

The Spirit of Nature: International wood architecture through Scandinavian eyes

„The spirit of Nature“ l'architecture bois internationale
vu de Scandinavie

„The spirit of Nature“ internationale Holzarchitektur aus
skandinavischer Sicht

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Spirit of Nature

The 'Spirit of Nature' is a tone-poem composed by Jean Sibelius. This piece of orchestral music has provided the name for an international architecture award. The Spirit of Nature Wood Architecture Award was established in Finland in 1999. The Award is granted in the Sibelius Hall in the city of Lahti every second year, for architectural excellence to a person or group of persons whose work exemplifies a progressive and creative use of timber. The Award is presented at a concert given by the Lahti Symphony Orchestra consisting of music by Sibelius.

The founder of the international Spirit of Nature Wood Architecture Award is the Wood in Culture Association, set up to promote and foster a cultural tradition which breathes the presence of nature. The Association wishes to use the Award to support and internationally highlight a form of architecture in which timber has the central position. The organiser hopes that the Award will both increase the respect for timber buildings and building components, and improve their quality.

The aim of the Award jury is to highlight various valuable phenomena in different cultures, the driving forces behind which have also significant wider influence on wood construction. The Spirit of Nature Wood Award is a starting point for dialogue: the Finnish wood industry seeks an active discussion and interaction with the winners of the award. The award offers the opportunity to explore the production of the award-winning architects in more depth, and to apply their ideas in the industry's own operation. ¹



Akseli Gallen-Kallela, *Building*, 1903 - Ateneum Art Museum/Finnish National Gallery/Central Archives/Hannu Aaltonen

Seven Winners - Seven Lessons in Architecture

Finnish artist Akseli Gallen-Kallela painted six frescos in the central hall of the Juselius Mausoleum in Pori, among them a powerful work entitled *Rakennus* - 'Building'.

"The painting is an emphatic illustration of the abiding conviction in the Nordic region that the art of building is also a social art, an art fundamentally devoted to place, people and community", writes Peter MacKeith. ²

Architecture reflects and creates our cultural identity. It consists of both the visible and the invisible. We are not able to see the immaterial part, but we may still, be able to sense it. Cultural differences are especially easy to sense. Culture expresses our material and immaterial world. Culture is what we do in interaction with one another and with the landscape. It is an ongoing, constantly developing process. In architecture, culture is

about the ways of dwelling and living together. Architecture shapes our environment according to our cultural intentions and transfers these intentions to future generations when they come to inhabit the existing cities. Different environments affect peoples' identities, creating cultural diversity. Local materials and building techniques strengthen the differences and emphasize the cultural identities. This is beautifully interpreted in the architecture of Wenche Selmer from Norway, for example. She emphasized the importance of the milieu and the use of the building, achieving coherence.

Another Norwegian architect and theorist, Christian Norberg-Schultz wrote: *"...since ancient times, genius loci, 'the spirit of a place', has been considered a reality one should understand and respect. Only by doing so would one acquire identity and a foothold in life. Hence, we can rightfully say that what we are is the world that is available to us."*³

According to Norberg-Schulz, architecture has an obligation to adapt the true spirit of the place through the architect's interpretation. Nordic countries have also been influenced by Kenneth Frampton's idea of 'critical regionalism'. In this concept, the architect is also the one who stages the qualities of a place for human perception.⁴



Jean-Marie Tjibaou Cultural Centre, Nouméa, New Caledonia (1998), Photo by John Gollings

1. Cultural identity - Renzo Piano 2000

When selecting the world-renowned master Renzo Piano (b. 1937) as the first winner, the jury set a yardstick for the quality of the Spirit of Nature Wood Architecture Award. Piano's architecture is technologically innovative, elegant and balanced with modern building systems and capabilities. Nevertheless, he has written that "the universality of technology has the potential to destroy the spirit of place, yet place is local and must not inhibit the potential of technology". Piano has demonstrated that inspiration and meaningful substance for contextual architecture can be drawn from modest local cultural sources, teaching us the meaning of cultural identity.⁵



