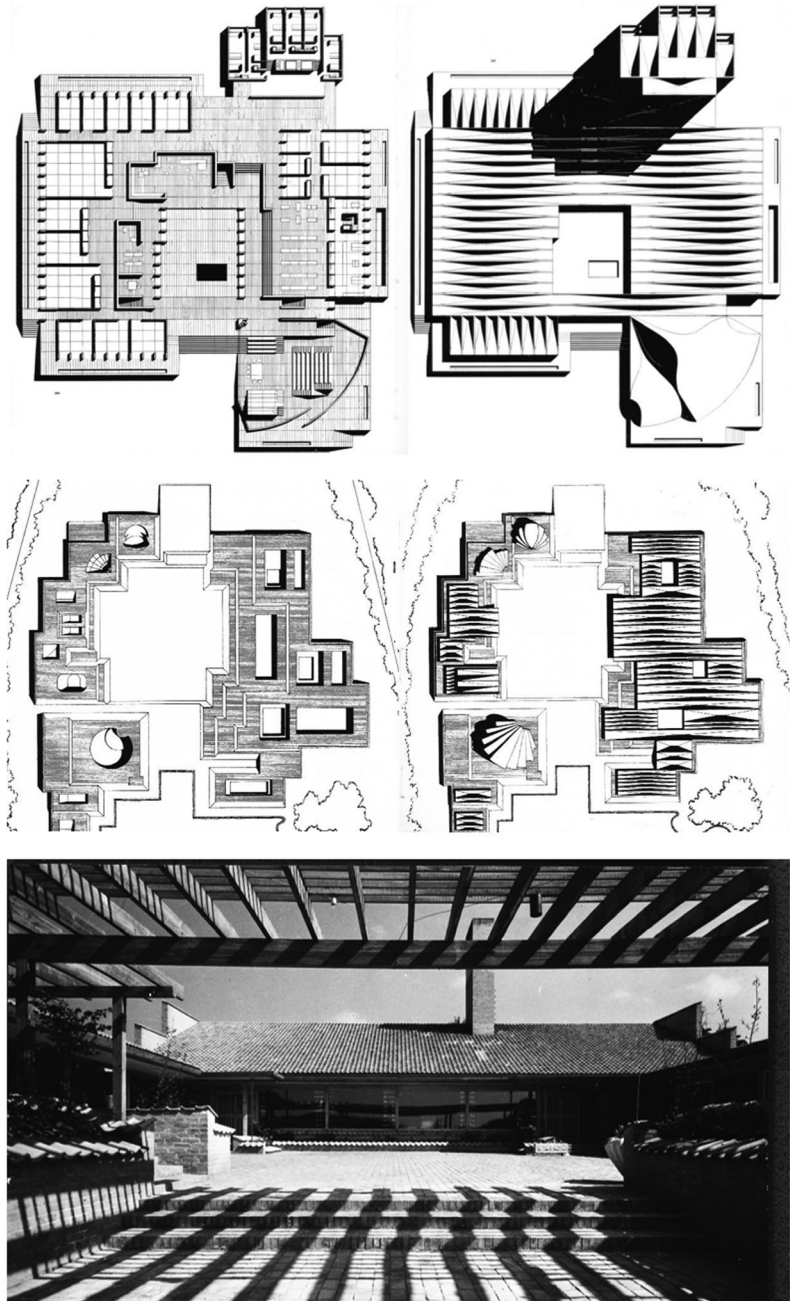
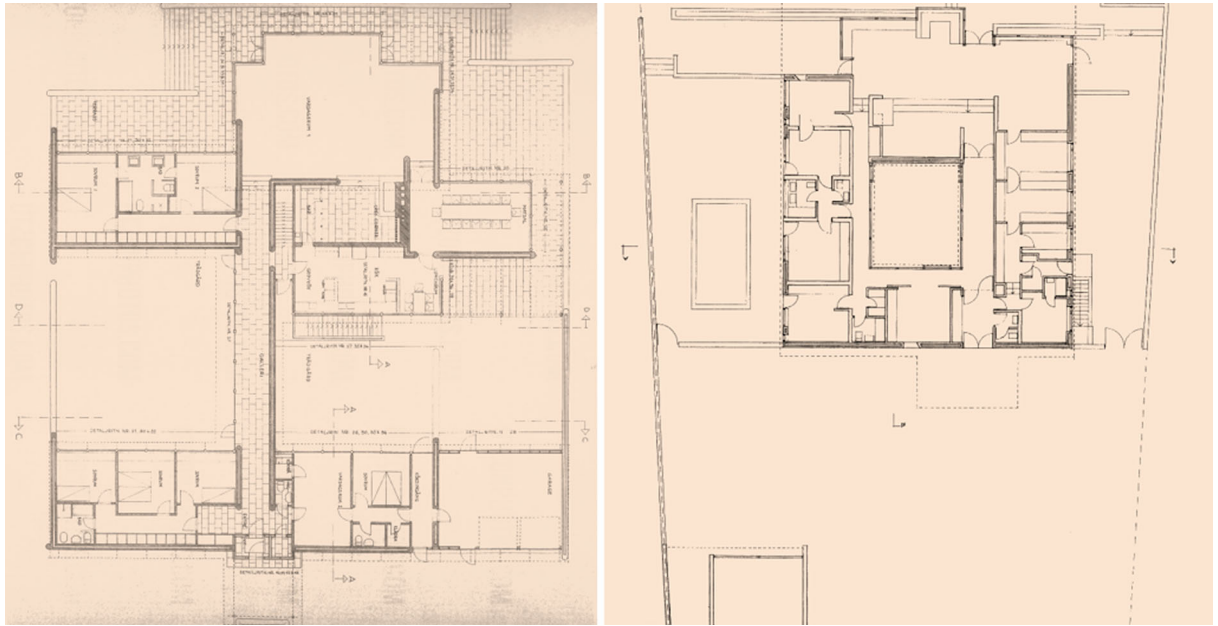


Figure 23.
(from top to bottom) Jørn Utzon,
competition entry for the High
School in Højstrup, Elsinore, 1958–
1962; Jørn Utzon, the Copenhagen
World Exhibition, Amager, 1959;
Jørn Utzon, competition entry for
the Social Centre for Housing
complex in Fredensborg, 1959, in
Jørn Utzon, 'Platforms and
Plateaus: Ideas of a Danish
Architect', *Zodiac*, 10 (1962), 114–
17, © Utzon Archives / Aalborg
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through Lin Yutang's account of Chinese architecture as an embodiment of a central axis and an asymmetric layout. Sirén's dualist account of historical earthwork was also a significant influence.⁷⁹ This explains why Utzon's courtyard



layouts also intentionally divided the programmes and forms of his proposed building complex into dualist sets. The High School in Højstrup featured a residential tower at one corner of the urban-scale podium and an auditorium room at the other, as Utzon and his team struggled to formulate and synthesise a coherent iconic roof/earthwork juxtaposition.⁸⁰ In Copenhagen, the Exhibition complex was also divided into two zones (atriums for the exhibitions on one side, and auditoriums for the lectures and performances on the other side), when it was clearly impractical to divide the atriums from the auditoriums.

