

Constitutional: Finnish Frameworks of Architecture and Design in the Public Sector

This essay examines the work of Helsinki Design Lab, a Finnish model of design and research that brings architects into an expanded design process to address public policy formation. Part of initiatives put in place by the Finnish Parliament, in a culture where design is a part of governance processes, the model connects academic, activist, professional, government and industrial fields in transformative collaborations and processes that embed design into everyday life.

FRANCES HSU
Aalto University

INTRODUCTION

Finland's reputation as a culture infused by design includes not just a history of architect's and artists ongoing design collaboration with modern industry to produce everyday objects, textiles, and buildings. More recently, in the last half decade, a new systematic series of strategic initiatives have been undertaken with transformative potential for the role of architects in the design of physical, social and civic landscapes.

This essay addresses the interaction of architects, designers, citizens and students in the formation of public policy aimed at the design of cities. It focuses on issues of strategic design and governance in the work of Sitra, the architect-initiated and directed Helsinki Design Lab, and Snowcone & Haystack. Finland in general and the work of HDL and Snowcone & Haystack can be viewed as part of the production of a kind of knowledge unique to architecture and to architects working in the expanded field of architecture.

Within the American context, the Finnish state faces similar underlying challenges involving the built environment. The symptoms caused by worldwide crises might appear considerably less severe, and are perhaps in their earlier stages of development, but the problems are similar. Finland is a microscopic magnification of conditions and, due to the country's smaller size and population can be viewed as a laboratory-like setting for testing architectural attempts to affect meaningful change. (The political battles in last several years have dealt with the balance between a more 'strict' social democracy and a more 'green,' controlled market economy.) The tensions, risks and possibilities faced by Finland correspond to those of architects in the US and worldwide: The creation of public interfaces and audiences for the professionals typically associated with design and planning as well as the inhabitants of a city; achieving political innovation and architectural vision with collective imagination; and changing architectural education to establish strategic ways and means of design thinking.

PREFACE

In general, architectural history has portrayed architects not as professionals working in the public interest but as instruments of developers, corporations, the wealthy or reigning

religious and political powers. Concepts currently in use for theorizing architecture as a conduit for transdisciplinary knowledges and global flows include “tactical,” “participatory,” and “informal” urbanism; “postcritical” and “projective” practice. And certainly, aspects of urban development and practices in Finland can be defined by these categories. Yet in addition, the role of the architect is being recalculated as regulator of the valves controlling transdisciplinary and global-oriented flows. At a time when city making involves blogs, pop-ups, installations and festivals, the Helsinki Design Lab has attempted to understand the energy of bottom up as well as top down efforts to design society. The entire realm of design from the scale of the object to urban territory is addressed from a positivistic and human-centric viewpoint to tackle design issues related to pressing environmental and social problems that are often not most effectively resolved by conventional specialized design practices. Helsinki is a city where technologies and infrastructures, both visible and invisible, have been embedded in the public sphere. Architects and designers have led efforts to establish strategic design as a core value of Finnish culture. The Helsinki Design Lab is part of an effort to embed design team capabilities into governmental structures. This type of endeavor, which also occurs at MindLab in Denmark and Public Policy Lab in New York, differs from organizations such as Ideo and Brightspot which are independent of government.

