Helsinki, Finland Michael Michalek

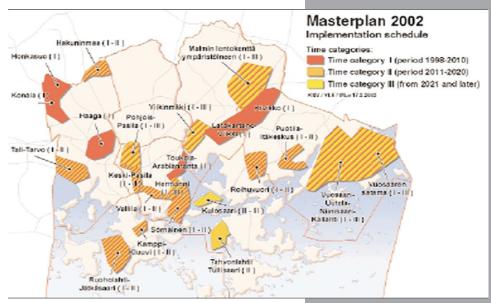
Close to the Forest,

Nature in the City



Since Finland declared their independence in 1917, they have become one of the world's wealthiest nations. What was once a predominantly agrarian country, rapidly transformed into a modern industrial urban society. The main source of economic income became based upon paper making and engineering, and a significant portion of the population shifted from rural areas to more urban settings in Southern Finland. Within the past twenty years, Finland, more specifically Helsinki, has shifted its main economic generator to electronic and information technologies. Their shift has been quite profitable and has, again, changed their urban context. More importantly, the resulting wealth has allowed Helsinki to think progressively about open space planning, development, and management.

Helsinki is a forrested maritime city with a close connection to nature. Over one third of the cities surface area is covered by green spaces. The constructed parks and closely monitored green spaces are an essential part of the cityscape, and are integral to enhancing the quality of life for the residents of Helsinki.



City Statistics

City Population: 559,046

City Area: 686 sq.km

Density Level: 2,993 inhabitants per sq.km

Park Acreage: 4,450

Bike Path (in km): 950

Work Force:

Agricultural .1%
Manufacturing 20.60%
Services 78.7%

Average Inhabitant per Dwelling: 1.5

Context

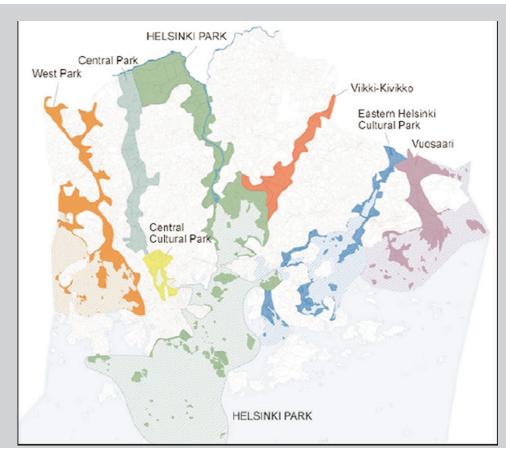
There is an intricate network of departments responsible for planning, constructing, and maintaining all of Helsinki's open spaces. Supervising these departments are various committees, among which is The Public Works Committee.

The Public Works Committee directs and supervises the activities of the Public Works Department. In particular, the committee defines the objectives for the department's operations each year, and then evaluates their progress. All plans, prepared by civil servants in the Public Works Department, are submitted to the Committee, who alone has the authority to approve.

Underneath the Public Works Department is The Street and Park Unit. They are responsible for constantly developing and maintaining the network of green areas.

Aside from departmental organization, there is a master plan which gives general guidelines for the development of Helsinki green spaces. The green area program is composed by the residents, civil servants, and decision-makers. It lasts ten years, after which a new program is composed.

This organization has lead to a variety of multifaceted parks in Helsinki. The styles and values of different communities are reflected in each open space, and alternate between districts.



§(Left) A diagram of Helsinki's "Green Fingers" conceptual plan. The goal of their open space plan is to extend large habitat corridors from the densely populated shoreline to the more rural edges of the greater Helsinki region.

Major Components

a. Connective corridors

The largest continuous forested areas in the city may be found in the Central Park, Tali, Munkkiniemi, Viikki, Kivikko, Laajasalo, Mustavuori and Uutela.

b. Anchors

The City of Helsinki owns over 10,000 hectares of forest across over 10 municipalities in Uusimaa.

Within Helsinki's borders, there are approximately 3,800 hectares of forested green areas. The City of Helsinki owns roughly 3,500 hectares of forest in the Nuuksio highland lake area in Espoo and Vihti, and these are for outdoor recreation use. In addition to these, the City of Helsinki owns large areas of forest in Sipoo.

c. Civic

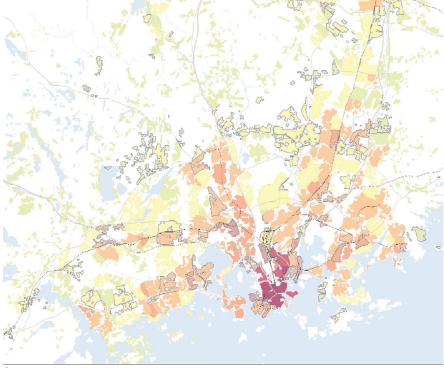
Helsinki Park

d. Neighborhood Parks

Similar to the American P-patch, Helsinki has allotment gardens. Allotments are popular leisure spots for much of the population. They are used to grow vegetables and root crops for cooking as well as flowers and bushes for pleasure.

