

Architecture in Context

Helin Workshop

Peter Davey

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With an essay by Riitta Nikula

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PETER DAVEY

MEMORY AND RIGOUR:

The architecture of Pekka Helin and his team

On a quiet street not far from Senate Square, the centrepiece of Helsinki's neo-Classical heart, is a late 1990s building that at first seems rather reticent. It is part of the government complex, and houses the Ministry for Social Affairs and Health. Unlike many of its contemporaries built in similar settings elsewhere, Pekka Helin's design does not strive to demonstrate differences with older buildings; nor does it sedulously ape them. Like the surrounding nineteenth-century tenements, it has window openings punched above each other into plane walls, with the whole topped by a sort of mansard roof. Scale and relationships of solid and void are similar to those in Classical and Jugendstil neighbours, and openings are connected by horizontal elements.

Yet, instead of projecting from the wall plane like traditional string courses, the horizontal components of the composition are in fact recessed strip windows. Instead of stucco-faced masonry or rough stone, the elevations are finished in smooth red granite slabs and the external corner, at the junction of Kirkkokatu and Meritullinkatu, is glazed to dissolve visually. The entrance is signalled by brass doors below a glazed cleft in the cladding, through which a tall atrium complete with flying bridges can be glimpsed. Inside, rose-coloured polished plaster enlivens the general feeling of restraint. Throughout, detailing

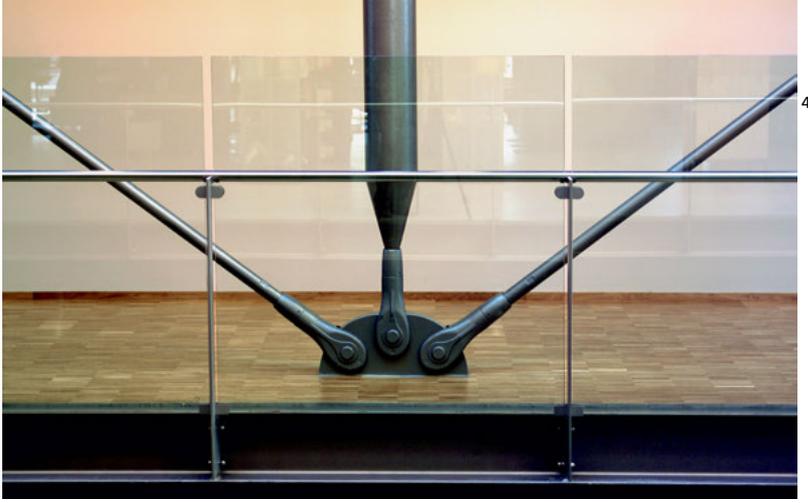
is crisp and unassertive. Simple silvery grey steel sections are clearly articulated and offset by the warmth of wood in places that are touched, handrails and fixed furniture for instance. Everything is calm, but with underlying strength.

Nowhere is this reticence better seen than in Helin & Co's music school, chamber concert hall and public library at Sello in Leppävaara, one of the district centres of Espoo, Finland's rapidly expanding second city, just west of Helsinki. The two cultural buildings are on a new market square built over supermarkets and commercial facilities at ground level. Both are largely clad in dark patinated copper elements, which are relieved by passages of glass in the foyers, letting daylight in and offering vistas of the often animated square to those involved in the usually introverted activities of the two buildings. Scale and texture are given to what could otherwise have been featureless boxes by the delicate grid of the joints between the copper cassettes, which seem to weather rather like the stone slabs they recall.

Internally, as in the ministry, you are welcomed in the building's big space, where a long bridge hovers suspended over the entrance hall, echoing a balcony on the other side of the volume. People on the upper level move at right angles to the entrance route, emphasising your own progression to the heart of the



1, 2 Ministry for Social Affairs and Health, Helsinki.
3 Sello Library, Leppävaara, Espoo; lobby.



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building. The bridge is constructed of glass and grey steel and is as clearly articulated as the bridges in the ministry. Cool metal and glass are enlivened by the warmth of red hand-polished plaster – one of Helin’s favourite materials for public buildings. Construction is intended to be direct and explicit, to the extent that the diagonal braces of the steel structure are exposed internally. But, keen as he may be on making construction in metal and glass legible (or perhaps because of the fact), Helin’s approach rarely resembles the worship of technology, characteristic of British high-tech architecture, which so often attempts to achieve ‘look! no hands’ effects. Helin & Co’s buildings clearly tell the story of how they were built.