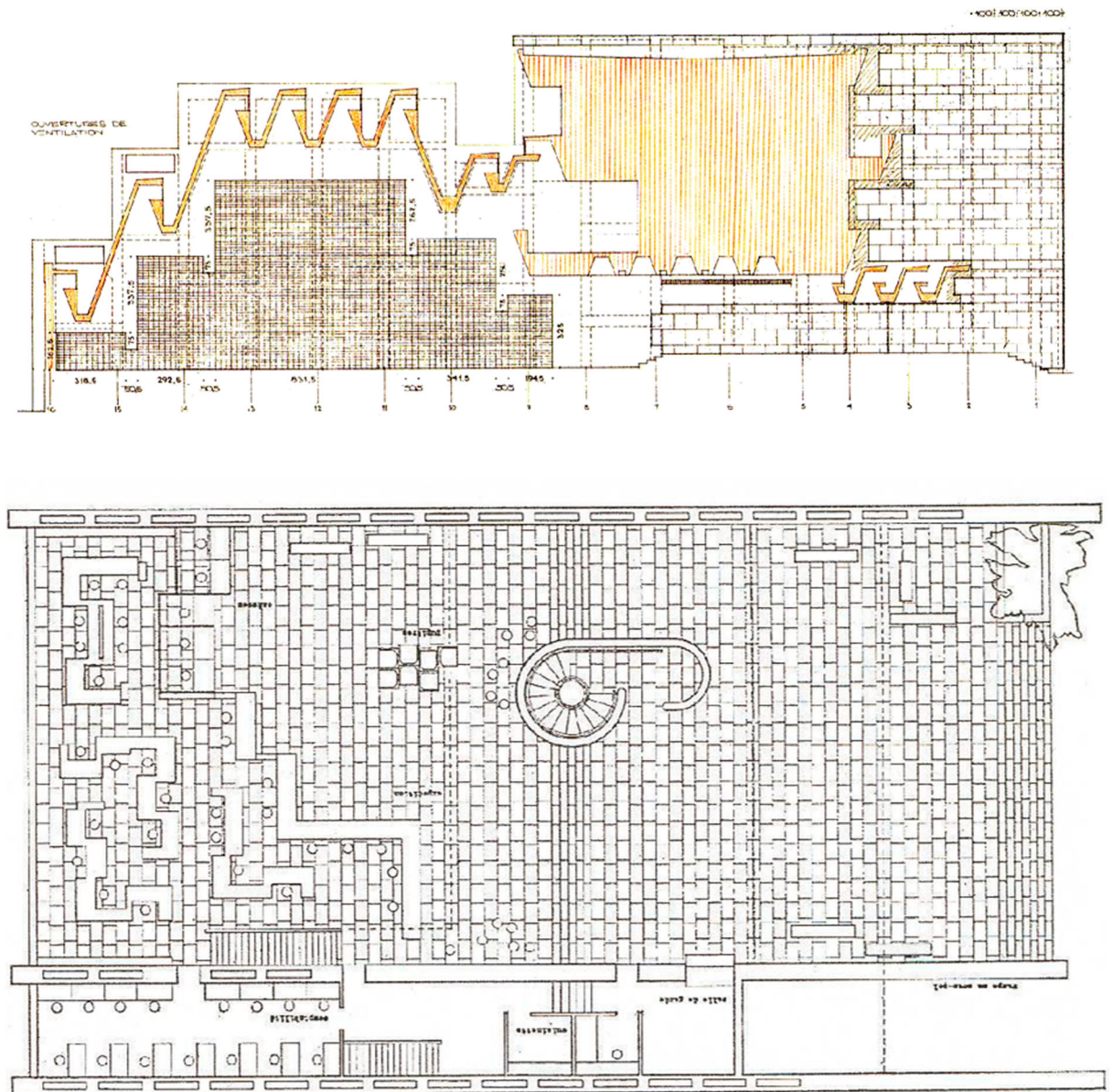
Utzon and his team applied similar design principles in the Banck House and Herneryd House projects. The Banck House can be read as a combination of Utzon's Hellebæk House and two courtyard housing units. The Hellebæk-House portion features at the front of the building for the served/public domains, such as the living and dining halls. Two 'courtyard' units (for bedrooms and serving areas) are located at the back of the house. The Herneryd House can also be read as a combination of the Hellebæk House and one courtyard housing unit. One side of this courtyard was for the serving/private areas, and the other side was for the served/public areas. Both houses successfully responded to similar site conditions of narrow fronts with open views. But their design did not feature smooth hierarchical transitions of spaces and roof/earthwork juxtapositions. The distinctive dualist characteristics of this formation can be traced, in their somewhat disorganised form, in Utzon's competition entry for a university centre in Odense (1966), with its linear open plan at the front combined with numerous courtyards at the back (Fig. 25).