Allotments were designated in the early decades of the 1900s for the purposes of the working population. Open green spaces and parks were making the shift from an elitist leisure activity to a classless type of recreation. In addition, the government of Helsinki intended the implementation of these allotments to help alleviate many of the health issues of the time.

The city leases the land areas to associations responsible for allotments. These associations take care of administration and monitor compliance to the use and maintenance instructions. Individual tenants deal directly with the associations.



§(Above) Map showing efficiency of building density ranging from 2.1m³ to 0.1m³

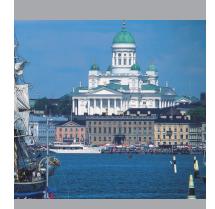


...(Above) The Esplanade's linden uplighted Photo: Seppo Kaksonen.

**(Bottom) An example of the maritime habitat which is protected by careful planning.



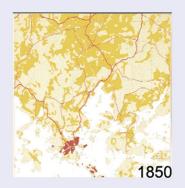
**(Below) A picture from the Helsinki central park water zone which demonstrates the necessity of the delicate balance between natural anvironments and human construction due to their proximity.

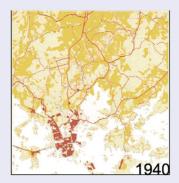


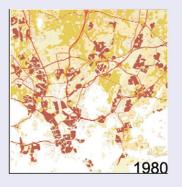
Efficiency on built areas (built m2/areal m2).

1.5 - 2.1 1.0 - 1.5 0.8 - 1.0 0.6 - 0.8 0.4 - 0.6 0.2 - 0.4 0.1 - 0.2 0.0 - 0.1

Non-residental floorspace is > 50% of total floorspace







§(Above) The diagrams demonstrate the dramatic change in density which occured just over a 100 year span, as well as provide an understanding of development patterns over time.

Funding Mechanism and/or Planning

Funding for all services related to the construction and maintenance of open space in Helsinki is provided by the government. There are 6 divisions underneath the Public Works Department who are responsible for design, creation, and maintenance of open space. Those divisions are:

- -Architectural division
- -Administration Division
- -PWD-Construction Management
- -PWD-Technical Services
- -PWD-Environmental Services
- -Street and Park Division

Issues

- •Increasing Population •Maintaining Cultural history through site development
- •Relocation of Industry •Maintaining Integrity and density of open space
- Industrial Site Conversion

Initiatives and Ideology

Instead of segregated, monotonous "dormitory suburbs" Helsinki's urban construction policies aim to develop areas that are richly diversified in terms of their functions and visual townscape qualities.

Following the same lines, in terms of diversified functions, are the parks and green areas. Helsinki has adopt a concept where they see the whole city as The Helsinki Park. The concept represents a kind of experimental laboratory for the development of a new park culture. There hope is that this will "be an important comfort factor in the future that will further enhance the city's recognition."

Within the boundaries of the ocean and river park extending from Harmaja to Haltiala are many of Helsinki's most valuable attributes: the sea, unique architecture, cultural history preserved in manor estates, and natural features in greenbelt areas. The development of regional recreational facilities and parks which take advantage of these attributes, will be intensified. Particularly Helsinki intends to focus their efforts in the city center, where park areas will expand and waterfronts will be freed up for residential use.

Lessons Learned

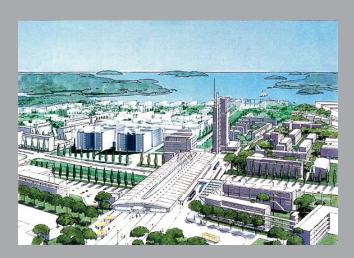
One of the main lessons to be learned from Helsinki, is how to effectively manage and maintain a large network of open space. Helsinki has an impressive departmental structure to their government, enabling them to constantly monitor and improve all of their green spaces.

Another factor in Helsinki's great open space management is their guiding philosophy of a "green finger" network. The "green finger" division is a preservable plan which provides a constant balance of open green space for all the inhabitants. In other major cities such as Los Angeles, Califonia and New York City, New York green open space is economically distributed to the wealthier citizens who can afford to pay for it. Within the past 20 to 30 years, these larger cities have begun to realize the social injustice of open space allocation, but from earlier on, Helsinki understood the benefits of providing quality open green space to their working class.

Lastly, the prioritizing of and respect for the environment which occurs in Helsinki, allows for a stronger system of open space sustainability. In Helsinki, it seems that the majority of the population works towards a cohesive relationship with man and the environment. The residents of Helsinki support all of the necessary legislation to provide their city with quality life-enhancing green open spaces. It seems that all of the benefits which Helsinki has are because of a difference in culture. To eventually gain these same benefits, environmental education is a necessary priority.

