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CYNTHIA MYNTTI

Putting Finnish Housing Design into Context: The Helsinki Experience

FURTHER INFORMATION

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Foreword

Cynthia Myntti conducted the main research for this paper during the academic year 2004-2005, when she was a guest researcher in the Department of Architecture, Helsinki University of Technology (TKK). She focused on the design of social housing in Helsinki from the 1950s to the present time, on the advice of Tuomo Siitonen, then Professor of Housing Design at TKK. This paper aims to understand the policy context of the design decisions of architects practicing in Helsinki. She tests the Finnish housing policy: to what extent it is selective or universalistic and what are the current challenges?

Lately there has been growing interest to put Finnish housing into a wider context. Foreign experts evaluated the Finnish housing finance and support systems within the EMU environment in the year 2002. This examination was ordered by Paavo Lipponen's II government. The government was interested in adapting the Finnish housing to the extended and liberated financial market. On the other hand there has also been a growing interest of foreign researchers in Finnish housing and Scandinavian social housing systems in general. Foreign researchers are often interested in the social housing system as an example of an effective welfare regime, successfully resisted such common urban problems as homelessness, distinctive public rental housing market and polarisation of residential areas. This interest mostly comes from countries where the importance of social housing is lesser and further diminishing due to more market oriented approaches. Also Myntti's paper is firmly on this track, often following findings represented in the 2002 evaluation.

In the near future the Finnish housing system is increasingly facing demands for changes. Consequently views from outside, such as this paper, are warmly welcome. They have a potential to clarify the specific nature of the Finnish housing policy and give ideas of which practices are worth of keeping and which are not. First and foremost, Myntti's paper with its glossary and tables serves as a useful introduction for foreign students, researchers and experts who like to find out connections between Finnish housing policy, urban planning, housing design and architectural history of Helsinki.

Helsinki, March 2007

Ari Niska and Markus Laine

City of Helsinki Urban Facts

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Introduction

In Finland the design of dwellings, whether those for families living in detached houses or for households living in apartment blocks, is influenced by a multitude of factors, only one of which is the inspiration of the architect. Other factors include city plans that specify the size of city blocks and building dimensions and character; the developers' and construction companies' preference of standard building methods over new approaches; the economics of housing production and consumption, from the variable cost of building materials, fluctuating national interest rates, and vacillating governmental subsidies; and finally, changing demographics and consumer preferences.

This paper provides an introduction to the social, political and economic context in which architects design housing in Finland, with special emphasis on housing in Helsinki. It asks the following questions: what are the basic principles of housing policy in Finland; what role have architects played in the design of multifamily dwellings, especially those for households of limited means; and what are the most important challenges facing the designers of housing in the coming decades?

Finland presents an illuminating case study on housing policy for a number of reasons. By international standards, the average Finn lives in housing of a good standard and in socially mixed neighborhoods. With far-sighted planning and high quality architectural and urban design, Finland has managed to avoid the spatial segregation of low income people, a social problem plaguing many other industrialized countries. Yet as will be shown below, the country faces the huge problem of caring for the housing needs of a population with a life expectancy longer than their aging residential buildings, and, at least in the capital region of Helsinki, new challenges brought about by increased housing expectations and increased competition for affluent tax payers.

The Dual Nature of Finland's Housing Policy

In Finland official documents from the national constitution to municipal budgets recognize housing as an area of *public* concern, and therefore amenable to some sort of government intervention.

"The public authorities shall promote the right of everyone to housing and the opportunity to arrange their own housing."

Constitution of Finland 2000
Section 19 (The Right to Social Security) Paragraph 4

Public housing policy seeks to "create the conditions for good, reasonably priced housing in a way that promotes lifecycle quality, regional balance and social cohesion and choice."

Financing Social Housing
The Housing Fund of Finland (ARA), 2004

"In its housing policy, Helsinki aims to provide its residents with a healthy, safe and pleasant city with quality housing for people at different stages of their lives, and with different standards of living."

Helsinki Housing Programme 2004-2008

Public policy on housing in Finland, however, recognizes the dual nature of the buildings in which people live; they are both a *public good* and a *private commodity*. Adequate housing is a *public good*¹ in the sense that it is a basic requirement for the well-being of everyone. The availability of well-designed housing at varying prices and tenures makes for attractive, socially mixed neighborhoods, a fundamental goal of Finnish housing policy and city planning.

As a *private commodity*, housing is also, for the majority of Finnish households, something bought and sold on the market according to their preferences. Nearly 60 per cent of dwellings in Finland and 42 per cent in Helsinki are owner-occupied, compared to 37 of housing stock in Sweden and 28 in Stockholm.² Thus in Finland and in Helsinki a home is often an investment; a home owner has the opportunity to accumulate capital that can be transferred to the next generation, for instance.

¹ "Public good" is being used here in the way that Amartya Sen (1999:129) discusses it in his book *Development as Freedom*. Other economists may prefer "positive externalities"; public support for housing improves welfare through subsidies and regulations.

² Statistics Finland 2004c:119; Regeringskansliet, Government of Sweden 2004:7; Urban Audit. See also Tables C and D

Because housing is both a public good and a private commodity the Finnish government intervenes on housing in two distinct ways: through multiple mechanisms it subsidizes rental housing for the least well-off households, and it also subsidizes home ownership for all households purchasing their dwelling.³

Finland's balancing of public goods and private commodities is not unique to the housing field but is a central feature of the Finnish welfare state more generally. Like other Nordic countries, Finland has a substantial public sector, with high taxes and social expenditure, yielding specific results, such as gender equality, the smallest income differences and the smallest poverty rates in the industrialized world.⁴ Yet Finland has always differed from its Nordic neighbors, particularly Sweden, in the way it has balanced social solidarity and individual responsibility, and the basic relationship between state-provided entitlements and participation in the market place⁵.

Some analysts attribute the Finnish approach to welfare to the enduring virtue of 'managing on one's own,' an individualism rooted in traditional agrarian society⁶. Others point to the powerful and shifting influences of Finnish political parties, which have strongly divergent attitudes that are felt in local and national policy-making. But from its earliest formulation by Kuusi and others in the 1960s, Finnish social welfare policy has viewed economic growth and social welfare as mutually enhancing.⁷ Thus, the investment of public monies in universal child care, high quality public education, comprehensive health care and adequate housing results in solid economic performance. Finland's persistent top rankings

³ The main portion of this tax subsidy to home owners comes in the form of home-mortgage-interest deduction and generally benefits the wealthy; the two highest income brackets receive 80 % of all interest deduction (Viitamäki 1999).

⁴ Kautto and Moisio 2004:201

⁵ In fact, the public sector represents less than one quarter of all employment in Finland, and is thus lower than in the other Nordic countries where it is over thirty per cent (Sinko 2005, 34). It has been argued that the long tradition of smaller public sector in Finland is the main factor that differentiates it from the other Nordic Countries.