Figure 24.
(from left to right) Jørn Utzon,
Banck House, 1958; Jørn Utzon,
Herneryd House, Helsingborg,
1960–1962, © Utzon Archives /
Aalborg University & Utzon Center

Figure 25.
Jørn Utzon, competition entry for a
University Centre in Odense, 1966,
a linear open plan at the front
combined with numerous
courtyards at the back, © Utzon
Archives / Aalborg University &
Utzon Center



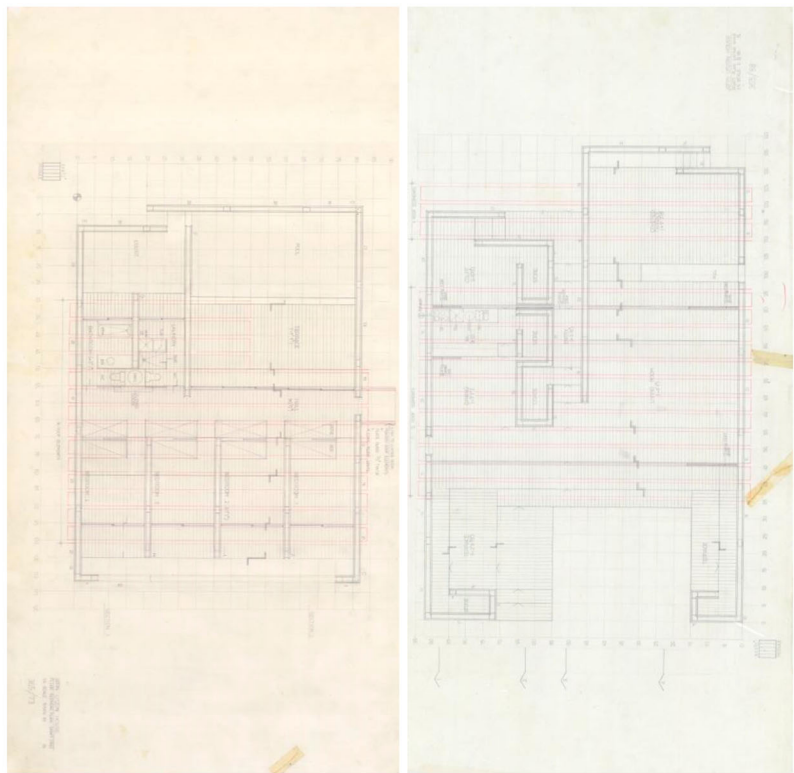
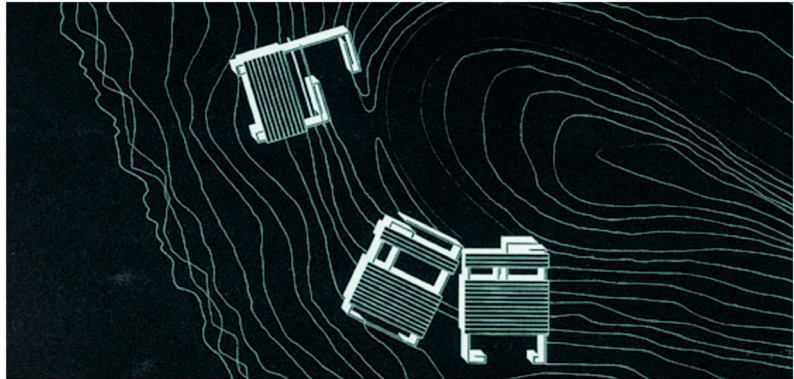
The Melli Bank project (1959–1960) featured the mature version of Utzon's courtyards (Fig. 26). From the narrow front side to total enclosure at the back, Utzon and his team formulated the interior of Melli Bank as a series of interconnected courts.⁸¹ These semi-enclosed courts were organised around a central axis. Through processional movement, they gradually transformed



from open courts for large public/served areas at the front to small private/serving areas at the back. This continuity of spaces and the sequence of their transformation were further dramatised by the roof/earthwork juxtaposition in the sculptural beams and skylight, and the grand staircase of the sunken court. This was drawn from Utzon's study of Chinese houses and temples,

Figure 26.
Jørn Utzon, proposal for the Melli
Bank, Tehran, 1959–1960, ©
Utzon Archives / Aalborg University
& Utzon Center