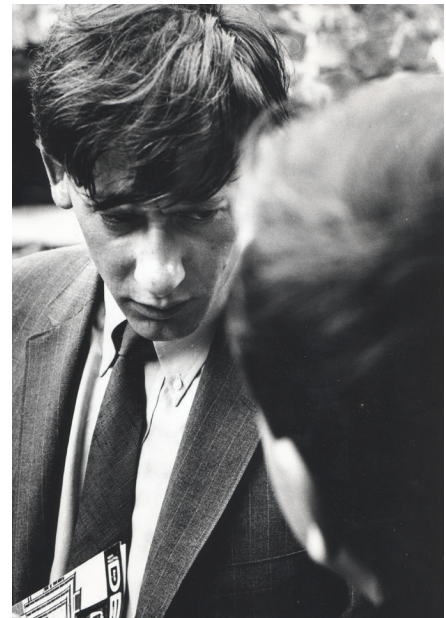
INDUSTRIAL, ENVIRONMENT AND PRODUCT DESIGN SEMINAR, 1968

On February 29, 1968, a group of engineering, design and architecture students in Finland requested money from the 50th Anniversary of Finnish Independence Commemorative Fund to host a design seminar. In their letter, students Harri Hintikka, Matti Kaje, Juhani Pallasmaa, Tom Simons and Yrjö Sotamaa wrote about about the changing role of design and the need for innovative design through the integration of industrial design education and practice with technical and financial structures. The impetus for their request was the second issue of the *Journal of Scandinavian Design Students*, a student publication that ran from 1967 to 1971. SDO #2 contained essays editorials, cartoons and diagrams addressing a design ethic based on the integrated, systemic practice of design as the first step to effectively addressing pressing problems of the time. This new definition of design brought together “engineering, human factors, production, and sales” knowledge, interfacing it with “technicians, doctors, psychologists, economists”. This kind of thinking had the objective of broadening design to include “system design, computer use, human factors engineering, applied psychology, and anthropology.” That summer, the Industrial, Environment and Product Design Seminar ran in two sessions on the island of Suomenlinna off the coast of Helsinki, bringing together a group of educators and practitioners, including Buckminster Fuller, Victor Papanek, Finnish designer Kaj Frank, Christopher Alexander, John McHale and other Swedish and Finnish designers.

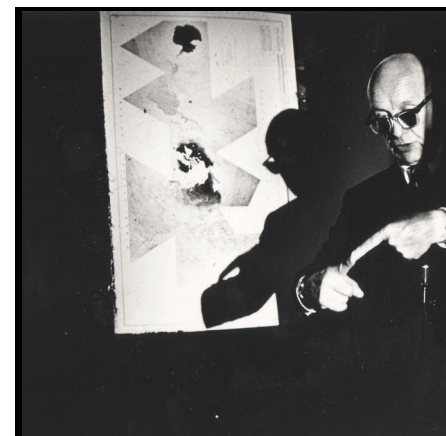
The Design Seminar event was formalized when the Anniversary of Finnish Independence Commemorative Fund (founded in 1967) was reborn the following year as the Finnish Innovation Fund Sitra. The new President of Sitra, Klaus Waris, agreed to support research into a new kind of cross disciplinary collaborative form of design research connecting technical, industrial, and governance activities that fell into a sort of “no-man’s land.” Sitra took on the challenge presented by the Finnish students to extend the craft-based tradition of Finnish design to move beyond the products, objects and buildings to include systems and strategic thinking as one that could promote Finnish economic development, international competitiveness and cooperation.

DESIGN EXCHANGE PROGRAM (DEP)

Sitra aimed to build design capability within national and municipal government in Finland by exploring the potential of strategic redesign. The training of a new generation of strategic designers and creating debate about current institutional structures would all enhance the Finnish public sector’s ability to envision new business models for the future. Design



1



2

Figure 1: Christopher Alexander, Suomenlinna, 1968 <http://1968.helsinkidesignlab.org/>

Figure 2: Buckminster Fuller, Suomenlinna, 1968. <http://1968.helsinkidesignlab.org/>

Exchange was a pilot placement program which managed and supported the embedding of strategic designers within various project teams of Finland's ministries and city municipalities to work as full time employees for a year. The partner ministries and departments played an active role in finding appropriate placement spots. The idea was that young designers could be helpful in finding ways of offering government new tools for delivering on its commitments and responsibilities. Students might both experience government processes at early stages of their careers and help to envision alternative futures and potentials.

In 1968 at the time of the Suomenlinna conference, Scandinavian design, established as a global phenomena in the 1950s, was being eclipsed by the radical work of British and Italian groups. The conference discussion, on broadening the scope of "design" to include the systems, strategic thinking and business models into the more typical output of the designer has resurfaced, forty years later, with the work of Helsinki Design Lab (HDL) from 2008 to 2013. .

HELSINKI DESIGN LAB (HDL)

HDL is the research arm of Sitra, Finnish Innovation Fund. It was created in 2008 when Sitra Director of Strategic Design Marco Steinberg asked his ex-Harvard GSD classmates Brian Boyer and Justin Cook to join him in founding Helsinki Design Lab. (Boyer and Steinberg met at RISD). Boyer had worked as an independent architect, software programmer, and technology entrepreneur. Cook had experience in Renzo Piano Building Workshop in Genoa and as principal of a design-build firm in Seattle. They were joined by Dan Hill, an urban sociologist who had worked as an Associate at Arup and for Monocle and BBC. Supervised by the Finnish Parliament, the HDL partners were given the task to advance Sitra's work and address the challenges that Finnish governments and other public institutions were facing.