Story in a Box: Vuosaari

Surrounded by the sea on three sides, Vuosaari is a seaside district with many nature areas. The shores are generally open to the public. There are five small-boat marinas, with a few planned for Aurinkolahti and Vuosaarenlahti. Bathing beaches are at Rastila, Kallahti, Kallahdenniemi, Uutela and Aurinkolahti. There is a wide variety of flora and fauna, and many nature conservation areas. The area is home to the following Natura 2000 network sites: Kallahdenniemi bay; Porvarinlahti, an important wetland bird area; and Mustavuori grove. Parks, sports fileds, forests and other nature areas all provide a wide range of recreational activities.





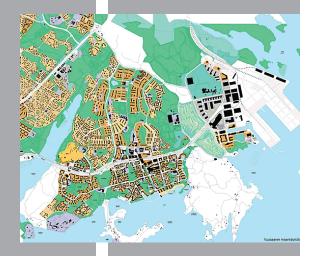
**(Above) A simple diagram indicating the regional context or Vuosaari.



**(Above) Aerial photo of Vuosaari which demonstrates the confined urban development.

**(Below Right) A plan view of the future plan for the relocation of the Vuosaari port.

**(Below Left) A professional rendering showing the envisioned future of Vuosaari.





**(Above) A plan view of the overall size and subdivion of Helsinki's Central Park. Central Park is located adjacent to Helsinki park.



**(Below) Indoor pool and sunbathing



Story in a Box: Central Park

Central Park in Helsinki is a perfect example of the mixture between man and nature which Helsinki strives to have co-exist. The park covers roughly a thousand hectacres and is 10 kilometers in length. Because it spans over such a long distance the terrain and species inhabiting it vary greatly from section to section.

Within the park there are four nature preserves at the northern end of the park. They include; Pitkäkoski deciduous forest, Haltiala primeval forest, Niskala arboretum, and Ruutinkoski deciduous forest. Along with the diversity in habitat is a diversity of fauna. Mammals living in the Central Park include elk, badger, fox, arctic hare, brown hare, weasel, raccoon dog, and muskrat. Bird species nesting in the park include black woodpecker, goldcrest, Eurasian jay, tits, dunnock, garden warbler, wood warbler, and red-breasted flycatcher.

On the outskirts of the city, silvicultural works are undertaken according to the principles of ecological management. For example, the nesting places of birds and mammals are preserved during logging. The city has a set of clearly defined and diverse management objectives including the conservation of biological diversity in forests

While 700 hectacres are devoted to nutral presevation, the resulting 300 are for the citizens to actively occupy and use. Depending on the area and season, a variety of recreational activites are available to partake in. Everything from kayaking to horse riding courses to running tracks are available. Again, everything is managed so that negative impacts (i.e. soil compaction around tree roots, erosion on shores, etc.) of constant human interaction in green spaces is kept to minimum.

Resources

- 1.) City of Helsinki Webpage. 29 January 2006 http://www.hel.fi/wps/portal/Helsinki en/?WCM GLOBAL CONTEXT=/en/Helsinki/>
- 2.) Ross De Alessi Lighting Design Webpage. 29 January 2006 http://dealessi.com/gallery.html
- The Network Of Metroplitan Regions and Areas webpage. 29 January 2006 http://www.eurometrex.org/Docs/eAtlas/HELSINKI eAtlas.pdf#search='master%20pla n%20helsinki,%20finland'>
- 4.) Helsinki Central Park webpage. 29 January 2006 http://www.hel2.fi/tietokeskus/julkaisut/pdf/05 09 15 taskutilasto englanti.pdf>
- Facts About Helsinki. City of Helsinki Urban Facts. http://www.hel2.fi/keskuspuisto/eng/1centralpark/
- **Photos retrieved from City of Helsinki website
- § Photos retrieved from EuroMetrex Pdf.
- ...Photos retrieved from Ross De Alessi webpage

Population 2001		Housing		Public Facilities		Employment		Economy	Transportation	
Inhabitants	1,304,595	Number of Dwell- ings	618,299	Hospital	67	Labour in Total	988,148	Urban Commercial Activities	Number of Cars	525,682
						Non-working	312,000	Offices	Private	87.10%
0-14years	18.20%	Apartments	65.50%	Education		Labour Force	676,109	Restaurants	Business	12.90%
15-64	70.30%	Rental Houses	39.30%	Universities	9	Unemployed	55,441	Hotels		
65+	11.60%	Built Before 1970	40.00%						Number of Bicycles	N.A.
				Cultural Institutions		Employed (jobs)	659,114	International Attractions		
		Average Inhabitants	2.00	Museums	95	Agricultural	0.10%	Airport		
		Per Dwelling		Theatres	84	Manufacturing	20.60%			
				Cinemas	65	Services	78.70%			
				Recreation (in ha)						
				Forrest	3,800					
				Parks	1,800					
				Bike Paths (in km)	950					

Economic Growth	1990	1995	2000	2005
Finland	-7.1	-3.6	-1.2	4.5
Helsinki Region	-4.1	-4.7	0.4	4.6