

Jørn Utzon 2003 Laureate Essay

The Architecture of Jørn Utzon

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"It seems to me that past, present and future must be active in the mind's interior as a continuum. If they are not, the artifacts we make will be without temporal depth or associative perspective.... Man after all has been accommodating himself physically in this world for thousands of years. His natural genius has neither increased nor decreased during that time. It is obvious that the full scope of this enormous environmental experience cannot be combined unless we telescope the past.... Architects nowadays are pathologically addicted to change, regarding it as something one either hinders, runs after, or at best keeps up with. This, I suggest, is why they tend to sever the past from the future, with the result that the present is rendered emotionally inaccessible, without temporal dimension. I dislike a sentimental antiquarian attitude toward the past as much as I dislike a sentimental technocratic one toward the future. Both are founded on a static, clockwork notion of time (what antiquarians and technocrats have in common), so let's start with the past for a change and discover the unchanging condition of man."

—Aldo Van Eyck

It is an embarrassment that the first edition of my *Modern Architecture: A Critical History* (1980), made no reference to the work of Jørn Utzon. Even within the constraints of a concise history such an omission now seems inexcusable and in subsequent editions I have attempted to redress this. Over the past decade the canonical importance of Utzon has become increasingly evident, not only because of his authorship of one of the most significant monuments of the twentieth century but also because both before and after the realization of the Sydney Opera House he would project a wide range of equally seminal works, together with a number of compelling realizations. Given the exceptionally fertile character of his career, he is, in his eighty-fifth year, a fitting recipient of the Pritzker Prize.

Comparable in subtle ways to the protean achievements of Le Corbusier, Utzon's architecture emerges today as paradigmatic at many levels not least of which is the manner in which, from the beginning of his career, he would challenge the assumed superiority of Eurocentric culture. The other equally basic postulate of his architecture, which remains as challenging now as when it first appeared around 1947 turns on its irreducible grounding in the opposition of *earthwork* versus *roofwork*. Two seminal preconditions attend this principle; first, the recovery of the roof-form, hitherto largely repressed in the Modern Movement with its fixation on the flat roof, and, second, the equally intrinsic import of the earthwork as a necessary landform capable of integrating a structure into the surface of the earth.

Aside from their mutual preoccupation with the inherently topographic aspect of architecture, Utzon came to share with Frank Lloyd Wright, whom he met in 1949, a common drive to project a global building culture which, while equally inspired by both occidental and oriental paradigms, would nonetheless exploit the technological capacity of the epoch while simultaneously responding to the contours of a particular site and the latent expressivity of a specific program. In the last analysis we can say that the tectonic potential of advanced engineering form perhaps played a more decisive role in the evolution of Utzon's architecture than it did in the case of Wright, so that shell concrete construction, after the exemplary work of Maillart, Candela and Torroja, and folded plate construction in post-tensioned reinforced concrete, after the inventions of Pier Luigi Nervi, patently informed the earliest flights of his imagination, not only in his remarkable proposal for the Crystal Palace site in London, designed with Tobias Faber in 1947, but also in his equally epic studies of the time for a permanent world exhibition site in Copenhagen (1959) and for a utopian settlement in the turbulent

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mountain landscape around Elvira in Spain (1960). Apart from the shell concrete roofs that became the touchstone of his early style, the Elvira project was also directly inspired by experiencing the Mayan ruins in Chichen Itzá, Monte Alban and Uxmal; a civilization that provided him with the essential format of the stepped platform or podium to which he would return repeatedly throughout his career.

For Utzon, as for Wright and Aalto, there would be no necessary contradiction between an unequivocally modern architecture and a building culture that hypothetically would be more generally accessible to the society at large, just as for him there was no inherent rupture between modernity as such and the more enduring and inspiring continuity of universal civilization, seen as a differentiated whole. The subtlety of this position is brilliantly exemplified by Utzon's 1953 project for a restaurant tower which was envisaged as being built on the Langelinie promontory in Copenhagen; a proposal as much inspired by the antique form of the Chinese pagoda as by Wright's S.C. Johnson laboratory tower built at Racine, Wisconsin in 1947. Utzon aimed at realizing a popularly accessible work in much the same sense as Wright's Guggenheim Museum would be well received by the general public a few years later.