Prior to joining Sitra, Steinberg taught for ten years at the GSD (1999-2009) where he in 2008 he began a pilot program with MIT Collaborative Initiatives on Stroke Pathways New Models for Health. Steinberg applied a systems approach to analyzing stroke care. In building HDL, he dug into the archives to be inspired by the legacy of the Industrial, Environmental and Product Design conference that Sitra had sponsored in 1968. Steinberg spearheaded the founding of HDL which transitioned strategic design to include ideas about the design and delivery of more effective services.

"Despite the interconnectedness inherent in the issues we face, government continues to take a 'siloed' approach in which one group of people is charged with creating visions for change (politicians), and another who is charged with delivering on those visions (civil servants)."

HDL worked from the proposition that while the world was in "crisis" and facing problems from social inequality to ageing to climate change, government was insufficiently equipped to deal with them. They argued that the flaw in this system was the disconnection between design and delivery. A fundamental reconceptualization of how government approaches big projects was needed. The boundaries of complex problems and their processes could be rethought as a way for architects to participate in the larger field of design: "Helsinki Design Lab helps government leaders see the 'architecture of problems.' We assist decision-makers to view challenges from a big-picture perspective, and provide guidance toward more complete solutions that consider all aspects of a problem. Our mission is to advance this way of working—we call it strategic design." The overall approach of HDL was informed by three questions: How to educate strategic designers?; How to increase the supply of practices capable of providing strategic design services?; and How can governments and foundations commission projects for strategic design?

RECIPES FOR SYSTEMIC CHANGE

The objective of HDL was to provide a platform for a Finnish and international strategic design community to share knowledge experiences in conceiving and developing design as a driver for innovation. They proposed to examine the forces and flows affecting large-scale projects in two ways: 1) the development of the HDL studio model as a methodology and a philosophy and 2) research into case study examples of successful decision making and outcomes. The results of this work were used for the organization and construction of the Low2No Sustainable Design and Development Competition located in new neighborhood of Jaktasaari in Helsinki.

The work of HDL is part of growing worldwide interest in applying design methods and design thinking to social and public policy changes. This field is especially strong in the Scandinavian countries, where universities in Finland, Sweden, Norway and Denmark have been practically the first to expand the field of design by initiating new majors and curriculums. To formulate their “recipes” for systemic change, HDL imported the architectural design studio model, which they all knew quite well, into their work for Sitra. They used the design studio as a model of problem solving that diverged from the more commonly used linear approaches endemic to government policy decision making, in order to redesign the process at the individual, group and institutional levels. This was most agile way, they thought, to operate in times of uncertainty and continual change, when increasingly, society operates in contexts where evidence is still developing, information will always be incomplete and debate around facts is ongoing: “While the public sector is improving its service design capability, we also need to build organizations capable of framing relevant questions in the first place.”

The HDL Studio Model was conceived as a lightweight tool enabling organizations to quickly sketch new solutions matching challenges to kickstart the transformation process. If the design studio was an ideal platform for codifying and experimenting with strategic redesign, architectural thinking was particularly useful for conceptualizing problems. Discussion has addressed a shift in architectural education where rather than designing buildings architects should redesign the systems around which built forms exist and evolve. Instead of designing a hospital, for example, the architect should consider how to develop the healthcare system. Instead of a school building, they should think how to induce better learning methods for the future.

HELSINKI DESIGN GLOBAL 2010

The HDL Studio Model was put into practice at Helsinki Design Global in 2010. The conference brought together over 100 people from around the world to discuss the possibilities of design as a government capability. The three day event ended with a round table discussion. The audience was comprised of people from government as well as designers. The event included three HDL Studios on education, sustainability and ageing with two goals: to advance Sitra's understanding of important topics for the public sector relevant to the future of Finland and to test and develop the Studio Model. Topics were chosen for their balance between international relevance and Sitra's national mandate.

Education Studio: Are dropouts simply failing in their studies or is Finland's highly regarded education system showing its cracks by failing to support these individuals? Outcomes included a set of priority shifts addressing key elements in the education ecology: 1) Equal access to education; 2) Current social contract; 3) Social welfare system; 4) Administrative structures that are hierarchical and vertical; 5) Schools as institutions for acquisition of academic skills; 6) Focus on the normative; 7) Learning for academic achievement.