Ando Hiroshige Museum, Batou (2000), Photo by Mitsumasa Fujitsuka

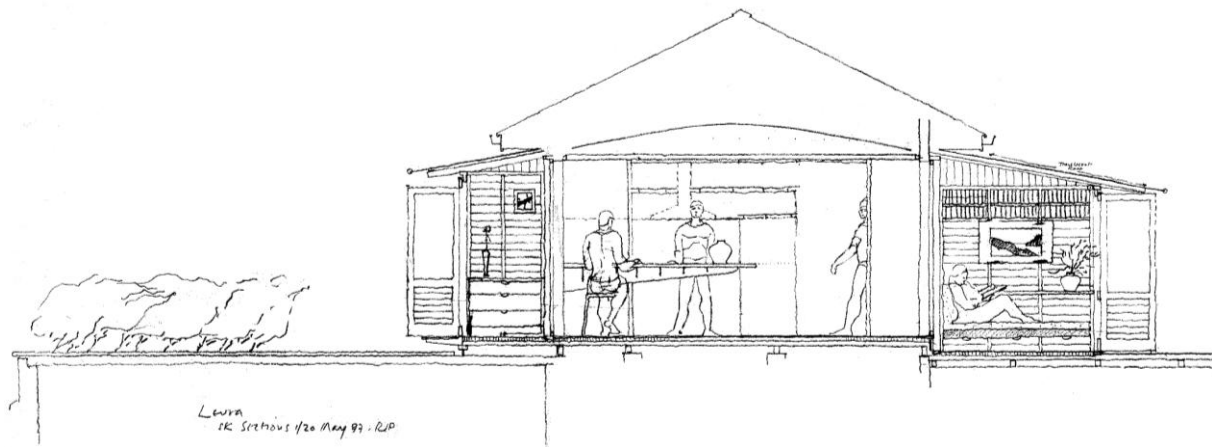
2. Humanity - Kengo Kuma 2002

The winner of the second Award in 2002 was Kengo Kuma (b. 1954). He was considered to combine new and traditional elements and produce architecture that is completely modern whilst still being sensitively and carefully adjusted to its existing surroundings. Kengo Kuma has pointed out that it is easy to practise architecture in Japan. The nation is wealthy, the constructors are skilful and a living tradition sustains qualified craftsmanship as well as architectural experimentation. Accordingly, the Award was a tribute to the centuries-long tradition of Japanese wood architecture and handicraft skills. While the first Award set a standard, the second gave it geographical breadth.⁶

The Ando Hiroshige Museum (2000) was a major turning point in Kuma's architecture. For the first time, he discovered a satisfactory answer to the question, "what is public space". 'Apertures' became the key issue in his work. In the Hiroshige museum, he realised the effectiveness of public apertures that are capable of creating links to the surrounding environment. The meaning of these voids is to position the built elements and the landscape in a balanced relation with each other.

"Apertures are not just interior voids but things that connect outside and inside - things that entice us inside and effectively connect architecture to the real world around it", says Kengo Kuma.⁷

Apertures in Kuma's architecture could be seen as physical counterparts to the idea of void - 'Mu' - "no thing" that is well understood in Zen Buddhist philosophy. It is the third possible logical term equal to yes or no, meaning 'not yes'-'not no'. The intention of the term is to enlarge the essence of the question. The idea is evident in Japanese film director Yasujiro Ozu's movies. Between the 1930's and 50's, when film studios were led by directors, he was able to produce the most balanced and humane narration in movie history. Ozu added pauses in his films. For example, a take where a kettle is boiling created a pause in the story and produced a spatial atmosphere. These still life frames added to the films a moment of compositional emptiness, 'Mu' - the void.⁸ Kengo Kuma's buildings possess a similar atmosphere. They represent the humane aspirations of architecture.