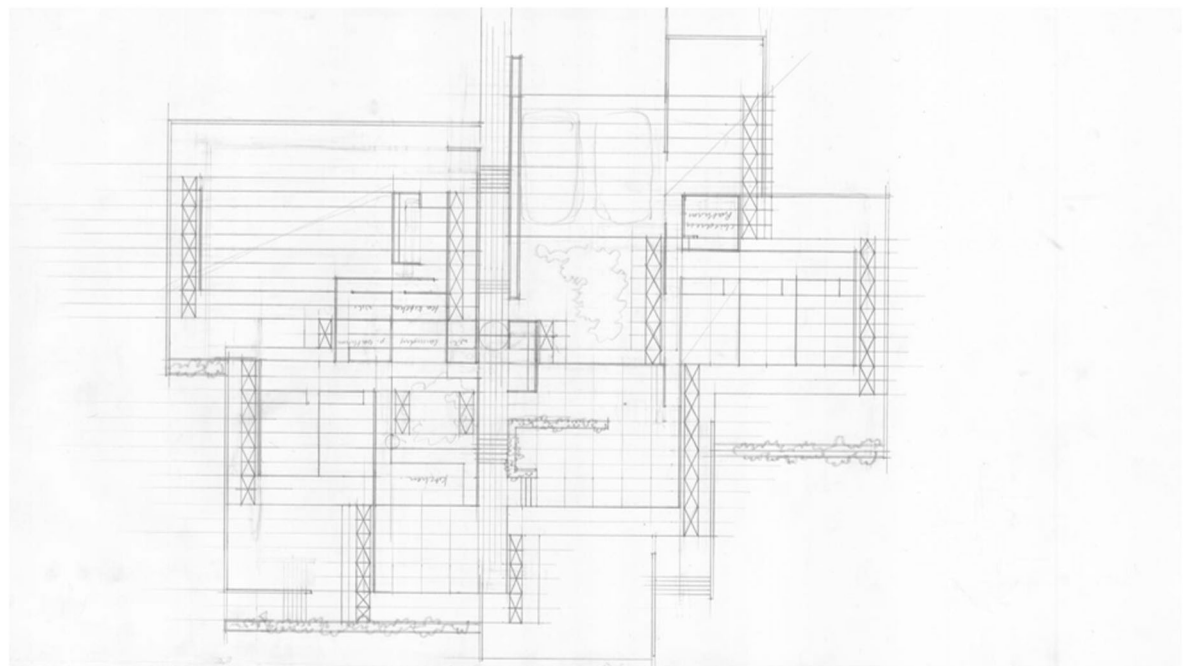
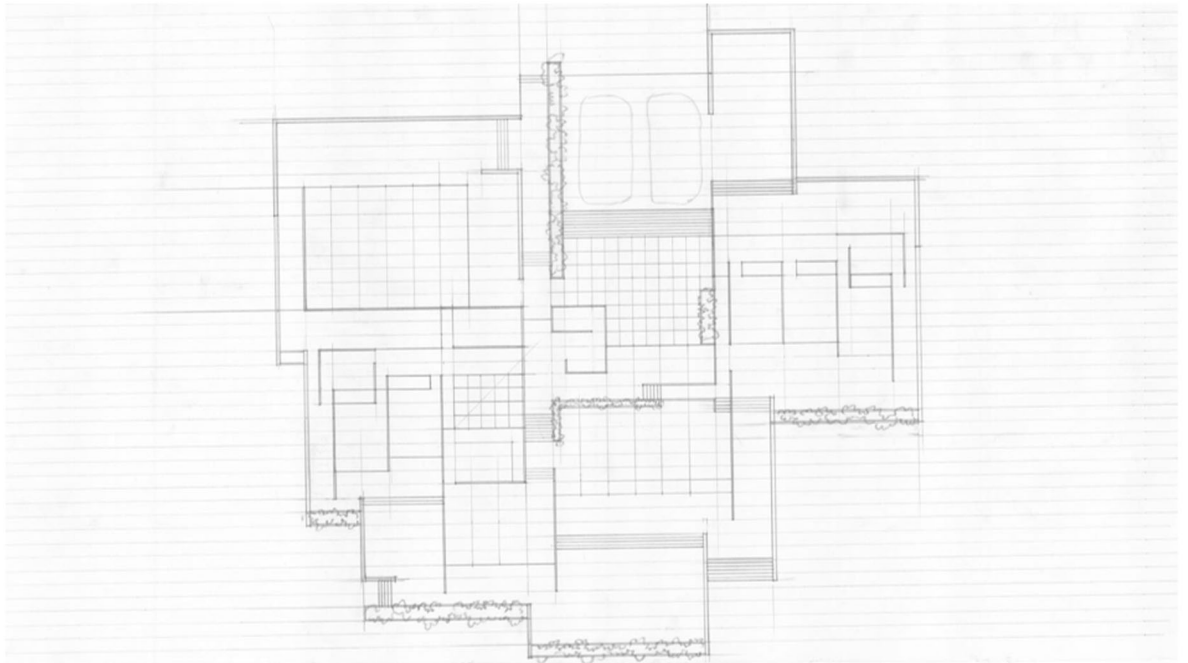
Figure 27.
Jørn Utzon, own house at Bayview,
Sydney, 1962–1965, © Utzon
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whose series of representational courtyards were also shaped by iconic roof/earthwork juxtapositions within a narrow front site.⁸²

The transformation of Utzon's 'courtyards' also explains why the final design of his own Bayview house in Sydney (Fig. 27) was so different from the Banck House and Herneryd House projects. Working on the Bayview House, Utzon and his team gradually transformed the housing complex from the courtyard setting of the Banck House and Herneryd House projects into the 'Melli Bank' formula (Fig. 28). Before Utzon resigned from his Sydney Opera House position

Figure 28. (opposite)
Jørn Utzon, initial plans for own
house at Bayview, Sydney, 1963–
1966, © Utzon Archives / Aalborg
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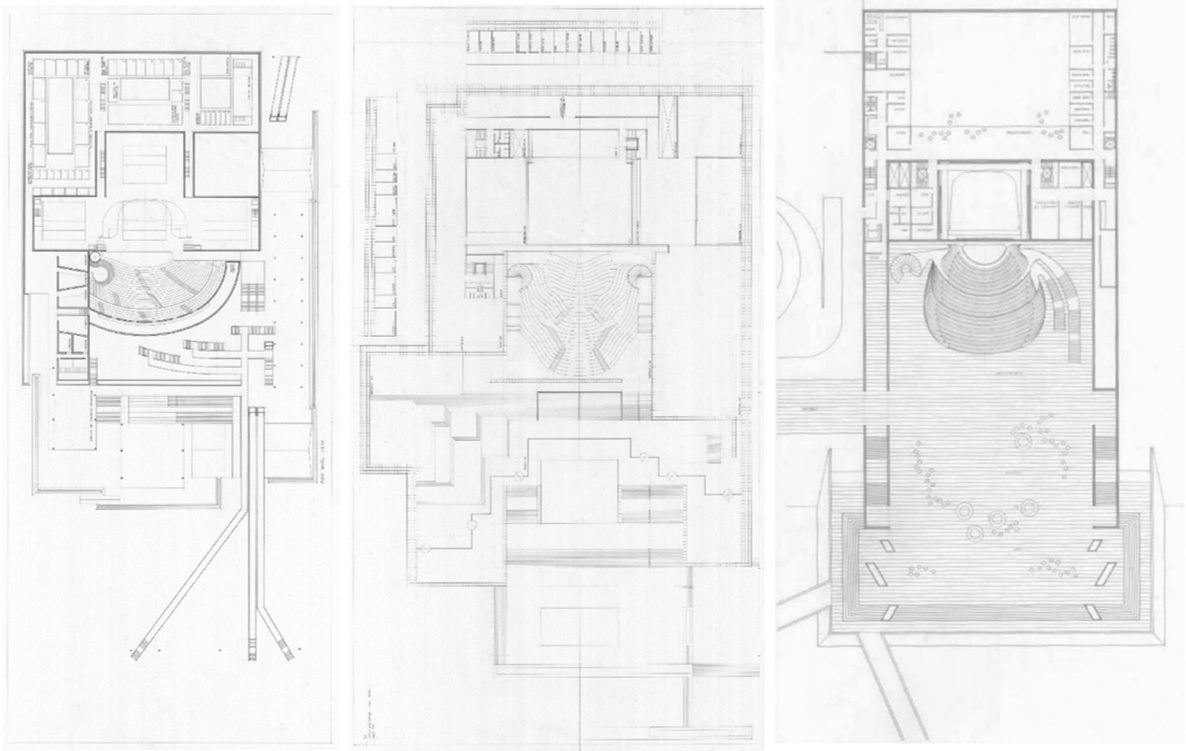