⁶ Niva 1989:322

⁷ Kuusi 1961; Pietilä 2001:7

in economic competitiveness and productivity would suggest that its market-oriented welfare approach has merits.⁸

Finland's housing policy does have its critics, however, who argue that the government approach has always been temporary and without long-term vision.⁹ The critics argue rightly that the major public sector interventions to protect low-income households have occurred only in the times of crisis: following World War II when the country was faced with the triple challenge of rebuilding damaged areas, accommodating returning veterans, and resettling refugees from Finnish Karelia; during the period of massive urbanization in the 1970s; and in the midst of the economic depression of the 1990s when unemployment and mortgage defaults reached all time highs. However if one includes state support for home ownership, Finland's public sector interventions on housing appear more constant, if skewed toward better off households. Put another way, the common thread linking over 50 years of public decision-making on housing is the encouragement of home ownership.¹⁰

Putting Finnish housing policy to the test

The dual nature of housing policy in Finland prompts one to ask to what extent it is 'selective' or 'universalistic' (terms often used to describe national approaches to housing policy). A "*universalistic*" housing policy recognizes that everyone, regardless of their economic situation, has the social right to adequate housing. All citizens are both givers and receivers of benefits, and the moral logic is equality. "*Selective*" housing policy, by contrast, is more narrowly defined on providing housing as a safety net for the poorest sectors of society through access to subsidized rental dwellings and/or assistance with actual rent payments. The normative logic is charitable; the better off pay and the worst-off receive, once they have demonstrated their need.¹¹

⁸ Kautto & Uusitalo 2004:84

⁹ Juntto 1990:380

¹⁰ Kairamo 1998:65

¹¹ Bengtsson 2004:6; Stephens et al 2002

Test one

By many accounts Finland has taken a universalistic approach to housing, underscored in a high-profile external evaluation of Finnish housing finance and support systems sponsored by the Ministry of the Environment, the state agency responsible for housing policy.¹² That report notes that a very broad cross-section of the population of Finland (73 per cent) is theoretically eligible to live in housing produced with the Housing Fund of Finland (ARA) support. This is considerably higher than in other continental European countries. Of course not all those eligible do live in dwellings produced with state subsidies in Finland.

Test two

Finnish housing policy is universalistic in that households with moderate and high incomes also benefit from public support. Every individual purchasing a home with a mortgage can reduce his or her income tax through deductions on the mortgage interest. Other benefits include exemptions from property transfer tax for first time buyers and from capital gains tax after two years of home ownership.¹³ These benefits accrue to every tax payer purchasing a home irrespective of level of income.¹⁴ The theory is that everyone should and can move up in the economic hierarchy of housing, and that economic mobility through home ownership is good for society at large.¹⁵

Current challenges

Under Finland's current approach to universalistic housing policy, however, the loss to government coffers from tax deductions has increased while the amount spent on housing production supports has decreased (see table B, and this mismatch may grow if interest rates increase). Thus it could be argued that

¹² Ministry of Environment 2002:15

¹³ Ministry of the Environment 2004

¹⁴ Baunkjaer 2004:163

¹⁵ Juntto 1990:209

Finland's universalism in housing benefits unfairly the most advantaged sectors of society. While any restriction of the mortgage deduction would be deeply unpopular among owner-occupiers, the recent external evaluation sponsored by the Ministry of the Environment did recommend a greater progressivity in the tax benefit system.¹⁶

Finland's universalism in housing was strongly articulated with the founding of the public sector housing program ARAVA in 1949; state support was meant to improve the quality of housing for all Finns and benefits were not restricted to low-income households. Indeed, eligibility for residency in Tapiola, one of Finland's most famous residential areas from the 1950s, was not income-restricted. Since the 1960s, however, Finland has employed an increasingly 'selective' approach to housing policy; household needs must be high enough (such as the presence of children, old age, or disability) and income low enough to qualify for certain benefits, such as access to the mostly highly-subsidized council houses or housing allowances provided under the welfare system.¹⁷

As Finland faces reduced revenues for welfare expenditures, needs-tested selectivities are emerging as one way to direct limited resources to helping the worst off.¹⁸ The Ministry of the Environment-sponsored external evaluation pointed out, for instance, that many people living in rental dwellings constructed with ARAVA loans now have incomes high enough to make them ineligible as new entrants to subsidized housing; the report recommends that more of these households should be encouraged to move into free-market rental accommodation or to purchase their own home.¹⁹

¹⁶ Ministry of Environment 2002:35

¹⁷ Interviews with Anneli Juntto (February 2005); Ari Laine (March 2005); see Glossary for social and council housing, housing allowances, and the Social Insurance Institution of Finland (KELA)

¹⁸ Bengtsson 2001:272-273; Interview with Anneli Juntto (February 2005)

¹⁹ Ministry of Environment 2002:18

The tightening of housing benefits through means-testing or needs-testing is a deeply contentious issue in Finland as elsewhere. Targeting presents enormous bureaucratic challenges, and it risks stigmatizing recipients. And when a program becomes defined as “for those other people” rather than “for all of us,” it easily loses its political support.²⁰ This is the story of public housing in Britain and the United States, which are not positive models.²¹

²⁰ Sen 1999: 135

²¹ Bauer 1957: 140-142; Stephens et al 2002

The broad spectrum of housing policy

Three final observations are worth making on the nature of Finnish housing policy. First, public policy on housing is highly politicized in Finland from the macro to the micro levels. Officials representing the political spectrum formulate national legislation, approve city plans and budgets, and participate in the governance of the real estate management companies that run council housing. In Helsinki, for example, all detailed city plans, the legally binding documents that prescribe land-use rights for specific plots, must be approved by the City Council. Diverging political interests often push in opposite directions, for more public spaces and services and social housing for low-income people, or more privatized land and private sector involvement.²² In this context, then, policy almost always represents a compromise between different interests, making it difficult to identify an enduring vision.

Second, the apparently straightforward question of which policy instruments are included under the rubric of "housing policy" or more specifically "housing supports" is not so simple. The most obvious for inclusion are those mechanisms used by national and local government to increase the *production* of reasonably-priced housing and to support the *renovation* of existing housing stock.²³ In 1980, for instance, the state subsidized nearly 50 per cent of all new housing starts; in 2003 the figure is less than 20 per cent.²⁴

At present the Housing Fund of Finland (ARA) supports production, repair and renovation through the following mechanisms: (1) ARAVA loans granted to finance the construction of rental and right-of-occupancy dwellings; (2) interest subsidies paid on bank loans taken by developers of social rental housing; (3) repair grants for specific improvements to existing rental or owner-occupied housing stock, such as lift construction; (4) energy grants to reduce energy

²² Helsinki City Planning Department 2003:2; Helsinki Housing Affairs division web site; Interview with Pekka Helin (March 2005)

²³ Lujanen 2004:104

²⁴ See Table A

consumption in residential buildings; (5) grants for protecting heritage buildings and (6) equity grants for the construction of dwellings for homeless people, refugees and students; (7) and guarantees on bank loans for the construction of new rented, right-of-occupancy, and owner-occupied houses.²⁵

In Helsinki, the municipality offers another type of support for housing production: access to land. The city of Helsinki is in the unusual position compared to other cities of owning most of the land within the city boundaries. Since the late 1970s, municipal officials developed the HITAS system to use their power of land ownership for the social good: land is leased to the developers of owner-occupied and rental housing in exchange for certain price and quality controls. The HITAS system was developed in part to extend home ownership to households with regular but limited incomes, since prices are below the market rate for similar free-market dwellings. But HITAS owner-occupied buildings are often built along side social rented buildings to achieve desired social mixing in the planning of new residential areas. To protect against speculation, resale prices of HITAS flats are controlled.²⁶

“Housing policy” also typically includes one type of consumption support: housing allowances paid to disadvantaged households as part of social welfare budget of the state. Through the state Social Insurance Institution (KELA), Finnish families in economic difficulty can claim housing allowances to cover a portion of their housing costs, wherever and in whichever type of housing tenure they live.