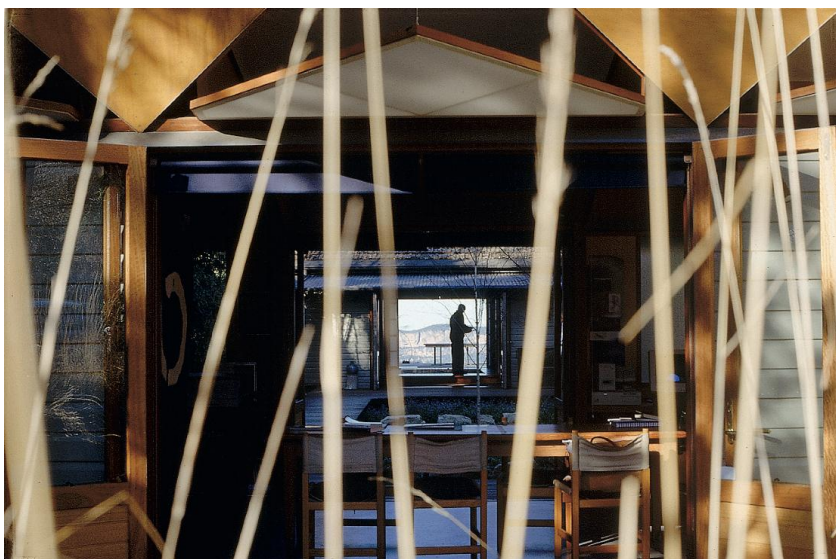


Richard Leplastrier, Drawing, Blue Mountains House and Studio (2000)

3. Craftsmanship - Richard Leplastrier 2004

The third recipient of the Award in 2004 was architect Richard Leplastrier (b. 1939) from Australia. He recalls his youth: *"As a student of Architecture in Sydney, immersed in the world of racing yachts and beautiful buildings, I would walk at lunchtimes to the shipyard on my neighbourhood point, and share food with my shipwright apprentice friends against whom I raced small fast dinghies over the weekend. We all made our own boats, as light, as strong, and as beautiful as possible. But these young professionals set the standard for me - nothing but the best was good enough for them. They were straightforward, honest people whose moral geometry has set the pattern for my life."*⁹

Architects are craftsmen and architecture has to do with craft. The finished building is what counts. Over decades, buildings should not only withstand time, but also become more beautiful with age. The wooden materials of a building are real: they have texture, weight and smell. The joints in a wooden boat possess beauty because they are simple and natural and fulfill their function. In buildings, architectural beauty can be found in crafting things. Craftsmanship and detailing are the third lesson to be learned. Architecture requires skills, but even more, the persistence to practise these skills and honesty when crafting the material. As Alvaro Siza claims: "Architecture is art or it is not Architecture... Architecture requires the perfection of the detail until the detail is dissolved."¹⁰



Blue Mountains House and Studio, Leura, New South Wales, (2000) Photo by Richard Leplastrier

4. Temperance - Peter Zumthor 2006

In 2006, the prize was awarded to Peter Zumthor (b. 1943) from Switzerland. He has written: *"But what also comes to mind when I think of my own work is the verb 'to temper' - a bit like the tempering of pianos perhaps, the search for the right mood, in the sense of instrumental tuning and atmosphere as well."*¹¹

In buildings, abstract concepts like spatial experience, scale and function are translated into a physical form. Buildings begin their lives when people start to use them. The humane experience of space, form and materials in all architecture is born from its own language that affects both mind and body. An architectural concept consists of both the rational and the poetic. These two, the rational and the poetic, are inseparably intertwined. The poetic is essentially more than just an atmosphere. It is the unspeakable in architecture.

One of Ludwig Wittgenstein's main intentions in *Tractatus logico-philosophicus* was to set bounds to whereof one could speak. The work consists two parts: the one presented in the book, and all that he did not write of. Inside the boundaries stay all possible and factual states of affairs (German *Sachverhalt*). According to the philosopher, the other part is the important one. We are not able to describe the part, which remains outside the boundaries. Still, we are able to see it by realizing whereof one cannot speak.¹²



Sogn Benedetg Chapel (1999), Sumvitg, Switzerland, Photo by Samuli Miettinen



5. Art and senses - José Cruz Ovalle 2008

The fifth architect receiving the Award was Chilean José Cruz Ovalle (b. 1948). Ovalle seeks true understanding of the situation and constructs an entity where the landscape, social space, the cultural and built context and the personal touch are integrated into a whole. The interpretation of the structural use of wood is taken past technical precision into poetry.¹³

He writes: *"The experience of sculpture liberated from the singular block of wood is sufficient proof that there is no archaism inherent to wood. Wood is not subject to a set form. New works may well originate from traditional materials and old works can be produced from new materials."*¹⁴

*"Like wine, the building strives to arouse a certain voluptuousness of the senses, to make incarnate the responsive dimension of form through the relationship of materials and space. When encountering natural light, the wood displays a multitude of nuances, just like with the aroma, taste and colour of wine."*¹⁵