The validity of this subtle approach would never be more convincingly demonstrated than by the two low-rise, medium density housing schemes that Utzon built in North Zealand, Denmark between 1956 and 1963, the first at King near Helsingør and the second at Fredensborg. Both of these single-story residential communities were based on an atrium typology comprising an L-shaped dwelling in plan, set within a square court and enclosed on all sides by brick walls. Featuring mono-pitched roofs capped by Roman tiles and draining into the private courtyards, these standard dwellings, virtually square in plan, were assembled into continuous chevron formations and fed by automobiles in such a way as to conform to the American Radburn principle of separating vehicular and pedestrian movement. In both settlements each house, attached to its neighbor, is accessed in two ways; first from the relatively blank, brick-faced exteriors fronting onto streets feeding into the fabric and second from an interstitial greensward permeating the settlement, exclusively restricted to pedestrian use. What Utzon was able to postulate with these two interrelated schemes was an alternative suburban land settlement pattern for a megapolitan, ex-urban world, one that has never been equaled, neither culturally in terms of accessible imagery nor environmentally from an ecological standpoint. He would proceed to show in a remarkable proposal for Odense University, dating from 1967, how this same typology could be deployed to achieve a city-in-miniature by replacing the interstitial greensward with public courts and vehicular-free pathways leading into the *res publica* of a civic center, flanked by civic facilities and crowned by a shell concrete assembly hall.

Three years later in a seminal article published in the Danish magazine *Arkitektur* Utzon elaborated his concept of an additive architecture, a principle that was already evident in the Odense project. In so doing he would touch on what has remained one of the more intrinsic challenges that are inherent to his approach, namely the combination of prefabricated components in a structural assembly in such a way as to achieve a unified form that while incremental is at once flexible, economic and organic. We can already see this principle at work in the tower-crane assembly of the segmental pre-cast concrete ribs of the shell roofs of the Sydney Opera House, wherein coffered, tile-faced units of up to ten tons in weight were hauled into position and sequentially secured to each other, some two hundred feet in the air.

Utzon's drive towards additive prefabricated form was inspired by traditional Chinese architecture, wherein sculptural roofs with varying pitches are invariably arrived at not through the use of trusses as is common in western building practice but rather by an arrangement of stacked beams stepping up towards the ridge of the roof. While such a system was not literally employed in Sydney, it is clear that the additive precept was analogically present in other aspects of the fabric above all in the bent plywood mullions that were designed to carry the faceted curtain wall extending between the soffit of the shells and the modular paving of the podium. The kind of tectonic challenge latent in this

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proposition is one that Utzon would confront on many occasions in refining his design for the opera, not only in his derivation of the shell geometry from a 246 foot diameter sphere whereby all the ribs could be assembled from a set of identical components but also in his attempt to develop an equally modular system for the undulating, acoustic plywood ceilings of the auditoria.

We may recognize a certain tension in Utzon's architecture between, on the one hand, the plastic potential of in-situ reinforced concrete, implied surely in his 1962 proposal for Asger Jørn's Silkeborg Museum and, on the other, his preoccupation with constructing complex geometrical assemblies out of prefabricated concrete components; an ambition that took on a particularly ingenious civic form in his 1962 proposal for the new town center of Farum in Denmark.

If there is one building in Utzon's career that highlights this opposition between in-situ and prefabricated concrete it is his Bagsværd Church completed outside Copenhagen in 1976; a building which aside from this tectonic dialectic, also stands out as his most compelling Danish work following his return from Australia. The referential complexity of this structure is such that it is difficult to account for all the cross-cultural ramifications of its form. An early sketch indicates that the folded-plate roof of the nave was derived from a vision of an open-air congregation, gathered under a cloudy sky; an image of *ecclesia* in the original Greek sense of the term. At the same time, the wide nave and the narrow aisles deliberately recall the type-form of a Nordic stave church, while the undulating folds of the in-situ reinforced concrete roof, spanning 18 meters across the nave, evoke the subliminal image of a suspended pagoda roof, as we find this in an early Utzon sketch of a Chinese temple.

Wood plays a decisively expressive role in this work, not only in terms of the stark, bleached unpainted timber furnishings of the interior, but also with regard to the floor-to-ceiling, unpainted, exterior fenestration, the proportions of which are vaguely evocative of oriental building; once again, surely referring to China. Lastly the blank facades in prefabricated concrete planking and blocks, combined with standard greenhouse glazing, poised above the aisles, jointly produce the gestalt of an agrarian building and it is just this ambience that would enable him to create one of the most compelling religious structures of the last half of the twentieth century. There is also, one might also add, the festive aura evoked by battens of spotlights set on either side of a nave, engendering an atmosphere appropriate to the choral tradition of the Lutheran faith. Other features serve to reinforce this character; among them boldly patterned raiments designed by the architect's daughter, Lin Utzon, and white-metal organ pipes stacked in timber cases. All these elements have surely contributed to the communal acceptance of the church as a spiritual space. Finally one should note the specific way in which this church has been integrated with its suburban site, first, by virtue of its deft sitting in relation to a nearby pond that reinforces, by association, the implicit agrarian character of its form and second, because of a stand of young birch trees that were planted by the architect not only in relation to the main body of the church but also with respect to the adjacent parking lot. At the time of the building's completion these all but imperceptible saplings made one hyper-aware of the way in which architecture is unavoidably projected across time, so that one immediately realizes that Bagsværd will remain incomplete until such time as these trees have attained their full height. One senses that only at this moment will this barn of a building attain its full poetic character; that is to say when it is perceived from a distance through a veil of silver birches.