The amount spent on personal housing allowances has been increasing (see table B). In 2004, nearly 160,000 Finnish households (or approximately 7 per cent of all households) received these general housing allowances.²⁷ That figure would be higher if housing allowances to older people and students were added

²⁵ Housing Fund of Finland ARA 2004:11

²⁶ Interviews with Mikael Sundman (November 2004) and Annukka Lindroos (April 2005), Helsinki City Planning Department

²⁷ Statistics Finland 2005: 18 (table 17). See also Table B, which presents trends in types of housing supports, comparing housing allowances with production support and mortgage interest deductions.

in. Even then, however, housing allowances still represent a very small fraction (around 1 per cent) of overall welfare spending in Finland. The largest claims on welfare spending are for pensions, health care, benefits for families with children, and unemployment security benefits.²⁸

General housing allowances tend to fluctuate with unemployment; the greater the number of people out of work, the greater the number claiming general housing allowances. However, a number of other factors affect the relative balance between housing allowances as consumption support and support for housing production. In recent years low and stable interest rates have made typical state support for housing production in the form of ARAVA loans unattractive to housing developers. Policy makers have also argued that support to individuals in the form of allowances distorts the market less than production supports. Thus, state support for new housing production has been replaced with subsidies of discretion – individual housing allowances or mortgage interest deductions.

What is not always counted in “housing policy” are those policy instruments that represent not expenditures but revenues *lost* to the state through tax deductions and exemptions to owner-occupiers. This is certainly the case in the United States.²⁹ In Finland, too, the challenge of ensuring that housing policy is fair, efficient and politically supported requires a consideration of *all* benefits, those cast as universal and those that are selective, those that treat housing as a public good and others that support it as a private commodity.

The third and final observation revisits the question of social mixing, a bedrock principle of Finnish housing policy. A broad political spectrum in Finland supports the idea of mixing in one neighborhood people of different income levels and different housing tenures. Most newly planned city blocks in Helsinki, for example, contain a maximum of 40 per cent subsidized rental dwellings and

²⁸ Social Insurance Institution of Finland (KELA) 2003

²⁹ Russell 2000:132-135

minimum of 60 per cent free market rental and owner-occupied dwellings. Suburban housing areas built rapidly to accommodate migrants from the countryside in the 1970s had higher proportions of subsidized dwellings, and these neighborhoods are currently the focus of large-scale renovation and new free-market infill building. In Finland free-market and subsidized buildings are indistinguishable from the exterior, and all families use the same shopping areas, green spaces, and day care centers and schools.³⁰ The Finnish housing company (*Asunto-osakeyhtiö*) system also enables the mixing of tenures within one building: flats may be owner-occupied, rented by a private owner on the free-market, and rented subsidized by a municipality. As a result, the spatial segregation of low income people, the stigmatization of their neighborhoods, and the subsequent slum development experienced in other countries has been avoided in Finland.

Yet some are now questioning the current approach to social mixing. The Ministry of Environment-sponsored external evaluation asks, for example, whether the current approach to social mixing might lead to “standardized” neighborhoods lacking the sort of diversity that ultimately makes cities interesting places.³¹

Responding to this charge, Helsinki’s *Housing Programme for 2004-2008: A Variety of Ways to Live*, highlights the need for a greater variety of residential building types, and for housing districts that are positively differentiated with unique identities, such as “Vuosaari – living by the sea,” “Arabia – art and design city,” or “Viikki - science park and ecological housing.”³² Creating positive differentiation through unique architectural design and special neighborhood qualities is a reasonable response to the charge of ‘sameness.’ Many, however, fear that current pressure on Helsinki to compete with neighboring municipalities for high income tax payers will result ultimately in the creation of neighborhoods distinguished by their affluence, and this could threaten the social cohesion

³⁰ Interview with Mikael Sundman (November 2004)

³¹ Ministry of Environment 2002: 27,33

³² Helsinki City Council 2004:19

achieved to date through mixing.³³ One must ask whether developing exclusive residential enclaves creates, merely by contrast, less desirable ones.

³³ Interview with Alpo Uski (March 2005)

Housing and the Finnish architecture profession

Early phase

In the twentieth century Finnish architects designed houses for a wide variety of clients: wealthy individuals, real estate speculators involved in huge developments such as Töölö in Helsinki, and those providing housing to families of modest means. For a time between the 1920s and the 1950s idealism reigned with a young and optimistic generation of architects. That generation included Alvar Aalto, Erik Bryggman, Hilding Ekelund, and Yrjö Lindegren; they engaged in the polemical debates of the day, articulated the social goals of the profession, and applied their design skills to provide modern and functional housing for the masses.

General housing conditions in Finland were poor through the 1950s. In 1930 over 5000 persons in Helsinki shared a one room dwelling with more than six other persons, and tuberculosis was endemic due to the appallingly crowded conditions.³⁴ As late as 1960 only 16 per cent of dwellings in the country had bathrooms; 31 per cent central heating; 35 per cent toilets; 47 per cent running water and 89 per cent electricity.³⁵

It was therefore fitting that architects would devote their energies to the housing question in these years, and even within the provision of mass housing they worked with a range of institutional clients. In the 1920s the welfare-oriented Housing Reform Association (*Asuntoreformiyhdistys*), for instance, hired the architect Martti Välikangas to design Puu-Käpylä, wooden houses for workers in a neighborhood of Helsinki arranged according to Garden City principles.³⁶ From the 1930s the Socialist Cooperative Union made plans for workers' housing, and by 1938 the progressive Helsinki Housing Cooperative HAKA was founded by a

³⁴ Kairamo 1998:60; Lehtovuori 1999:47

³⁵ Solla et al 1991: 45

³⁶ Keinänen and Paatero 1993:16-21

group of cooperatives, and insurance and banking organizations.³⁷ It was HAKA, for instance, that developed the Helsinki's Olympic Village to house international athletes for the ill-fated games of 1940, and then for Finnish families. Enlightened industrial employers had had a tradition of building housing for their workers, but none had been as ambitious as the complex designed by Alvar Aalto between in 1937–1941 for the Ahlström company at Sunila.³⁸

Finland emerged from World War II having lost one tenth of its housing stock in the territorial concessions, facing the resettlement of the evacuees from Karelia and the reconstruction of the war damaged north.³⁹ Half a million returning war veterans also needed housing. Wood was the only building material available; nails, cement, bricks and steel were all scarce.⁴⁰ Finland had already experimented with the Do-It-Yourself construction of small wood single-family houses (the so-called Type Plan Houses) during the Depression so was well poised for a rapid response following the War. In 1942 the Finnish Association of Architects established a Reconstruction Office and Standardization Institute, providing voluntary services of architects and standards for DIY home construction. Numerous "Veterans' Houses" (*Rintamamiestalo*) of this type were built in Helsinki and around the country. Following the War, Sweden also offered Finland smaller prefabricated wooden houses to help alleviate Finland's housing crisis.⁴¹

The National Housing Production Board, or ARAVA, was founded in 1949 to address Finland's continuing needs in housing. Parliament passed the first ARAVA legislation to provide low interest government loans for the construction of economical, well-designed and solidly constructed houses in urban and rural areas.⁴² The emphasis of the first housing legislation was on improving the quality of housing for all Finns, not on providing low-income housing specifically.