In a way, architects as artists work like magicians who create unforeseen atmospheres by arranging simple materials. Art is based on methods through which feelings are affected. Architecture and art express the meanings they strive for through illusion. In this regard, architecture reminds us of sculpture. An artwork expresses ideal beauty and reminds us of a more perfect world. The property of a great work of art is its inviolate perfection. The use of a single material and the power of the material itself create timeless serenity. In an architectural/architectonic space, the feeling of time at a standstill creates an illusion of the eternal and the immortal. It awakens oneiric images of a possible world. As Juhani Pallasmaa sees it: *"Great works are complete microcosms, lived metaphors, which evoke another reality"*¹⁶



Pérez Cruz Wine Cellars, Wineries, Paine, Santiago, Chile, (2001), Photo by Juan Purcell

6. Synthesis - Hermann Kaufmann 2010

In 2010, the Award was granted to Hermann Kaufmann (b. 1955) from Austria. He has devoted his career to the research and development of wood construction and building processes. The inspiration for his work comes from a deep respect of the local tradition, the local workmanship, small size enterprises and workshops and the generations-long understanding of how to build with wood in a harsh climate. The challenges in building in the mountains have inspired Kaufmann to develop prefabrication. The notable fact is that despite high-performance structures, the buildings are affordable, easy to maintain and beautiful architecture.¹⁷

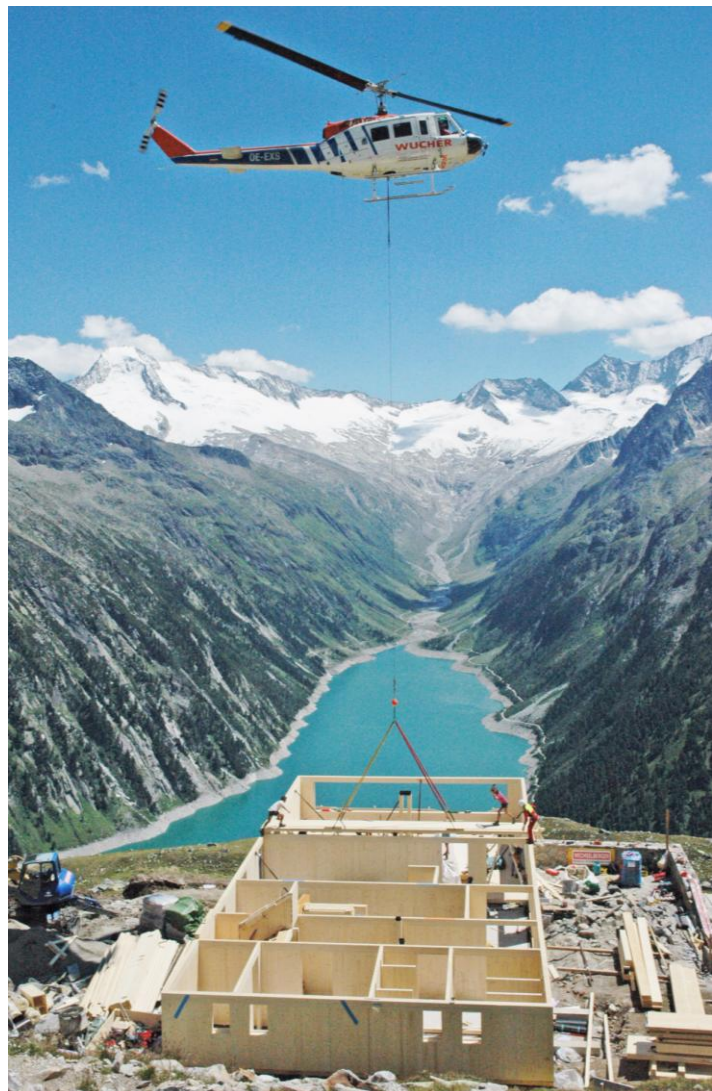
Solving the design task is a matter of finding a synthesis, as was claimed by Alvar Aalto. At the end of the year 1940, Aalto wrote: "... architecture is not a science. It is still the same great synthetic process of combining thousands of definite human functions, and remains architecture. Its purpose is still to bring the material world into harmony with human life."¹⁸

Fifteen years later he continued: "Whatever our task, whether large or small...there is one absolute condition for its creation before it can attain a value that qualifies it as culture...In every case, opposites must be reconciled."¹⁹