In-situ versus pre-cast will also play a comparable role in the parliament building erected or the state of Kuwait to Utzon's designs in 1982. Here the additive principle will be applied to the orthogonal compound of the ministerial offices, enclosed as a city-in-miniature by a high perimeter wall. These repetitive patio structures are offset by three monumental shell-concrete canopies, once again designed as a series of folded plates. The first of these, within the compound, faces northeast while the second, of a more elongated proportion, lies just beyond the enclosure and faces northwest towards the sea. Both are supported by pre-cast concrete pylons that taper towards the point of

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bearing immediately beneath the canopy, where, as Utzon puts it, "You see very clearly what is bearing and what is being carried." With these words he would evoke the time-honored distinction between the load bearing and the load borne, while at the same time alluding to the manner in which the pre-cast spanning elements are post-tensioned in order to achieve the required span. A third continuously undulating canopy covers the east-west route that leads from the main entry to the covered open square facing the ocean, beneath which political power would represent itself to the populace at large. The analogy is that of a tribal leader under a tent, wherein the broader symbolism has connotations which are at once both cosmic and institutional, for as Utzon remarked, "...The hall seems to be born by the meeting between the ocean and the building in the same natural way as the surf is born by the meeting of the ocean and the beach..."

From his late fifties onwards Utzon gradually removed himself from everyday practice to focus successively on the two relatively modest houses that, over a twenty-year period, he will build for himself on the island of Mallorca; Can Lis built on a falaise facing the sea in 1971 and Can Feliz, set within dense pine scrub, on which work started around 1990. Both houses are orchestrated so as to provide a sequence of carefully constructed views, while both are, at the same time, conceived as microcosms which transcend the normal concept of a single dwelling to constitute, particularly in the case of Can Lis, a series of independent dwellings clustered together to form a single whole. Built of local sandstone blocks with pre-cast concrete roofs that are capped by local tiles, Can Lis breaks down into a sequence of discrete spaces and courts that are equally disposed to living in the open as to sheltering behind glass. Thus the spatial chain unfolds as an entry; courtyard-cum-stoa, with a kitchen—a sitting room to be followed by a paired bedroom suite and a guest suite. These last are in effect self-contained rooms, lit by thick embrasures of stone; openings that are angled towards the sea and protected by large single sheets of surface mounted plate glass, similar to the glazing method employed by Sigurd Lewerentz in his flower kiosk for the gate of the Malmo Cemetery. As Richard Weston has observed these dwellings testify to Utzon's capacity to work in high and vernacular modes simultaneously; a synthetic drive made easier by the implicit classicism of the Mediterranean domestic tradition; latent above all in the patio house paradigm to which these houses aspire in different ways. As with his habit of spending his spare time in Australia, sailing on the open sea, it is significant that both houses are framed in such a way as to give onto the panorama of a seemingly unspoiled universe.

Utzon belongs to that generation of architects who still believed that the primary responsibility of the profession was not only to meet the building needs of society on an ad hoc, daily basis, but also to evolve generic types and modes of practice that were appropriate to the unprecedented conditions of modern life. He belongs to those whom Sigfried Giedion identified as members of the Third Generation, that is to say those, who, while no longer believing in the manifest destiny of modern architecture to engender a new utopian order, were nonetheless still committed to the notion that architects should attempt to provide models and methods that are appropriate to the conditions of daily life. Hence the somewhat surprising paradigmatic nature of his buildings and hence also his lifelong concern for evolving non-reductive building methods in order to facilitate their realization. This last is surely the prime mover behind his preoccupation with additive architecture; his realization that society not only needs appropriate type-forms but also ways of achieving these forms in an economic manner. While all of this is of the utmost importance, one cannot emphasize enough the hyper-sensitive attempt by his architecture to go beneath the superficial stylistic tropes of different civilizations, to redeem, as it were, certain common structural principles, lying beyond the periodicity of history, so as to recast anew, at a deeper level, the constantly fluctuating play between the species being and the constraints of nature.

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