³⁷ Kairamo 1998:61

³⁸ Korvenmaa 2004; Weston 1995:75-76

³⁹ Juntto 1990:379

⁴⁰ Kairamo 1998:63

⁴¹ Lehtovuori 1999: 72-79

⁴² Lindblom 1960:151

This is a critical point, and one that illustrates the difference between the Finnish approach to mass housing and that of the United States, for instance. “Social” or state subsidized housing was to be economical, but its superior design should serve as a model for housing developed in the profit-driven free-market, not the other way around.

The architectural profession was deeply involved in the early ARAVA work. ARAVA housing became equated with efficient Functionalist designs and modern dwellings for modern Finnish families.⁴³ The new housing ideals emphasized economical and healthy living: open site planning, preserving trees and natural vegetation; using the form of the terrain in residential composition; recognizing the importance of the four orientations for light and ventilation; building economically; and using durable materials.⁴⁴

The architect Hilding Ekelund (1893–1984) bears special mention here because his work – as a practicing architect, municipal building administrator, editor-in-chief of *Arkkitehti* and the first professor of housing design at what was to become the Helsinki University of Technology – established the standards for housing design in Finland for the rest of the 20th century in Finland. Ekelund’s architectural designs combine a simple elegance with empathy for their users. He was profoundly influenced by the urbanism and building culture of Italy, and on his legendary trips there beginning in the 1920s, Ekelund observed that in between the impressive but “exhausting” monumental architecture stood the *architettura minore* those “simple smooth buildings, just walls and openings but purposeful and harmonious in their proportions.”⁴⁵ Back home in Finland he designed similar simple smooth buildings with grace and visual appeal, and apartments epitomizing new notions of efficiency and comfort.⁴⁶

⁴³ Saarikangas 1993 and 2002

⁴⁴ Korpivaara-Hagman 1988:31; Nikula 1994

⁴⁵ Helander 1997:46

⁴⁶ Saarikangas 1997:221

The Olympic Village (1938-1948), one of Ekelund's best known housing schemes, employed a revolutionary open block site plan that rejected the perimeter block urbanism then typical in Helsinki and radically reinterpreted the rectilinear *siedlungen* approach popular in German housing at that time. The buildings combine harmonious and well-proportioned facades with references to Tuscan farmhouses and functionalist Nordic buildings, plus "sheltering, friendly entrances and ... small and carefully designed details in just the right place."⁴⁷

Ekelund was Finland's most outspoken champion of better housing for the masses for several decades of the 20th century. In his teaching and writing, he openly urged his fellow architects to work for the social good, arguing that this responsibility represented the highest ideal of the profession.⁴⁸ His goals were universalistic: *all* people deserve efficient, pleasant, and dignified dwellings.

Yet while so much of housing architecture of the 20th century was devoted to increasing the minimum standard, the laudable social goal of *Existenzminimum*, the 21st century raises the possibility that one size no longer fit all.⁴⁹ Thus, the question now becomes how do architects design mass housing for a presumed *diversity* of dwellers?

The current situation: from regeneration of existing housing stock to new production

The 2002 Ministry of the Environment- sponsored external evaluation of Finland's housing support program concluded that Finland is a "well-housed nation:" that Finnish housing policy has mobilized reasonably generous resources, a clear understanding of the value to society of good housing and living environments, and the political will for maintaining and improving the system. But the report also observes that while Finland is in many ways an example for other countries, the country has experienced greater volatility in its housing market than any other member of the European Union, resulting in

⁴⁷ Helander 1997:43,46

⁴⁸ Helander 1997:46

⁴⁹ Siitonen 1995:94-95

mismatches between what people can afford or what they desire and what is available in the market, especially in Helsinki. The report also warns that a “time-bomb” exists with the bulk of Finland’s existing housing stock produced since World War II, and the aging of both apartment blocks and their resident population.⁵⁰

The “time-bomb” of aging buildings forces one to look at the negative consequences of what was a virtue in Finnish housing 50 years ago: small flats in walk-up apartment buildings. These flats epitomize economy and rationality, with every centimeter planned for a 1950s family with 1950s furnishings. Now, however, these flats may remain desirable dwellings for able-bodied one or two person households but are increasingly problematic for older residents having difficulty with the stairs, and they are not attractive to families with children. To keep older people with reduced mobility in their homes in such buildings, ARA is providing grants and loans for the addition of lifts in both social rental and privately owned buildings. What this illustrates well, though, is that the functionality of one era for one set of users may not necessarily translate into functionality in a different time and for different people. The problem also underscores the urgent need to consider flexibility in the design of residential buildings.⁵¹

The first generation of buildings constructed from the 1960s with pre-fabricated concrete elements has other problems. As they pass their fortieth birthday many buildings have external walls approaching failure; with rusted reinforcing rods and cracked concrete, they will have to be reconstructed not just refaced. From 1960 until 1980 the Helsinki City Housing Production Office (ATT) produced nearly 20,000 council house dwellings, the great majority in blocks of flats. In the country as a whole, nearly 350,000 residential buildings of all types and tenures were built in the period.⁵² These buildings constructed in haste at the

⁵⁰ Ministry of Environment 2002:9,34,36

⁵¹ See, for instance, examples of Open Building work in Finland: Kahri 2004; Hankonen 1998; Tiuri 1997; Tiuri and Hedman 1998. Karin Krokfors’ 2006 thesis contributes substantially to this literature.

⁵² Helsinki City ATT 1981:7; see also Table H

height of urbanization now also require the costly renovation of updated kitchens and bathrooms and new heating, plumbing and electrical systems. Analysts admit that the full cost of these improvements is yet to be calculated. In some geographic areas with declining population growth, cost-benefit analyses may favor demolition rather than renovation.⁵³

The second problem identified by the external evaluation is the mismatch between what people desire, what they can afford, and, crucially, what housing is available. In part the problems are simply quantitative. Building costs have increased, which makes the developers of housing uncertain about the profitability of new ventures and reluctant to undertake new projects. On the other hand, the currently low interest rates encourage developers into quick-profit private-sector building rather than the more controlled production of social housing with government loans or interest subsidy commercial loans. The result is that demand still outstrips supply in Helsinki especially.

Although the low interest rates on mortgages have enabled more people to purchase their own homes, the demand for affordable rental housing in particular remains high. In Helsinki there are over two applicants for every place in subsidized rental accommodation, and over 87,000 applicants in the queue nationwide.⁵⁴ Despite the excess demand, the 10–20 per cent of applicants deemed in “urgent need” of housing are always offered places. And those wanting rental apartments in Helsinki usually find them if they are prepared to move further from the center, to less desirable areas, and into bigger (and more expensive) apartments of which there is an oversupply. Helsinki plans the construction of 3,500 new dwellings each year from 2004–2008, nearly 60 per cent of which would be subsidized.⁵⁵ But many feel that these ambitious plans will not be enough to alter significantly the current imbalance between supply and demand of social rental housing in Helsinki.

⁵³ Helsinki City Council.2004:12-13

⁵⁴ Statistics Finland 2004a:15; Interview with Ari Laine, ARA (March 2005)

⁵⁵ Helsinki City Council 2004:21.