Hermann Kaufmann's architecture gives us a lesson in creating a synthesis and a master class lecture on how to reconcile opposites. Contradictory elements of life are brought into dynamic interaction. In a synthesis, opposites become the prerequisites for each other; tradition for innovativeness, vernacular for modern, archaic for high technology, visual for functional, craftsmanship for prefabrication and regional for global. Architecture must be perceived in a broader sense than as just a technical or economic phenomenon. Buildings and cities require both humanity and reasoning. The technical and moral challenge of our time is huge, as we confront global warming and all its concomitant effects. When architecture is a human's reciprocal relationship to his or her surroundings, the challenge of architecture lies in the possibility to change the limits of reality. More than ever before, we need creativity and an altruistic attitude.

As Steve Jobs claimed:

*"Technology alone is not enough - it's technology married with liberal arts, married with the humanities, that yields us the result that makes our heart sing."*²⁰



Olperer Hut, Zillertal, Tyrol, Austria, 2007
Photo by Hermann Kaufmann



Studio Mumbai Carpenters, Photo by Samuli Miettinen

7. Co-operation - Bijoy Jain 2012

The seventh recipient of the Award is architect Bijoy Jain (b. 1965) from India. Bijoy Jain's efforts to coordinate culture-bound values, traditional working methods and modern life with the requirements of architecture are beautifully manifested in Studio Mumbai's work. Studio Mumbai is a community of skilled carpenters, craftsmen and architects. They themselves design, build and maintain the buildings in a collective dialogue. A working community has gradually developed a working method based on materials research, mock-ups and drawings, combining in an excellent way traditional craftsmanship with architecture that superbly uses very little resources. The work of Studio Mumbai is characterised by social responsibility for the working community, growing into a mutual respect for people representing different religions and cultures through shared work, as well as applying principles of ecological construction. The working method of Studio Mumbai, directed by Bijoy Jain, is holistic. Despite its cultural contexts and the difference in tools, the working method can to a large extent be compared to that of the winner of Award from two years ago, Herman Kaufmann.²¹

Bijoy Jain writes: *"Different kinds of postures are required in the making of architecture. If we lose our sense of posture, is it possible that we may lose the idea of how to make something? While the material might still exist, just by losing our sense of posture, we become unable to make certain kinds of space, structure or materials."* This is what we can indeed learn from the architecture and working methods of Bijoy Jain's Studio Mumbai.²¹

7.1. Virtues in Architecture

*"What if I begin by showing you two sorts of people, the one expending large sums on money in building useless houses, the other at far less cost erecting dwellings replete with all they need."*²²

These words, which Xenophon placed in the mouth of Socrates, describe the ability of the economy to create balance and wellbeing in life. In building construction, solving the equation of quality and economy has traditionally been the architect's key role. He or she looks for the best alternative in the use of resources from which a good life is created, as well as the architecture that serves it. An architect balances conflicting expectations and creates in his or her design sustainable values for the community and lasting significance for the environment. His or her key assets are the trust of partners, respect for professionalism and the building material, as well as the appreciation of high-quality work. It is only from these that sustainable architecture and significant culture can arise.²³

All the seven Spirit of Nature Award winners represent different countries and four continents. The architecture they have created shares the ideal Vitruvian principles.²⁴ A well-organised arrangement of the parts of a building is the most salient feature of Renzo Piano's architecture, which avoids the conventional and monotonic at the same time. José Cruz Ovalle's buildings have qualities of beauty and good proportions, in addition to functionality. Hermann Kaufmann has sense for propriety and economy and yet his architecture is able to touch our hearts. All of them are capable of logical reasoning and high-class artistic expression, and have a sense of proportions and skills in managing the building process. They share the courage to act according to their own vision, a feeling of responsibility to their communities, a high level of professionalism, and the ability to turn wooden buildings into masterful architecture.



The Aalto University Wood Program Students, World Design Capital Events Pavilion, Helsinki, Finland (2012), Photo by Tuomas Uusheimo

8. Through Scandinavian Eyes

Why is there no Scandinavian architect among the winners of the Award? What interesting happens in Nordic wood architecture in Finland and in Sweden and in Norway. What are the characteristics and strengths of current Nordic wood architecture?

