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Tradition and renewal in finnish wooden architecture An architect's view

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Building creates the framework for interaction between man and nature; a building expresses the present state of this relationship. With the siting, direction, openings, façade, wall structures, porches, balconies, pergolas, disposition of external spaces and planting, we regulate vistas, microclimate, temperature, the scent of autumn leaves and the faint fluttering of the evening wind – in other words, possibilities of enjoying nature and fitting in with its timeless and cosmic framework. Possibilities of entering in to a fruitful dialogue with nature.

The mode of building that is current today still sees nature as an encumbrance whose influence must be minimised, an opponent who must be relieved of his weapons. With highly developed technology, we build 'machines for living', fortifications of a kind, with measurable, optimal conditions – day and night, from one season to the next, independent of culture and local condition. A low brick single-family house built in the middle of a field expresses current building habits in Finland, in which development turns against itself: from a thermos flask equipped with artificial breathing, connections to the outside world, other people and nature are maintained only through electronic messages. Comparison with traditional building in lively discourse with its environment reveals the extent of the change.

When we speak of ecobuilding, of the new 'soft' or 'green' building methods or models of sustainable development, the question is in the end of a basic change of attitude in the industrialised countries, with their high standards of living: it is necessary to learn to see nature as a source of inspiration, a framework for our experiences and quality of life – and no longer as a dangerous opponent who must be attacked in the manner of Don Quijote.

According to the conditions of nature, in meaningful dialogue with nature, with the help of nature, naturally – these are the key-words of the architecture to come. Adaptable, diverse, flexible – a slender and bending tree withstands a storm better than a thick and strong one that will inevitably, in the end, break. A building should seek its own natural expression according to the terms of tradition, place and nature.

Building in wood offers unlimited perspectives for the development of an 'ecological' model of building in Finland. Wood is a renewable natural resource which is available cheaply and locally. Wood is easy to work, both by hand and mechanically. Wood functions simultaneously as a load-bearing and heat-insulating structure, it does not conduct heat from the outside in. It also has the capacity of storing heat, it smells good, forms a beautiful surface and creates good acoustics. And finally, by burning or rotting, wood returns to the ecosystem.

When they arrived in Finland after the ice age, the first huntsmen and fishermen built their *kota*, or hut, in the shelter of a tree. The proverb 'listen to the spruce by whose roots you live' expresses this concretely.

In addition to its structural function of supporting a hut, the *kota* spruce has a symbolic meaning: it has been a symbol for the entire cosmos, the *axis mundi* that unites earth and sky.

The living *kota* spruce was gradually replaced by a pillar, to which these symbolic meanings were transferred. The world axis was placed slightly skew, pointing toward the North Star.

In many African cultures, villages are still built around a central, ancient tree and houses are supported by a living tree trunk or its substitute. The central pillar of the Japanese tea-room, too, follows the same tradition.

In the Lukka cabin at Lieksa open-air museum, the most primitive form of the Karelian house, the oven is set against the side of a beautifully twisted standing pine rooted in the ground, which is thus a relic of the sheltering *kota* spruce. Gradually this oven-supporting pillar developed, in the interiors of our cabins, into a handsome, beautifully embellished *uun-
inpankopatsas* whose function it was to support the beams that decided the spatial divisions of the cabin.

Over the centuries, our building tradition has developed natural ways of building in harmony with local conditions. The changing of the seasons has been taken into account in modes of living and spatial constructions (porches, courtyards, storehouses, guest-rooms, summer byres etc.). Timber walls breathe and store heat, the construction of the floor prevents radon radiation and airs the base. The attic functions as an intermediate zone that lessens heat currents, roof structures remain dry and are easily maintained. Clapboarding and shingles are still useful materials for façades and roofs. The log system permits the prefabrication, moving and demolition of the building.

Wood has its own aesthetics. The natural rhythm and correct dimensions, the restrained emphasis on methods of joining, and the handling of the surface characteristic of wood building, create their architecture – other formal motifs are discarded as unnecessary.

The dimensions of timber and logs, ways of joining them and their static qualities were canonised in ancient Greece in the system of orders as an ideal of classical beauty, although the shift from building in wood to building in stone had already been made.

It was, therefore, no wonder that Finnish peasant building, of which clear, ridge-roofed building masses organically merged with the landscape are typical, recalls Greek temple areas – as the poet Rabbe Enckell remarked in his poem, *Akropolis soliga massa skrämmer mig ej...*

*Akropolis
soliga massa
skrämmer mig ej.
Jag har sett
den finska kullens
grå lada,
dess tempellika
proportioner
utan tyngd
resa sig
mot vårhimlens ändlösa
vidd.*

The sunny mass
of the Acropolis
does not frighten me.
I have seen
the grey barn
of the Finnish hill,
its temple-like
proportions
rising
weightless
towards the infinity of
the spring sky.

One of the finest characteristics of wood is its capacity to reflect time. Grain, annual rings, the twisting of the trunk or the bending of a branch express the condensed time that is the growing process.

Wood also ages beautifully: it adapts, bends and becomes patinated – unlike many other building materials, such as fibreglass and plastic, which set themselves against the grain of time, until they finally collapse.

Of all the Earth's organisms, trees are the longest-lived. The ancient spruce trees of local woodlands or the courtyard birch that spreads its branches protectively over the house bring us messages from many past generations, as do the worn thresholds of the cabin, the creaking floors or the rail fence that merges with the forest.

The naturally functioning wall of the future could combine the advantages of vertical and horizontal structures. This used to be done in the back part of Karelian buildings, in which cattle-sheds are made of logs but are freely variable with pillars under a standing hay-barn.

Such a wall-structure could be based on the pillar-and-beam system with which a building can be erected up to the roof in a couple of days. Horizontal timbers or planks could be placed between pillars, forming an internal surface and heat-store. The timbers press against each other under their own weight, but porches and other constructions can be freely added to the frame.

Additional organic insulation should be used if necessary on the exterior and, as the façade surface, plywood, shingle or boarding without ventilation slits, so that the surface material, too, can function as a heat insulator.

It appears that a natural attitude to life and way of building, whose slogan could be 'adapt, nurture, repair and save!', is in profound contradiction with the basic aims of consumer society: to produce and sell things, energy and services.

It is clear that an attitude to life that demands ski-jumping in the middle of summer on a plastic slope and tropical swimming baths in Lapland in the depths of winter is more 'productive' than that of the hermit who gains his enjoyment from birdsong in his forest lair.

Weather conditions, autumn rains, the smell of the forest or the sunrise cannot be made into money – at least so far. They therefore remain in a category that is somehow beyond society, are allowed to live their own shadow lives, to the satisfaction of a few romantic souls. It seems that experiences of nature cannot function as stimuli to production, consumption and building .

A way of building that uses the specific conditions of a particular place, such as the heat and light of the sun; snow, turf and sawdust as insulation, and the trees of neighbouring woods as building materials, a way of building that prefers maintenance, repair and re-use to new building, that produces housing in which leisure time is spent sitting on the porch and cultivating tomatoes – such a way of building fits less well within the framework of consumer society than current modes of building and living, with their use of artificial substances, maximal use of machines and forced consumption habits.

The image of an outdoor dance-pavilion reflects natural, 'ecological' building *par excellence*: for the floor booming wooden planks; for the walls dewy meadows and distant vistas; for the roof the white curve of the summer night's sky in the land of the midnight sun.