A qualitative mismatch also exists between housing available and what people actually want, especially in Helsinki. Minimum standards have increased, especially as regards room sizes, built-in furnishings and appliances, and accessibility. Research suggests current residents of apartment buildings want better outdoor spaces (well designed courtyards with less parking and asphalt); bigger balconies; more storage; common rooms for residents; basement rooms for businesses, services and hobbies; some duplex garden-side apartments that offer the qualities of single family homes to households with children; and the ability to make conversions in and between apartments.⁵⁶

Young people who moved to Helsinki in large numbers in the 1990s now have families, and they find it easier to purchase family homes in Espoo or Vantaa than in Helsinki. Only 20 per cent of all households in Helsinki consist of families with children. This situation has caused the city to rethink its emphasis on compact flats in multistory apartment blocks. Families with children seek direct access to gardens.⁵⁷ The current Helsinki Housing Programme calls for the construction of more terraced houses, and an increase in average apartment size from the current 63m² to 75m² by 2008.⁵⁸

Well-off residents also want more choices in housing and this has become a critical issue for city of Helsinki, as mentioned earlier in the discussion of social cohesion. All municipalities compete for residents with high incomes who pay similarly high taxes, none more so than in the Helsinki metropolitan region. No municipality wants to be saddled with the extra welfare costs of low-income households, or to become a regional reservoir for social housing. So while addressing the urgent question of affordability, city officials now believe that they must also offer greater free market choices to better off residents to keep them in Helsinki. The city housing plan repeatedly uses terms like "choice," "variety," and "competitiveness."

⁵⁶ Helsinki City Council 2004:17; Silvennoinen and Hirvonen 2002

⁵⁷ Juntto 2004:34

⁵⁸ Helsinki City Council 2004

In addition to the “time-bomb” and “mismatch” problems identified by the Ministry of the Environment’s external evaluation, the heightened awareness of sustainability in housing and urban design and the new impetus to build “compact” cities demands new solutions for high-density low-rise housing in particular.⁵⁹ Helsinki is using remediated land on previously industrial waterfronts – Vuosaari, Herttoniemi, Arabianranta, Kalasatama, Ruoholahti, Jätkäsaari among others – to create new mixed use communities. By bringing housing to the center and to old harbor areas, Helsinki is consciously increasing its attractiveness to the creative class (a national target) and affluent tax payers (a local target)⁶⁰. Environmental activists are also advocating more ‘green’ building, including recyclable construction materials, use of building materials with less embedded energy, more recycling of water, reduced energy consumption in building operation, and so on.⁶¹

In summary then, as housing authorities and designers in Finland look to the future, they will confront major challenges: the immediate and critical renovation needs of buildings that would be considered ‘middle aged’ in human life span terms; addressing the fit between the housing needs and preferences of Finland’s varied households and the housing available; and, with the goal of sustainable living in mind, creating intelligent housing alternatives for people.

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⁵⁹ Hautajärvi 2005:11

⁶⁰ City Planning Department 2006:10-11

⁶¹ Solla et al 1991:70

Glossary

- ARA (*Valtion Asuntorahasto*)** Established in 1990, the Housing Fund of Finland finances and administers all national government housing subsidies. The first state housing institution was the Housing Production Committee (*Asuntotuotanto Toimikunta*), founded in 1949, followed by the National Housing Board, established in 1966. Unlike the loans of its immediate predecessor the National Housing Board, ARA loans are "off budget." Through securitization, ARA accesses international money markets by refinancing its existing debts. Finland was the first country in Europe to securitize old loans as a way of raising new funds.
- ARAVA:** Originally the National Housing Production Committee (*Asuntotuotanto Toimikunta*), established in 1949 to offer subsidized loans for housing construction. ARAVA loans are now given for producing, acquiring and renovating housing.
- ATT (*Helsingin kaupungin asuntotuotantotoimisto*)** The Helsinki Housing Production Department (ATT) produces rental homes, owner-occupied homes and right-of-occupancy housing for the City of Helsinki. The ATT builds and repairs homes according to the City's housing development plan and the residents' wishes, aiming at good quality and economical life cycle costs.
- Council Housing (*kunnan/kaupungin vuokra-asunnot*):** Rental apartments owned and managed by municipality-controlled management companies. Helsinki has 21 such companies with geographically-defined jurisdictions around the city. Council housing typically has been constructed and/or renovated with ARAVA loans, resulting in strict quality and rent controls. Tenant eligibility is needs-tested, and lifetime security of tenure is guaranteed.
- Detached or semi-detached housing (*omakotitalot*):** Typically single family detached homes that are owner-occupied.
- Developer (*Rakennuttaja*)** Helsinki city has its own office that constructs subsidized housing, the ATT (*Helsingin kaupungin asuntotuotantotoimisto*). Other non-profit developers (*Yleishyödylliset rakennuttajat*) qualifying for ARA interest-subsidy support for the construction of social housing include VVO Rakennuttaja Oy (the largest and most important), SATO-Rakennuttajat Oy, Etelä-Suomen YH-rakennuttajat, Asuntosäätiö (the Housing Foundation) and HOAS (for student housing).
- HITAS system:** In Helsinki, because the municipality owns the great majority of buildable land, it is able to lease its land to housing developers with certain price and quality stipulations. The purchase prices of these homes are meant to be affordable to ordinary wage and salary earners. To protect against speculation, the resale prices of HITAS dwellings have been regulated, but this is now under discussion.
- Housing Allowance (*asumistuki*):** Allowances cover 80% of 'reasonable' housing costs, including rent and utilities, exceeding a deductible set annually by the government. Allowances are paid to households and are needs-tested. The Finnish social insurance system KELA administers the general housing allowance, and also specific housing allowances for older people and students.
- Housing corporations (*Asunto-osakeyhtiöt*):** This system is typical for owner-occupation in blocks of flats in Finland. Legally, occupants of dwellings in housing corporations hold shares that entitle them to occupy the dwelling. They are free to sell to whomever they choose and at the price they choose; in some corporations other shareholders have first opportunity to buy. Under this system, owners are free to rent out their flats at free-market rates. The City of Helsinki owns some flats in private housing corporations and lets them at subsidized rents to eligible households.

Means-testing and needs-testing benefits: Means-testing judges the economic poverty of a household in order to determine eligibility for benefits; needs-testing typically includes not just income but other social criteria and capability handicaps to determine eligibility.

Part-ownership housing (*Osaomistusasunnot*): This new scheme extends home ownership to more people. Residents of state-subsidized part-ownership housing first purchase a 20% share in their accommodation, and then have right of residency under a fixed-period tenancy, during which time they pay rent to the majority owner. Eligibility is needs-tested. At the end of this tenancy, residents may buy the flat or house. Part ownership schemes are also run by private housing companies.

Real estate management companies (*kiinteistöyhtiöt*) In Helsinki, these are city-owned companies that in turn own and manage council houses. Each geographically-focused company is governed by a five-person board consisting of two representatives of political parties in the city council, two representatives of tenants, and one company or city official. The companies are self-supporting from rents collected, but they do secure ARAVA loans and ARA grants for major renovations and energy-saving improvements. Each company typically manages ten or more 'rent-defining units' (in Maunula, the Sahanmäki towers and slab apartment buildings form one rent-defining unit, for instance). Rents are now equalized across the units controlled by each management company, so units share the burden of new buildings and major renovations.