Sustainability Studio: Climate change is the symptom of the problem; the byproduct of a market failure whose externalities will likely limit future growth. The conference identified three



3

Project goal

Redesign the city in 90 days through a co-creation process aimed at delivering more resilient infrastructure and an urban form that provides greater social equity.

Theory of change

By working on an extremely limited timeline, business as usual could be suspended to make a new design process possible. This would invite stakeholders from the community, industry, and government into the same decision-making process, balancing biases against each other to develop a coherent proposal that seeks to generate new value for the town.

Success factors and strokes of luck

The Minister of Housing was familiar with the work of Elemental, a key player, and knew their foregoing projects in detail; The Minister of Energy was appointed to chair the public private partnership (PPP), helping to ensure funding and political stability when the government changed; and, although not visible, the scale of destruction created an opportunity to radically rethink planning practices.

4

Figure 3: Meeting, Strengthening Local Communities Case 1: Rebuilding Constitution

Figure 4: Assessment, Strengthening Local Communities Case 1: Rebuilding Constitution

meta-themes that specified specific qualities necessary for any responses to the challenge of carbon neutrality in Finland: Diverse needs, Urgency, and Opportunity. Based on these themes the Studio proposed a set of ideas targeting a variety of scales in space and time, from local to national and from immediate effects to 100 year return on investment.

Ageing Studio: To make good on the social contract between generations, Finland must redefine the understanding of all life stages. As the Baby Bombers retire, every level of society from the individual to the institution will be affected with particular attention focused on the interfaces between these different groups. The profile of the coming generation of the aged in Finland differ from its predecessors as a consequence of accumulated wealth and increased life expectancy and represent a sizeable concentration of individuals with high levels of time money and wisdom. Against this backdrop the Studio articulated a new understanding of the ageing population based on core principles: New wealth and new health; New social contract; and systemic institutional innovation. From these tenants a set of opportunities that could offer strategic impact were identified. These opportunities were called a ‘Whole-life Solutionscape’ and were not confined to typical ‘elderly’ timelines but spanned birth to death.

LEGIBLE PRACTICES: SIX STORIES ABOUT THE CRAFT OF STEWARDSHIP

In 2012 HDL identified six projects that were intentionally designed to achieve larger effects. Urban plans, websites, public services that address real need for change but also offer lessons on more abstract issues about political legal economic and cultural conditions that construct the dominant culture. HDL arranged three 2-party meetings where practitioners interviewed each other. Constitución Chile and Brownsville New York addressed housing and debates about equity and opportunity. Federal government and local authorities (US Consumer Financial Protection Bureau and UK Creative Councils) built innovation into cultural interventions. Gov.uk and Branchekode are websites created for specialized services and government that achieve quality by aligning stakeholders around a common improvement effort. Each story was conceived as a ‘tale of escape’ from the status quo. The pairing of groups aimed to foster new connections between practices that might not otherwise meet and to enable all to step back and articulate what they have done. The output of meetings was hundred pages of notes, videos and insights. HDL was interested in understanding various cultures of decision making that included the language, concepts, models and values that shaped decisions, the interpretations of the context, the analysis of risks and the charting of change.

LOW2NO COMPETITION 2009–PRESENT

Low2No is a design and construction project that aimed not only to deliver a more sustainable built environment for ecological urban living but also aimed to develop a market for sustainable development with the objective of putting Finland on a more sustainable development path. “Low2No is designed to engage the existing city; balance economy, ecology and society through strategic investments and interventions; and catalyze the long term market transformation away from energy and material intensive urbanism.”

The term “Low2No” comes from the phrase ‘from low carbon to no carbon’ and refers to the gradual and iterative transition from low to no carbon city building as a more viable and resilient approach to the sustainability challenge than building new eco-cities on uncontested ground. Sitra/HDL designed and funded the Low2No competition, acting as enabler of transformation to lead the project team through city block design phases and initiate related projects such as Open Kitchen. Besides low-carbon, energy efficient construction, a key priority was to enable lifestyles and consumer habits which increase well-being and minimise the burden on the environment. Negotiating with SRV construction company, VVO developer for social housing negotiating and the city to transfer the development rights, the potential role Sitra explored complementary national applications to create the conditions for the market

and municipalities to transition cities burdened by structural challenges towards carbon neutrality. The competition has had two major outcomes as of 2013: it put in place an approach to architectural competitions focusing not just on a building solution, which often encounters financial and cultural roadblocks (like the Helsinki Guggenheim competition) and it changed fire codes. One of the project's early successes was to work with the authorities to change fire codes and make multi-story timber construction legal in Finland, providing future projects with the possibility to use low carbon building materials, while opening a new market to the Finnish forest industry.