Figure 29.
(from left to right) Jørn Utzon,
Opera House in Madrid, 1962; Jørn
Utzon, Zurich Theater, 1964–1970;
Jørn Utzon, Wolfsburg Theatre,
1965, © Utzon Archives / Aalborg
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and abandoned the project in 1966, the building complex was divided into three different wings: the studio, living and dining, and sleeping. Based on the same hierarchical and representational formula, each wing was composed of a series of courts within a narrow front layout, which could have been constructed with prefabricated roof/earthwork elements.⁸³

In the 1960s, the Melli Bank project served as a significant precedent for Utzon's designs for three performing arts venues: the Opera House in Madrid (1962), Zurich Theatre (1964–1970), and Wolfsburg Theatre (1965) (Fig. 29). In each case, the main auditorium can be read as one of the courts, and the climax of Utzon's roof/earthwork juxtaposition. In the Wolfsburg Theatre, the prefabricated units were assembled to shape an angular earthwork and curved roof forms. Although none of these projects was realised, the Bagsværd Church, which was completed in 1976, featured a synthesis of Utzon's 'courtyard' concept (Fig. 30). As the main church can be read as the theatres in Utzon's previous three proposals, it also alluded to the main hall of a typical Chinese monumental complex.⁸⁴

Figure 30. (opposite)
Jørn Utzon, proposal for the
Bagsværd Church, 1968–1976,
© Utzon Archives / Aalborg
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In the early 1970s, Utzon expanded his 'courtyard' concept in a series of 'Additive Architecture' housing projects whose design and construction was based on the growth and composition of organic forms.⁸⁵ These included the Expansiva prototype in Hellebæk (1969) (Fig. 31) and the prototype for Uno-X

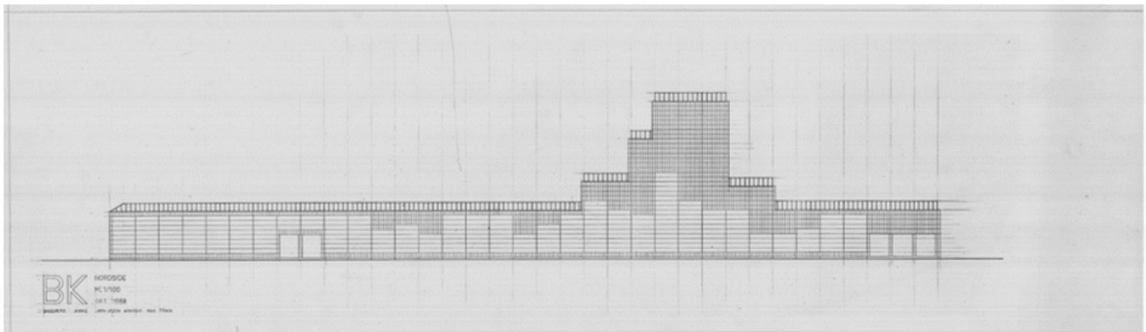


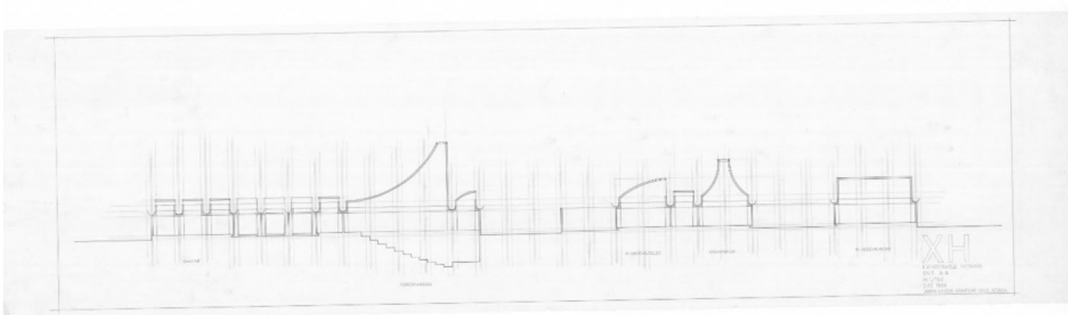
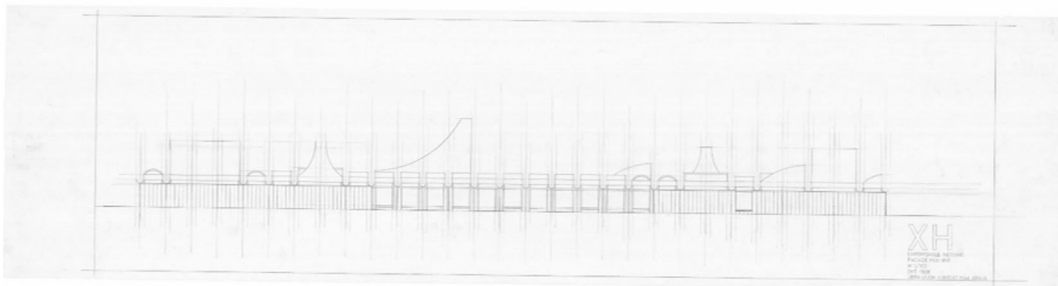
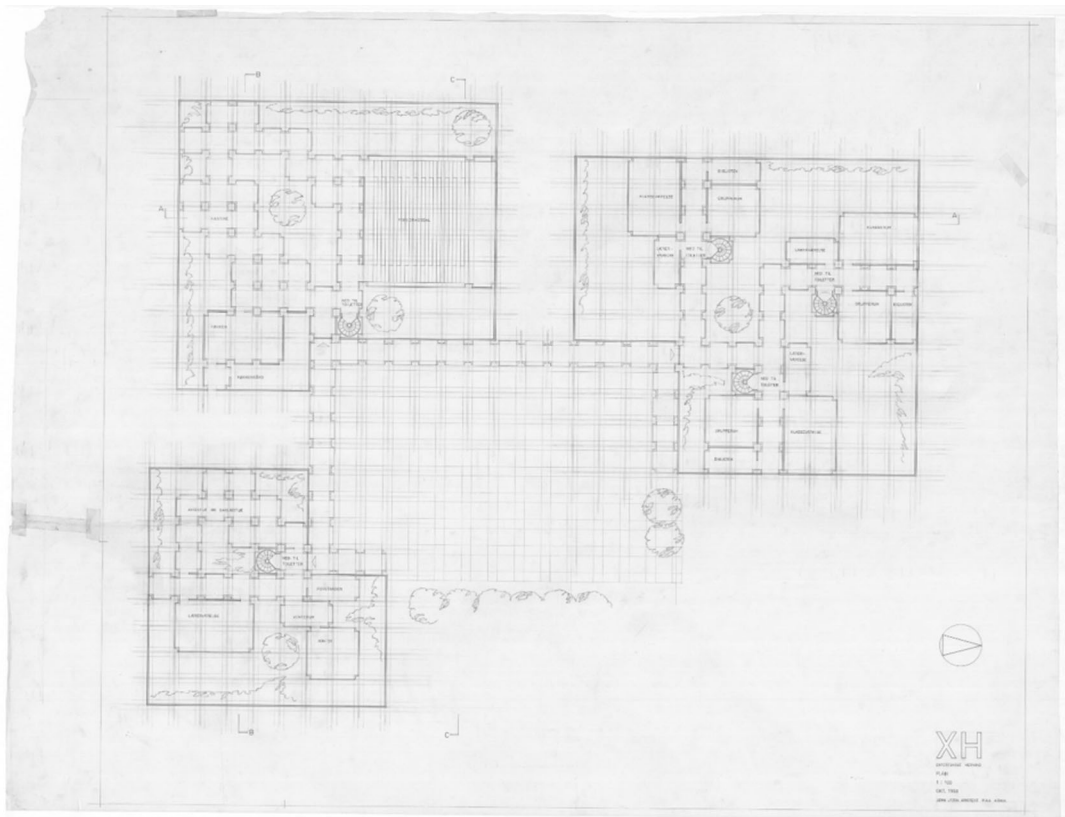


