新しいスタンダード—戦争で荒廃したフィンランドはいかにして困難を好機に変え たか

## New Standards: How War-ravaged Finland Turned Need into Opportunity

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Today, a moment of profound uncertainty is driving a new set of issues to the forefront of architectural discourse. A global pandemic, a changing climate, shifting populations, political unrest and economic turmoil are reconfiguring the terrain in which architects operate. In this context, a renewed interest in 'low-cost' building is not simply a pursuit of economic, material or energetic efficiency, it is also a means by which to reconsider the cultural conditions that building shapes and represents.

It should not be surprising then that the upcoming Venice Biennale, the world's premier forum for architectural discourse, will be devoted to a single question: *How will we live together?* As curators of the Pavilion of Finland, we have chosen to respond to the theme by revisiting a moment of urgency and uncertainty that produced new ways of building, new urban landscapes and a dramatic reconfiguration of domestic architecture around the world.

New Standards considers the legacy of Puutalo Oy (Timber Houses Ltd.), an industrial enterprise established in 1940 as a response to a national refugee crisis. Through extensive research in the company archives, the exhibition reveals the surprising scale and reach of Finnish wood construction during the post-war period. Alongside this research, new images have been commissioned from acclaimed Finnish photographer Juuso Westerlund to give a contemporary perspective on these buildings and communities as they exist today. Covering a wide range of contexts and climates from Finland to Colombia, these historical and contemporary views demonstrate that 'how we live together' is not only a question to be answered, but also a condition to be continuously examined.

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80 years ago, in the spring of 1940, the mood in Finland must have been sombre. A few months earlier, the nation had eagerly anticipated the arrival of the twelfth Olympic games, an event that would mark the end of a fevered campaign of building and preparation. Instead, the brutal "Winter War" now raged on the eastern border whilst a newly constructed stadium sat vacant in the center of Helsinki. By April, the games had been cancelled and the young nation had sacrificed 26,000 lives and more than 10% of its territory in order to remain independent. The Moscow Peace Treaty provided a break in hostilities, but it also left some 12% of the Finnish population homeless. While fighting continued in other theatres of the Second World War, Finland was left to focus on reconstruction.

Finnish architects and builders, who had set their sights on Olympic glory, were forced to rapidly re-direct their efforts to the pressing task of housing 420,000 refugees. While the government actively sought for ways to resolve the housing crisis, industrial companies recognised an opportunity to expand their business. In particular, the wood processing industry had available capacity as the war put an abrupt halt on exports. Although labour, material and

capital were in short supply, the nation's vast forest resources could be used to produce housing economically.

In May of 1940, twenty-one of the largest timber companies in Finland joined to form a conglomeration that they named *Puutalo Oy*, or Timber Houses Ltd. This industrial enterprise aimed to solve the national housing crisis by manufacturing houses through a network of factories across the country. Instead of competing against one another, the companies joined forces to share knowledge and centralize their design efforts. Together, they pioneered a model of construction that not only improved the speed and quality of wooden building, but also contributed to a rise in living standards that became synonymous with Nordic social-democratic progress for decades to come.

In less than a decade, this domestic effort grew into an international enterprise as *Puutalo* became the largest planning and selling organisation for prefabricated wooden houses in the world. By 1955, the company had delivered almost nine million square meters of buildings to every inhabited continent. The largest share of those deliveries were sent to the Soviet Union, Germany, Poland, Israel and the United Kingdom, while dozens of other countries received buildings through public and private orders.

After the war, a chronic shortage of food, raw materials and machinery plagued recovery across Finland (food rations remained in place until 1954). And with a limited range of products for exchange, it was difficult to obtain goods from abroad. Materials that could be traded came almost entirely from the forest industry in the form of timber, paper and cellulose. But while commodities could be traded easily, prefabricated wooden houses added greater value to these raw materials, and so the building industry took on a significant role.

For example, in March 1947, the governments of Finland and Poland signed a \$ 20 million agreement in which Finland would import 495,000 tons of coal in return for 4,000 wooden houses, as well as cellulose, copper supplies, machinery and construction panels. Similar agreements enabled Finland to import coal, iron, steel and tractors from the United Kingdom, beef, lard, butter and cheese from Denmark, wine and silk from France, potatoes, chemicals and textiles from the Netherlands and grapes and oranges from Israel. By the late 1940s, 5.5 % of all Finnish exports consisted of wooden buildings, and sales operations were soon organized on every inhabited continent.

By the end of the decade, Finnish wooden houses had been erected from Australia to Argentina, and from Cameroon to Iceland. Many these buildings were intended to be immediate solutions to a pressing crisis, but thousands of them remain in use today thanks to their material quality, spatial efficiency and adaptability.

Our current interest in 'low-cost' building may be driven by a contemporary set of concerns, but the parallels to the earlier moment of crisis are more than coincidental. The scarcity of materials, labor and capital that defined much of the post-war period led to a flourishing of design solutions that were resourceful, effective and durable. The architects of the era could hardly imagine the changes that we face today, but the strategies they devised are instructive as we look to break out of our normal mode of operations and seek new ways of living together.