In place of the traditional procurement method to which public sector organizations like Sitra/HDL are bound, the competition called for strategies to solve the carbon challenge rather than specifying a building solution. Finalists chosen for the breadth, depth, and complementarity of their experiences were in the 2nd phase asked to develop a method to work through the challenge of creating and constructing a carbon development project. (1) **C_Life** (Arup, Sauerbruch Hutton Architects, Experientia & Galley Eco Capital) were awarded the commission for the most robust strategy. Their entry addressed: 1) Informed consumption: An early user interface developed by Experientia allows users to view their energy and carbon profile; 2) Carbon mitigation via investments in renewable energy organized for district heating and cooling from a centralized location in combined heat and power plants. (In 2008 the Helsinki City Council approved a new energy policy guideline to improve the energy efficiency of Helsinki's building stock. The city aimed to profile itself as an energy saving forerunner by increasing its share of renewable energy from 4% to 20% and reduce greenhouse gases by 20% by 2020); and 3) Co-creating new housing models: Experientia conducted workshops with future residents.

The model city block of 22,000 m² in Jätkäsaari, Helsinki was the first site where the Low2No approach was developed and defined in practice. Built in partnership with private companies, it was meant to demonstrate to the city that the broader built environment would become more sustainable only through achieving social and environmental objectives with economically viable solutions. Messy regulatory environments, financial and cultural barriers to low carbon building were tested, through targeted investments, events and partnerships—the challenges and inertia of legacy, engaging stakeholders to ensure that solutions are possible, impactful and lasting: this is evidence that sustainable cities are no longer a technological feat but a cultural challenge.

Industry and design in Finland have a tradition of working together with the mandate of the government. The improvement of public service effectiveness involves designers in the development of systemic principles to prototype a government with built-in self-organizing design capability. In Helsinki, the invention of systems that provide greater access to design has produced a level of civic literacy and empowerment in the controlled market economy of the modern welfare state. The potential is for mentoring design activists who see in the contemporary world a multitude of opportunities for change. Yet still, networks between designers, governments, clients, builders and users that set new standards in terms of strategy may not produce new models of government but rather use new technologies and infrastructures to reproduce and sustain existing ones. It is for this reason that Steinberg ended HDL in 2013 and founded Snowcone & Haystack as a medium moving for reconceptualizing the frameworks around problem solving without government oversight. Still in its beginning stages, Steinberg has branched out to advising international governments (most recently Latvia, the UK, Boston, Mexico City and Dublin) on redesigning the future of government.



5

ENDNOTE

1. Five teams were selected from a pool of more than 70 to participate in the competition: **Rebuilding 2.0:** REX/Croton Collaborative/NOW, Transsolar Energietechnik, Magnusson Klemencic Associates, Bureau Bas Smets, 2x4, Arup New York, Front & Jonathan Rose Companies. **Cradle of Innovation:** WSP Group, Heatherwick Studios, B&M Architects, JK MM Architects, Space Syntax, Helsinki University, AA Palmberg Ltd, Pekka Himanen & Pauli Aalto-Setälä. **ReciproCity:** Bjarke Ingels Group BIG, Vahanen, ARUP Foresight Innovation, Transsolar Energietechnik, Anttinen Oiva Arkkitehdit AoA, Masu Planning, Passiivitalo.fi, Pasi Mäenpää & Mikko Jalas. **Low Carbon High Urban:** Peter Rose & Partners, Michael Van Valkenburgh Associates, Guy Nordenson and Associates, Transsolar Climate Engineering (Matthias Schuler), Mobility in Chain & Architectural Research Office. **C_Life:** Arup, Sauerbruch Hutton Architects, Experientia & Galley Eco Capital

Figure 5: Much grass roots activism in Helsinki--How to scale it up?