8.1. Nature

The Finnish expression of the Art Nouveau style, National Romanticism celebrated nature and the rural, archaic and rustic manners of building and left the surface of the wood visible. It may sound like a cliché to emphasize so much the importance of nature together with Nordic architecture - all countries have their own relationship to and appreciation of nature. And yet, this connection to nature is still crucial if one wishes to understand modern Nordic architecture. Nature is the scenery, and nature has provided Nordic architecture with design impulses - sometimes even the whole of its content. Finnish Architect Reima Pietilä once said: "Through our use of building materials we imitate the authentic impressions we derive from nature".

8.2. Tradition

Our old wooden church buildings show the skill of the traditional carpenters. New influences, drawn from cultural centres, have always been adapted to local conditions, landscape, light and available material. Renaissance influences arrived from Central Europe through Sweden in the course of centuries. Similarly, contemporary Nordic wooden architecture must be seen as a continuation of the diversified tradition. International influences are combined with locality, resulting in the emergence of Nordic architecture. Wood has been the most obvious building material. It has always been present in our life

as a resource for culture and as a symbol for concepts. All kinds of necessities have been made out of different kinds of wood. In times of scarcity, Finnish people even ate bread made of wood - 'pettu'. Tar was among the most important exports from Scandinavia until the end of the 19th century. Paper and pulp have taken its place since then.

The relationship to wood as a construction material has been controversial. Fires were such a common event that according to calculations, a Finnish town was destroyed by fire every 30-40 years. The 1827 fire of Turku was Scandinavia's greatest fire of all times and it forms a turning point in the development of the Finnish wooden town. On the other hand, fires have given wood an image as a vulnerable material. "Brick houses are homes for happy families" was the advertising slogan as late as in the 1970's.

8.3. Forest Industry

Alvar Aalto transported a piece of Finnish nature and its forms to the United States in 1939. The image of the young but modern nation was based on the forest industry, on which Finnish wood architecture still relies. The forests and wood as a functional material have produced results for Finnish architecture and for the forest industry - the tradition is based on this alliance. This has been both the strength and the weakness of wood architecture. The industry is in the hands of large corporations that desperately seek the formula for success through mass production. High technology wooden construction components are produced but so far, attempts to match them together on an extensive scale have failed. Only a few unique pieces of high quality architecture have been constructed, usually thanks to individual efforts.

8.4. Future

The challenge is to rediscover the connection with tradition. From now on, emphasis should be placed on developing construction and quality as the central issue. This will require revitalizing the education and rethinking creative building methods. Architecture as a synthetic process combining knowledge, skill and technology should be given the key role.

8.5. Finland

In 1994, the Aalto University in Helsinki launched the Wood Studio. The idea was to learn about building with wood by doing it with one's own hands and to create a wood architecture focused on the future. In 2001, the English-language Wood Program for international students was set up alongside the Wood Studio. In the Wood Program, a series of lectures on wood, short work assignments, workshops, excursions and other teaching supporting the main project were brought together around the core of the Wood Studio, design and construction. Over a period of nearly twenty years, the Wood Program has resulted in a multitude of studies on wood architecture. The core of the program is still learning by doing, and the main aim is to design and construct innovative wooden buildings. Around this concept, the school has developed a wide-ranging one-year teaching package. As the heart of the orld Design Capital 2012 in Helsinki, an Events Pavilion was erected. Students of the Wood Studio designed and constructed it themselves. The Pavilion linked together the Museum of Finnish Architecture and the Design Museum.

Current architectural vocabulary has been expressed by Anssi Lassila in the Kärsämäki summer chapel (2004), covered with tarred shingles. The construction followed traditional methods and used no modern machinery. The contradiction between archaic materials and contemporary forms creates an interesting composition in the landscape.