Figure 31. (opposite)
Jørn Utzon, drawings of the
Espansiva prototype in Hellebæk,
1969, © Utzon Archives / Aalborg
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Figure 32.
Jørn Utzon, photographs of the
Espansiva prototype for Uno-X,
Herning, 1959–1966, © Utzon
Archives / Aalborg University &
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in Herning (1969–1976) (Fig. 32). Both houses were constructed with prefabricated elements from the Espansiva building system that Utzon had already used for his Export College in Herning (1969) (Fig. 33). Although the College project was not eventually built, these three projects featured Utzon's 'courtyard' concept in their designs. Inspired by Lin Yutang, Aalto, and Sirén, Utzon had consistently utilised the courtyard as the place for receiving nature. His houses or building complexes were also isolated from their urban context to protect and preserve nature. At the same time, a staggered layout was consciously applied to express the animism of built forms, especially when combined with articulated roof volumes.



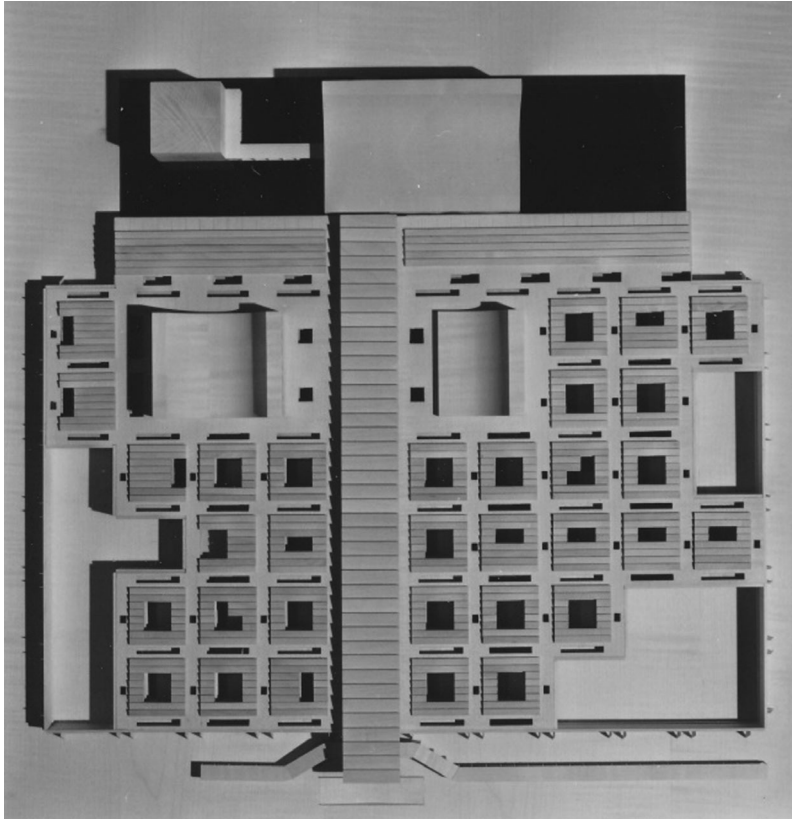


Figure 33. (opposite)
Jørn Utzon, proposal for the Export
College, Herning, 1969, © Utzon
Archives / Aalborg University &
Utzon Center

Figure 34.
Jørn Utzon, own photograph of the
National Assembly of Kuwait
project model, 1972–1982, ©
Utzon Archives / Aalborg University
& Utzon Center

Utzon's 'additive' projects of the 1970s differed from his earlier courtyard housing projects of the 1950s and 1960s, because they were prefabricated and assembled on site. They reflect the experience he gained from the Sydney Opera House project (1957–1966) in designing, producing, and constructing architecture within a constrained budget and schedule.⁸⁶ At the same time, drawing from his study of Japanese architecture, and the German scholar Heinrich Engel's *The Japanese House: A Tradition for Contemporary Architecture* (1964),⁸⁷ Utzon's 'additive' projects featured frame-and-panel construction. The building complex can also be interpreted as a composition of semi-detached rooms. This enabled Utzon and his team to add built forms and spaces both longitudinally and laterally. They could also shape the negative and positive surfaces of the building to sensitively respond to the surrounding site and internal programmes.⁸⁸ Finally, Utzon's interest in Chinese architecture, and especially his study of *Chinese Building Standards* (1925), resulted in a hierarchical formation of building plan and roof forms.⁸⁹ Bigger room equalled bigger and more expressive roof. Utzon's work with prefabrication and 'additive' hierarchy culminated in his design for the National Assembly of Kuwait,

a walled building complex that featured numerous courtyards and articulated building elements (Fig. 34).