Right-of-occupancy housing (*Asumisoikeusasunnot*): This scheme helps people build equity. Residents pay a right-of-occupancy fee of 15% of the purchase price of the accommodation and thereafter a monthly occupancy fee. Eligibility is needs tested. Residents are protected against unilateral termination of the agreement by owners. When right-of-occupancy residents leave the accommodation they are able to redeem their original payment adjusted to a construction cost index.

Selective housing policy: Selective housing policy targets benefits, such as subsidized rental housing and cash allowances, on those households determined the neediest.

Social housing: This term is more general than, but includes, municipally controlled 'council' housing. Social or subsidized rental housing is constructed or acquired with ARAVA loans (*Arava-lainat*) or interest-subsidy loans (*korkotukilainat*). In 2003 social rents averaged 8.37 Euros per square meter, approximately 81 per cent of free-market rents. Tenant eligibility is needs-tested. Eligibility criteria for housing built with interest-subsidy loans tends to be less stringent than that for housing built with ARAVA loans. So long as loans are in force – the term is typically 35-45 years – rents are controlled and eligibility criteria enforced.

Social insurance institution of Finland – KELA: This institution administers Finnish social welfare benefits, including health care, pensions, unemployment payments, disability benefits, and housing allowances. In 2000, this social expenditure represented approximately 25.2 % of Finland's GDP, just below the EU average.

Universalistic housing policy: Universalistic housing policy offers a variety of government supported benefits to all, irrespective of income or tenure.

An Overview of State Support for Housing in Finland

Mechanism	Renters	Owners
State support for <u>provision of housing</u>	<p>ARAVA <u>loans</u> to local authorities, public sector organizations, insurance companies, and non-profit organizations for construction of new rented housing, right-of-occupancy dwellings, or the renovation of rented housing for low-income tenants.</p> <p>ARA <u>interest subsidies</u> on loans (on interest over 3.4%) from private banks and other financial institutions for construction of rental housing. Qualifying tenants have higher income limits than ARAVA loans buildings.</p> <p><u>Supplementary loan guarantees</u> for construction of rented and right-of-occupancy housing</p> <p><u>Equity grants</u> with ARAVA loans for construction of housing for students, refugees and homeless people (from 2005 called “new investment” grants).</p> <p><u>Repair grants</u> for old and disabled people, housing in certain suburbs, renovations for barrier-free access, eliminating health hazards, reducing energy consumption, protecting ‘heritage’ buildings.</p>	<p>ARA <u>interest subsidies</u> for construction of part-ownership and other owner-occupied housing</p>
State assistance on <u>housing demand</u>	<p><u>Housing allowance</u> equaling 80% of “reasonable” expenditure depending on household size and income</p>	<p><u>Tax rebate</u> equal to 29% of mortgage interest cost</p> <p><u>Exemption from property transfer tax</u> for first-time buyers.</p> <p><u>Exemption from capital gains tax</u> (normally 29%) after two years ownership.</p> <p>ARA <u>loan guarantees</u> for 85% of purchase price</p> <p><u>Interest subsidies</u> on loans to individual borrowers with certain social and/or financial circumstances.</p> <p><u>ASP savings</u> and loans schemes for young first-time home buyers.</p>

Sources: Housing Fund of Finland (www.ara.fi), Ministry of Environment (www.vmparisto.fi)

Tables

A. Construction of New Dwellings by Type of Subsidy, all Finland

	1980	1990	2003	2004	2005
Dwellings with ARAVA loans					
rental, including student right-to-occupancy	10,840	15,065	2,758	1,761	1,033
owner-occupied	--	61	449	282	163
	13,954	3,420	--	--	--
Dwellings with interest subsidy loans					
building new rental		1,656	1,637	1,995	2,331
building new right-of-occupancy		--	189	218	252
building new owner-occupied		--	864	504	286
acquiring new owner-occupied		--	19	8	--
Total subsidized production	24,794	20,202	5,916	4,439	4,065
Total dwellings completed	49,648	65,397	28,101	30,662	34,177
per cent subsidized	49,9	30,9	21,1	14,5	11,9

Source: Statistics Finland. Construction and Housing Yearbook 2006 (tables 200, 202)

B. State Housing Supports in Millions of Euros at Current Prices

	1991	1996	2001	2006	2007
Housing allowances, general¹⁾	215	378	407	433.5	439
Support for production and renovation²⁾	454	378	157	185	141
Mortgage interest deductions	706	404	440	460	500

¹⁾ exc. pensioners' and students' housing supplements

²⁾ inc. interest subsidy gov't housing loans and renovation subsidy

Source: Statistics Finland. Construction and Housing Yearbook 2005 (table 6);

ARA: Housing Fund of Finland: Asumisen tuki Suomessa tukimuodoittain (1.9.2005),

<http://www.ara.fi/download.asp?contentid=20208&lan=fi>;

Ministry of Environment: Ympäristöministeriön hallinnonalan vuoden 2007 talousarvioehdotus

(27.7.2006, table on the page 20), <http://www.ymparisto.fi/download.asp?contentid=54271&lan=sv>

C. Residential Building Types (as a percentage of dwellings)

	Helsinki				Helsinki region ¹⁾	All Finland
	1970	1980	1990	2005	2005	2005
Detached Family	8.1	6.6	7.5	7.4	14.6	40.4
Row or Terraced	1.7	3.6	5.2	5.6	9.0	13.6
Apartment building	88.2	87.9	85.1	85.5	75.1	43.8

¹⁾ Helsinki Metropolitan Region municipalities: Helsinki, Espoo, Vantaa

Source: *Statistical Yearbook of the City of Helsinki 2005 (table 5)*;
Statistics Finland: Asuntokanta 2005; Statistics Finland: Altika database

D. Housing by Type of Tenure (as a percentage of dwellings)

	1950	1980	2005
Owner occupied			
Helsinki	24.3	49.7	45.0
all Finland	55.9	61.0	58.3
Rental			
Helsinki	75.3	42.7	45.0
all Finland	42.7	29.2	31.0
Other/unknown			
Helsinki	0.4	7.6	10.0
all Finland	1.4	9.8	10.7

Source: *Statistics Finland. Construction and Housing Yearbook 2006 (table 213)*;
Statistics Finland: Altika database; Helsinki City of Urban Facts 2006: Facts about Helsinki 2006:8

E. Dwelling Units by Density, 2004

	Average floor area/dwelling unit/m ²	Floor area/person/m ²
Helsinki region		
Helsinki	62.9	33.7
Espoo	80.3	35.1
Vantaa	74.0	33.7
Neighboring municipalities		
Tuusula	92.7	37.0
Järvenpää	78.4	35.2
Kirkkonummi	96.0	38.6
all Finland	79.3	37.1

Source: *Statistics Finland. Buildings, Dwellings and Housing Conditions 2004 (table 15, pp. 143-144)*

F. Average Density of Dwelling Units 1960-2004

	1960	1970	1980	1990	2004
Helsinki					
floor area/dwelling unit/m ²	51,3	54,8	57,8	60,3	62,1
floor area/person/m ²	17,0	20,7	26,9	30,7	33,7
all Finland					
floor area/dwelling unit/m ²	51,1	60,0	69,3	74,4	77,6
floor area/person/m ²	14,2	18,9	26,3	31,4	37,1