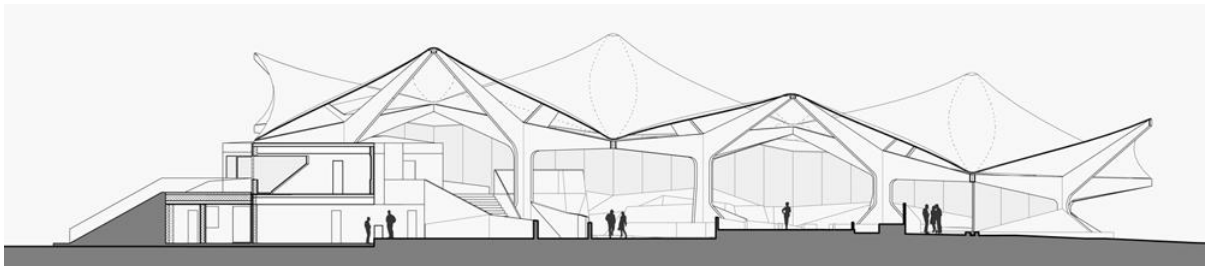
The Kuokkala church (2010) in Jyväskylä is the latest achievement of Lassila's office. An envelope covered in slate shakes shelters a beautiful interior space clad with light-coloured spruce. The original idea of a wooden shell with a grid structure would have taken the architectural concept even further.

Kilden, a theatre and concert hall in Kristiansand, Norway, has brought together all the city's institutions of performing arts. Finnish ALA Architects have designed a monumental undulating wall of local oak. Passing through, the audience moves from a natural landscape to the realm of performing arts. The building carries on the tradition of modern

Finnish architecture. The concept is clearly influenced by Aalto's Pavilion in the 1939 World's Fair in New York. On the outside, the building remains a simple functional box but spatially the waving form creates a magical atmosphere.



ALA Architects, Kilden Performing Arts Centre, Kristiansand, Norway (2011), Photo by Ivan Baan



Helen & Hart, Norway Pavilion Shanghai Expo 2012, longitudinal section

8.6. Norway

In Norway, Siv Helene Stangeland with her husband Reinhard Kropf is continuing the thoughtful architectural heritage of Wenche Selmer. Helen & Hart seeks a compound, practical knowledge about the material and how it can become an active part of the design process. For the Vennesla Library project, the office developed a concept in which the units of the main rib structure are practical hybrid constructions that contain all technical equipment and furniture.

These architects start by researching the performance and structural possibilities of wood and geometry with contemporary digital tools and conventional scale models and mock-ups. When knowledge in these fields concurrently influences the design process, they have developed optimized and expressive solutions. They have pointed out that, except for the use of digital tools, their method is hardly a new approach; the Wasa Museum in Stockholm exhibits an original drawing from the sixteenth century that shows how highly skilled boatbuilders selected parts of trees whose shape matched the construction elements they needed to build their boats.

For the Norway Pavilion in the 2010 Shanghai World Expo, they created an idea of a field of 'trees' made out of gluelam timber. The concept answered most requirements of the program and, at the same time, could be adapted to the enormous number of external inputs in the short, six-month design process.

8.7. Sweden

Gert Wingård and his collaborators have created a recognizable and delicate vocabulary of their own. Love for the human, appreciation for nature and consideration for the location have been a consistent theme in their architecture. "Wingårdhs is committed to the artistic and poetic dimensions of architecture. We always try to transcend the ordinaries of the brief." ²⁵

The design of the visitors' centre at the Tåkern bird sanctuary in Östergötland, Sweden, aimed at a building that could be both invisible and astonishing. The entire building is covered with straw, a traditional cladding that links the building to the wetlands where it stands. It also includes a watchtower overlooking the wetlands beside a meandering path.

The Mill House is a manifestation of the ritual of sauna and bathing, involving a spell together in the sauna and dashing out for a short dip in the cold water. This delicately articulated project forms an annex to an old rural farm in the south of Sweden. The exposed construction demanded carpentry of unusual excellence.

9. Epilogue

What does it mean to be a contemporary architect? I quote an interview with the first Spirit of Nature Wood Award winner Renzo Piano in *The Architects' Journal*. He said: "Architecture is one of the most difficult, complex serious jobs... To be an architect you need to be a master builder, a militant, a poet and a historian. But you have to be master builder; otherwise all this is garbage" ²⁶

I have faith in architecture. We cannot allow preconceived ideas and the desire for financial gain to eliminate creativity. The profession's mission has not changed during the history. Vitruvius and Aalto provided the same lesson. The special task of architecture is to create the spiritual circumstances for the encounter between the basic essences of humans, their lives and the material world. This is Spirit of Nature - The Spirit of Human Nature.



Gert Wingårdh, The Mill House, Västra Karup, Sweden (2007), Photo courtesy of Wingårdhs

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