Conclusion

Utzon's courtyard housing projects closely reflected his architectural philosophy in general and his thoughts on modern dwellings in particular. Both of them were partly cultivated by his engagement with Lin Yutang's *My Country and My People*. Aalto's work, and especially his Säynätsalo municipal office, offered Utzon a set of architectural idioms to formulate the Skånska Hustyper competition entry, his first courtyard housing project. Sirén's account of Chinese architecture motivated Utzon to develop his courtyard housing projects as expressive roof/earthwork juxtapositions of Chinese monumentality. Finally, Sirén's and Lin Yutang's accounts of Chinese dualism further informed the design principles of Utzon's courtyard housing projects, as documented in his 'Platforms and Plateaus' (1962).

Utzon applied and developed the resulting principles in his designs for the Banck House, Herneryd House, and Bayview House projects. But as the Bayview House eventually followed his design for the Melli Bank project, this formula also served as the precedent for three performing arts venue projects. Although these projects were not eventually built, the Bagsværd Church can now be read as a developed instance of the same formula, with the main church in the place of these projects' auditorium.

In the 1970s, Utzon's 'Additive Architecture' Espansiva prototype reflected his continuous learning from East Asian building culture. It also enabled him to further develop his 'courtyard' concept. These 'additive', hierarchical, and representational spaces and forms are to be found in Utzon's courtyard composition for the Espansiva prototype in Hellebæk, Uno-X, and Export College. These projects featured on-site assembly of prefabricated frames and panels. This enabled Utzon and his team to add 'courtyards' both longitudinally and laterally, as they sought to sensitively respond to the surrounding site and internal programmes. This 'additive' hierarchy culminated in Utzon's design for the National Assembly of Kuwait, a walled building complex featuring numerous courtyards and combinations of prefabricated building elements.

Notes and references

1. See Tobias Faber and Jens Frederiksen, *Jørn Utzon: Houses in Fredensborg* (Berlin: Ernst & Sohn, 1991); Richard Weston, *Utzon: Inspiration, Vision, Architecture* (Hellerup: Bløndal, 2002); Mogens Prip-Buus and Richard Weston, *Jørn Utzon, Logbook Vol. I: The Courtyard Houses* (Hellerup: Bløndal, 2004).
2. The Utzon Archives were established soon after Utzon's death in 2008 on an agreement between the architect and the host institute. Today, while only half of the total collection of Utzon's professional career has been archived and digitised, The Utzon Archives collec-

tion has allowed scholars to access some of the most important primary sources for Utzon's work.

3. Jan Utzon, interviewed by Chen-Yu Chiu (Hellebæk, July 2013).
4. This is based on conversations and email exchanges between the authors and these scholars.
5. See Kenneth Frampton, 'Jørn Utzon: The Transcultural Form and Tectonic Metaphor', in *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture*, ed. by John Cava (Cambridge, MA: MIT Press, 2001), pp. 247–98; Merete Ahnfeldt-Møllerup, 'The Kingo Houses', in *Jørn Utzon: The Architect's Universe*, ed. by Kenneth Frampton (Humblebæk: Louisiana Museum of Modern Art, 2008), pp. 22–27; Michael Asgaard Andersen, 'The Fredensborg Houses', in *Jørn Utzon: The Architect's Universe*, ed. by Frampton, pp. 54–63.
6. See Weston, *Utzon: Inspiration, Vision, Architecture*.
7. Ibid.
8. This is based on the authors' individual interviews with Utzon's children (Jan, Lin, and Kim) in 2008, 2009, and 2010.
9. Jan Utzon, interviewed by Chen-Yu Chiu (Sydney, October 2008).
10. Jan Utzon, interviewed by Chen-Yu Chiu (2008). For the detailed relationship between Utzon and Lin Yutang, see Chen-Yiu Chiu, Philip Goad, Philip Myers and Nur Yildiz Kilincer, 'My Country and My People and Sydney Opera House: The Missing Link', *Frontiers of Architectural Research*, 8.2 (2019), 136–53.
11. Tobias Faber, interviewed by Chen-Yu Chiu (Copenhagen, July 2009).
12. Jan Utzon, interviewed by Chen-Yu Chiu (2008).
13. See Yutang Lin, *The Little Critic: Essays, Satires, and Sketches on China*, 2 vols (Shanghai: Commercial Press, 1933–35).
14. Yutang Lin, *My Country and My People* (London: William Heinemann, 1936), pp. 294–96.
15. Ibid., pp. 217–94.
16. Ibid., p. 272.
17. Ibid., pp. 95–116.
18. Tobias Faber and Jørn Utzon, 'Tendenser i nutidens arkitektur' [Trends in Today's Architecture], *Arkitekten*, 7.9 (1947), pp. 63–69.
19. Ibid., pp. 63–65.
20. Lin, *My Country and My People*, pp. 294–303.
21. Faber and Utzon, 'Tendenser i nutidens arkitektur', p. 64.
22. Lin, *My Country and My People*, pp. 272–73.
23. Faber and Utzon, 'Tendenser i nutidens arkitektur', pp. 68–69.
24. Lin, *My Country and My People*, pp. 294–96.
25. Weston, *Utzon: Inspiration, Vision, Architecture*, pp. 10–11.
26. Ibid., p. 10.
27. Ibid., p. 10.
28. Ibid., p. 61.
29. Lin, *My Country and My People*, pp. 95–166.
30. Ibid., p. 264.
31. Lin Utzon, interviewed by Chen-Yu Chiu (Hellebæk, July 2009).
32. Lin, *My Country and My People*, p. 272.
33. Ibid., p. 273.
34. Ibid., p. 472.
35. Ibid., p. 292.
36. Ibid., p. 472.
37. Ibid., p. 292.