Source: City of Helsinki Urban Facts. Statistical Yearbook of the City of Helsinki 2005 (table 6);
City of Helsinki Urban Facts: Asuminen Helsingissä 1950-2004 (table 23), statistics 21/2006

G. Cost of Rental Housing (euro/m²/month) and Housing Prices (euro/m²) IV/2006

	IV/2006 €	Change IV/2005-IV/2006 %
Helsinki		
Average free market		
all Helsinki	12.33	2.4
1 (south city centre)	13.46	3.5
2 (west/north city centre)	13.24	3.9
3 (middle)	10.95	-1.7
4 (north/east)	10.13	0.7
Average ARAVA rental		
all Helsinki	8.62	4.3
1 (south city centre)	--	--
2 (west/north city centre)	9.08	3.2
3 (middle)	8.57	6.8
4 (north/east)	8.34	3.1
Housing prices*		
all Helsinki	3173.0	8.0
1 (south city centre)	4428.0	9.1
2 (west/north city centre)	3297.0	8.6
3 (middle)	2370.0	5.8
4 (north/east)	2099.0	5.4
all Finland		
Average free market	9.18	2.5
Average ARAVA rental	7.75	2.7
Housing prices*	1893.0	6.6

* Average selling prices for units in old blocks of flats

Source: Statistics Finland. Construction and Housing Yearbook 2006 (table 223);
Statistics Finland: Altika database (prices last updated 2007-01-30, rents 2007-02-07)

H. Residential Buildings by Year of Construction

	-1920	1921-1939	1940-1959	1960-1969	1970-1979	1980-1989	1990-1999
Helsinki	1,218	2,834	6,171	3,997	3,593	7,106	4,283
all Finland	77,784	80,695	282,014	145,803	208,816	274,238	176,821

Source: Statistics Finland: Buildings, Dwellings and Housing Conditions 2003:32;
City of Helsinki Urban Facts: Helsingin seudun aluesarjat: rakennukset 31.12.2002,
<http://www.aluesarjat.fi/>

References

- Asuminen Helsingissä 1950–2004 (2006). Helsingin kaupungin tietokeskus, tilastoja 2006:21.
- Baunkjaer, Claus (2004) Housing taxation, in Lujanen, Martti ed (2004) *Housing and Housing Policy in Nordic Countries* Copenhagen: Nordic Council of Ministers, pp155-177
- Bengtsson, Bo (2001) "Housing as a Social Right: Implications for Welfare State Theory," *Scandinavian Political Studies* 24(4):255-275.
- Bengtsson, Bo (2004) "The right to housing in universal and selective housing regimes" unpublished paper presented at European Network for Housing Research (ENHR) Conference, Cambridge, England
- Hankonen, Johanna (1994) *Lähiöt ja Tehnokkuuden Yhteiskunta (New Suburbs and the Society of Efficiency)* Helsinki: Gaudeamus/Otatieto
- Hankonen, Johanna (1998) "Tenants as Customers: Tirmula Project 1996-1998" unpublished paper presented at the CIB Task Group 26 Open Building Implementation meeting, Helsinki.
- Hautajärvi, Harri (2005) "Kestäviä kaupunkeja (Sustainable cities)," *Arkkitehti* 1:10-11
- Heikkilä, Matti and Mikko Kautto, eds. (2004) *Welfare in Finland*. Helsinki: STAKES
- Helander, Vilmelm. (1997) Hilding Ekelund in the vanguard of Finnish architecture: a small portrait, in Tuomi, Timo ed *Hilding Ekelund 1893-1984:Architect* Helsinki: Museum of Finnish Architecture pp 8-47
- Helsingin Seudun Aluesarjat. (<http://www.aluesarjat.fi/>)
- Helsinki City Council. (2004) *Monimuotoisen Asumisen Helsinki: Asunto-Ohjelma 2004-2008* (published in English as *A Variety of Ways to Live: Helsinki Housing Programme 2004-2008* http://onet.tehonetti.fi/asuntoasiainosasto_fi/onet/?group=00000032&mag_nr=2)
- Helsinki City Housing Affairs Division
http://onet.tehonetti.fi/asuntoasiainosasto_fi/onet/?group=00000032&mag_nr=2
- Helsinki City Housing Production Office (1981) *ASUNTO 80* Helsinki: ATT
- Helsinki City Planning Department (2003) *Detailed Planning* Helsinki: City Planning Department

- Helsinki City Planning Department (2006) *Helsinkiiläinen Kerrostaloatlas 2006 (The Block of Flats Atlas Helsinki 2006)* selvityksiä 2006:6
<http://www.hel2.fi/ksv/hela/Kaupunkisuunnittelulautakunta/Esityslistat/liitteet/061510074.pdf>
- Helsinki City Urban Facts (2006) *Facts about Helsinki 2006:8*
http://www.hel2.fi/tietokeskus/julkaisut/pdf/tt06_eng_net.pdf
- Helsinki City Urban Facts (2006) *Statistical Yearbook of the City of Helsinki 2005*
http://www.hel2.fi/tietokeskus/julkaisut/pdf/06_05_22_askelo_vj21.pdf
- Housing Fund of Finland – ARA (2004) *Housing Fund of Finland: Financing Social Housing* Helsinki: ARAJuntto, Anneli (1990) *Asuntokysymys Suomessa: Topeliuksesta Tulopolitikkaan* Helsinki: Valtion Painatuskeskus Asuntohallitus
- Housing Fund of Finland - ARA (2005) Asumisen tuki Suomessa tukimuodoittain (1.9. 2005) <http://www.ara.fi/download.asp?contentid=20208&lan=fi>
- Juntto, Anneli (2001) "Miksi pääkaupunkiseutua vaivaa toistuva asuntopula?" *Yhteiskuntasuunnittelu (The Finnish Journal of Urban Studies)* 39(3):51-61
- Juntto, Anneli (2004) "Asumisen kulutus tulevaisuudessa," *Aratieto: Valtion Asuntorahaston Asiakaslehti (Housing Fund of Finland Customer Magazine)* 1:34
- Kahri, Esko (2004) "PlusHome – Open Building Concept" unpublished paper presented at the Open Building Conference, Paris 2004
- Kairamo, Maija (1998) "Finnish Modernism: Future Ideas and Hard Realities," in Wedebrunn, Ola ed., *Modern Movement in Scandinavia: Vision and Reality*. Copenhagen: Fonden til Udgivelse af Arkitekturtidsskrift, p56-67
- Kautto & Moisio (2004) Poverty in Finland: A comparative approach in Heikkilä, Matti and Mikko Kautto, eds. *Welfare in Finland*. Helsinki: STAKES, p201-224
- Kautto & Uusitalo (2004) Welfare policy and income distribution: the Finnish experience in the 1990s, in Heikkilä, Matti and Mikko Kautto, eds. *Welfare in Finland*. Helsinki: STAKES, pp83-102
- Korpivaara-Hagman, Aila (1988) "Aravan tarina (The story of Arava subsidized housing in Finland)," *Arkkitehti* 3:31-34.
- Korhonen, Erkki (2004) *Asumisviihtyvyyys Helsingin kaupungin vuokrataloissa (Feeling at home in Helsinki City council houses)* Helsinki: City of Helsinki Urban Facts
- Korvenmaa, Pekka ed. (2004) *Alvar Aalto Architect, Volume 7: Sunila 1936-54* Helsinki: Alvar Aalto Foundation

- Keinänen, Timo and Kristiina Paatero eds. (1993) *Martti Välikangas 1893-1973 Arkkitehti* Helsinki: Museum of Finnish Architecture (Abacus Ajankohta 4)
- Krokfors, Karin (2006) *Aika ja asuntoarkkitehtuuri: Typologinen joustavuus asuntosuunnittelun uudistamisen välineenä. (Housing architecture in time: typological flexibility as a means of renewing housing design)*. Licenciate thesis, Department of Architecture, Helsinki University of Technology.
- Kuusi, Pekka (1961) *60-luvun sosiaalipolitiikka*. Helsinki: WSOY
- Lehtovuori, Olli (1999) *The Story of Finnish Housing Architecture*. Helsinki: Rakennustieto Oy.
- Lehtovuori, Olli (2001) "Asuntosuunnittelun etiikka ja estetiikka (The ethics and aesthetics of housing design)," *Arkkitehti* 1:88
- Lindblom, Olavi (1960) "ARAVA Tänään (ARAVA Today)," *Arkkitehti* 10-11: 151
- Lujanen, Martti ed (2004) *Housing and Housing Policy in Nordic Countries* Copenhagen: Nordic Council of Ministers
- MacKeith, Peter (1999) "Asumisen laatu (The quality of housing)," *Arkkitehti* 4:28
- Ministry of the Environment, Finland (2002) "Evaluation of Finnish housing finance and support systems" Helsinki: Ministry of Environment
- Ministry of the Environment, Finland (2004) Supporting Home Ownership <http://www.ymparisto.fi/default.asp?node=10794&lan=en>
- Ministry of the Environment, Finland (27.7..2006) Ympäristöministeriön Hallinnonalan Vuoden 2007 Talousarvioehdotus <http://www.ymparisto.fi/download.asp?contentid=54271&lan=sv>
- Nikula, Riitta (1993) *Armas Lindgren 1874-1929 Arkkitehti*. Helsinki: Museum of Finnish Architecture
- Nikula, Riitta (1994) *Sankaruus ja Arki: Suomen 50-luvun miljö (Heroism and the Everyday- Building in Finland in the 1950s)* Helsinki: Museum of Finnish Architecture
- Niva, Matti (1989) *Bostad, politik och marknad: En jämförande studie av bostadspolitik i efterkrigstidens Sverige och Finland*. Stockholm: Nordiska Institutet för Samhällsplanering
- Norri, Marja-Riitta (1983) "Unohtaako tämän päivän arkkitehtuuri sosiaalisen tehtävänsä? (Is architecture forgetting its social function?)" *Arkkitehti* 8:13

- Pallasmaa, Juhani (1994) "Identiteetti, intimitetti ja kotipaikka – huomioita kodin fenomenologiasta (Identity, intimacy and domicile – notes on the phenomenology of the home)" *Arkkitehti* 1:14-25
- Pietilä, Hilikka (2001) "Building a Welfare Society: The Finnish Experience." *Development* 43 (2):43-46.
- Regeringskansleit (2004) *Housing and Housing Policy in Sweden*, Stockholm
- Russell, James (2000) "Housing subsidies: America's misplaced priorities," *Architectural Record* December: 132-135
- Saarikangas, Kirsi (1993) *Model Houses for Model Families: Gender, Ideology and the Modern Dwelling. The Type-Planned Houses of the 1940s in Finland*, Helsinki: Societas Historica Fennica.
- Saarikangas, Kirsi (1997) "A Rational and Functional Floor Plan," in Timo Tuomi ed. *Hilding Ekelund 1893-1984: Architect* Helsinki: Museum of Finnish Architecture
- Saarikangas, Kirsi (2002) *Asunnon Muodonmuutoksia: Puhtauden estetiikka ja sukupuoli modernissa arkkitehtuurissa (Transformation of the Dwelling: Gender and the Aesthetics of Cleanliness in Modern Architecture)* Helsinki: Suomalaisen Kirjallisuuden Seura
- Sen, Amartya (1999) *Development as Freedom*. Oxford: Oxford University Press.
- Siitonen, Tuomo (1995) "Asuntoarkkitehtuuri ja mahdollinen muutos (Housing architecture and the possibility of change)" *Arkkitehti* 4:94-95
- Silvennoinen, Heli and Jukka Hirvonen (2002) *Koti kerrostalossa: Aukkaiden arjen kokemuksia asumisestaan (Home in a multistory apartment block)* Helsinki: Ministry of the Environment
- Sinko, Pekka (2005). "Työllisyys ja tuottavuus elintasoeron osatekijät Pohjoismaissa" teoksessa: Tuottavuus ja työllisyys: mitä opittavaa muista Pohjoismaista? Valtioneuvoston kanslian raportteja 3/2005.
<http://www.vnk.fi/julkaisukansio/2005/r03-tuottavuus-ja-tyoellisyys/pdf/fi.pdf>
- Social Insurance Institution of Finland – KELA (2003) *Annual Report 2003*. Helsinki: KELA
- Solla, Pertti et al (1991) *Asuntorakentamisen muutos: Miljoo 2000 Projektin raportti (Housing for Change: Millieu 2000 Project Report)* Helsinki: Ministry of Environment and TEKES
- Statistics Finland (2004a). *Sociaalisen asumisen tilastoja (Statistics of Social Housing in Finland)* Helsinki: Ministry of Environment and ARA

Statistics Finland (2004b) *Rakennukset, asunnot ja asuinolot 2003 (Buildings, Dwellings, and Housing Conditions)*. Helsinki: Tilastokeskus. Asuminen 2004:11

Statistics Finland (2005) *Rakentaminen ja asuminen vuosikirja 2005 (Construction and Housing Yearbook 2005)* Helsinki: Tilastokeskus.

Stephens, Mark, Nicky Burns and Lisa MacKay (2002) *Social Market or Safety Net? British Social Rented Housing in a European Context* Bristol: The Policy Press

Tiuri, Ulpu (1997) *Asunnon Muunneltavuus ja Avoin Rakentaminen (Adaptability of Apartment House Dwellings and Design Strategies based on Open Building Principles)* Licentiate Thesis, Department of Architecture, Helsinki University of Technology

Tiuri, Ulpu and Markku Hedman (1998) *Developments Towards Open Building in Finland* Helsinki: Helsinki University of Technology, Department of Architecture

Tuomi, Timo ed (1997) *Hilding Ekelund 1893-1984: Architect* Helsinki: Museum of Finnish Architecture

Urban Audit (reference mentioned on p 6)

Vihavainen, Maija and Virva Kuparinen (2005a) *Asuntojen hinnat Helsingissä loka – joulukuussa 2004*. Helsinki: Helsingin kaupunki tietokeskuksen verkkojulkaisuja 2005:5.

Viitamäki, Heikki (1999). Asumisen tuet vuosina 1990–1999. Valtion taloudellisen tutkimuskeskuksen keskustelualoitteita n:o 196.

Vihavainen, Maija and Virva Kuparinen (2005b) *Asuntojen vuokrat Helsingissä loka – joulukuussa 2004*. Helsinki: Helsingin kaupunki tietokeskuksen verkkojulkaisuja 8/2005

Weston, Richard (1995) *Alvar Aalto*. London: Phaidon