38. Ibid., p. 291.
39. Faber, interviewed by Chen-Yu Chiu.
40. Faber, interviewed by Chen-Yu Chiu.
41. Ibid.
42. Utzon took his own photographs of his working drawings for Aalto. His photographs of the Aaltos' work are part of today's collection of The Utzon Archives, Aalborg University Library, Denmark. For more information about the relationship between Utzon and the Aaltos, see Chen-Yu Chiu, Aino Niskanen and Nur Yildiz Kılınçer, 'Aalto through the Young Utzon's Eyes: The Role of Alvar Aalto in Developing the Artistic Maturity of Jørn Utzon', *Nordic Journal of Architecture Research*, 32.1 (2020), 35–72.
43. Faber, interviewed by Chen-Yu Chiu.
44. Ibid.
45. H. Sten Møller, *Jørn Utzon Houses* (Copenhagen: Living Architecture Pub, 2004), p. 10.
46. Faber, interviewed by Chen-Yu Chiu.
47. Ibid.
48. Ibid.
49. Mogens Prip-Buus, interviewed by Chen-Yu Chiu (Copenhagen, October 2013).
50. Faber, interviewed by Chen-Yu Chiu.
51. Prip-Buus, interviewed by Chen-Yu Chiu.
52. Faber, interviewed by Chen-Yu Chiu.
53. Ibid.
54. Ibid.
55. Ibid.
56. Ibid.
57. See Chen-Yu Chiu, Philip Goad and Peter Myers, 'The Metaphorical Expression of Nature in Jørn Utzon's Design for the Sydney Opera House', *Architectural Research Quarterly*, 19.4 (2015), 381–96. Among others, Utzon's study of Osvald Sirén's work included *The Walls and Gates of Peking: Researches and Impressions* (London: John Lane, 1924); *Les palais impériaux de Pékin: deux cent soixante-quatorze planches en héliotypie d'après les photographies de l'auteur, douze dessins architecturaux et deux plans* [The Imperial Palaces of Peking] (Paris: G. Vanoest, 1926); 'Tch'angngan au temps des Souei et des T'ang [Tch'angngan the Time of the Sui and T'ang]', in *Revue des Arts, A History of Early Chinese Art: Architecture* (London: Ernest Benn, 1929); *Billeder fra Kina* (Copenhagen: Gyldendal, 1937); *Kinas konst under tre Årtusenden* [Chinese Art Over Three Millennia] (Stockholm: Natur och kultur, 1942).
58. Ibid.
59. Osvald Sirén, *Den Gyllene paviljongen, minnen och studier från Japan* [The Golden Pavilion, Memories and Studies from Japan] (Stockholm: Norstedt och söners, 1919).
60. For more details on the relationship between Utzon and Sirén, see Chen-Yu Chiu, Peter Myers and Philip Goad, 'The Metaphorical Expression of Nature in Jørn Utzon's Design for the Sydney Opera House', *Architectural Research Quarterly*, 19.4 (2015), 381–96.
61. Osvald Sirén, *The Walls and Gates of Peking* (London: John Lane, 1924), pp. 5–7.
62. Ibid., p. 6.
63. Ibid., p. 7.
64. Ibid., p. 7.
65. Faber and Utzon, 'Tendenser i Nutidens Arkitektur', p. 69.
66. Faber, interviewed by Chen-Yu Chiu.
67. Utzon's photographs of these two case studies are available in *The Utzon Archives*.
68. During his working trip to Morocco in 1947, Utzon studied the vernacular house on site. This became one of the sources of his inspiration for designing the courtyard houses.

69. Today, Sirén's collection of Jan Jakob Maria de Groot's *The Religious System of China* (1892–1910) is part of the collection of the library of Museum Rietberg, Zurich. Sirén sold his book collection on East Asia (around four thousand books) to the Museum in 1961.
70. Jan Jakob Maria de Groot, *The Religious System of China*, 6 vols (Leyden: Brill, 1897–1910), IV (1901), p. 1.
71. *Ibid.*, p. 1.
72. Osvald Sirén, *The History of Early Chinese Art* (New York, NY: Hacker, 1970), p. 1.
73. Osvald Sirén, *Billeder fra Kina* [Pictures from China] (Copenhagen: Gyldendal, 1937), p. 12.
74. See the English translation in Weston, *Utzon: Inspiration, Vision, Architecture*, p. 61.
75. Jørn Utzon, 'Huset Ved Søen' [The Lakehouse], *Mobilia*, 11 (November 1955), p. 59.
76. Today, Utzon's own books and photographs of Wright's work are available in *The Utzon Archives*, Aalborg University Library, Denmark.
77. Jørn Utzon, 'Platforms and Plateaus: Ideas of a Danish Architect', *Zodiac*, 10 (1962), pp. 114–17.
78. Chen-Yu Chiu, 'China Receives Utzon: The Role of Jørn Utzon's 1958 Study Trip to China in his Architectural Maturity', *Architectural Histories*, 4.1 (2016), 12 <<https://doi.org/10.5334/ah.182>>
79. See Chiu, Myers and Goad, 'My Country and My People and Sydney Opera House'; Chiu, Myers and Goad, 'The Metaphorical Expression of Nature'.
80. Prip-Buus, interviewed by Chen-Yu Chiu.
81. *Ibid.*
82. See Chiu, 'China Receives Utzon'.
83. See Chen-Yu Chiu, Peter Myers, Philip Goad and Nur Yildiz Kılınçer, 'Jørn Utzon's Synthesis of Chinese and Japanese Architecture in the Design for Bagsværd Church', *Architectural Research Quarterly*, 22.4 (2018), 339–60.
84. *Ibid.*
85. Jørn Utzon, 'Additive Architecture', *Arkitektur*, 14 (1970), pp. 1–48.
86. Prip-Buus, interviewed by Chen-Yu Chiu.
87. Heinrich Engel, *The Japanese House: A Tradition for Contemporary Architecture* (Rutland: Tuttle, 1964).
88. See Chiu, Myers, Goad and Kılınçer, 'Jørn Utzon's Synthesis'.
89. See Chen-Yu Chiu, Nur Yildiz Kılınçer and Helyaneh Aboutalebi Tabrizi, 'Illustrations of the 1925-Edition *Yingzao fashi* 营造法式: Jørn Utzon's Aesthetic Confirmation and Inspiration for the Sydney Opera House Design (1958–1966)', *Journal of Asian Architecture and Building Engineering*, 18.3 (2019), 163–73 <DOI:10.1080/13467581.2019.1604357>