More obviously responsive to historical context are the big urban works. Helin was master planner and architect for a large part of the Kamppi development, in which Helsinki’s central bus station disappeared underground, releasing a very big inner-city site, and creating a subterranean transport interchange with the metro system. Helin was also responsible for designing offices and part of the retail component. Here – at least in the office parts – he has been clearly influenced by the work of Sigurd Frosterus, an architect who in the early decades of the last century fought against what he considered to be the

picturesque, over-folksy wilfulness of the National Romantic school of architects like Eliel Saarinen. Frosterus and his followers replaced it with dark, stern forms of rationalised Classicism, a style in which much of the early twentieth-century commercial centre of Helsinki was constructed, notably the Stockmann department store, close to Kamppi. Helin’s brownish-red brick facades of the office buildings, simply and rhythmically penetrated by vertical rectangular windows, are clearly Frosterian. The three blocks are firmly locked into Kamppi’s elaborate underground infrastructure so that they can stare haughtily across the street to a pallid 1950s red-brick tenement.

A short distance from the Kamppi complex is a block that is even more reflective of its context. The annexe of the Parliament building is on a very tricky site, where the grid of the city shifts, leaving a vacant triangular plot across a side street from Parliament. Helin & Co won the competition for developing this site and produced a building that clearly responds to its neighbours: the Parliament House itself, a scraped neo-Classical 1920s monument by J.S. Sirén built in pink Kalvola granite, and the Hankkija Office Building, a severe predecessor of Frosterian rationalism built by Jarl Eklund in dark brown brick. In the new building, similar brick clads a triangular block containing individual offices. Attached to this is part of a glazed



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4 Sello Library, detail.

5 Kamppi Centre, Helsinki; facade of one of the office blocks.

6 Parliamentary Annexe with J.S. Sirén’s neo-Classical Parliament House in the background.

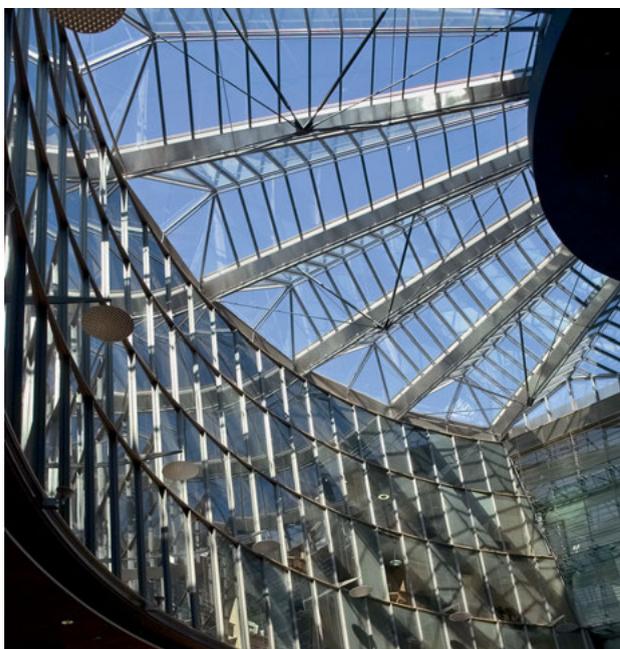
7 The facade of the Parliamentary Annexe adapts to the dimensions of the Hankkija Office Building (left) by Jarl Eklund.

cone which is clad in Kalvola granite where it is cut off to face Mannerheimintie boulevard, like the Parliament building itself. Like the triangle, the cone is largely occupied by the offices of the Members of Parliament (the annexe is connected to the main building by tunnel). Strikingly, offices on the external sides have full-length windows so that members of the public can observe their MP at work (in the curved part of the cone, a complicated double-glass wall inhibits irate citizens from taking violent action against their representatives). Internally, the conic part contains a top-lit atrium where a cafeteria is overlooked through sloping glass walls by inward-turned offices. The void is a version of the devices often used in the architecture of the north to bring precious daylight into the middle of a deep plan.

Other examples of this principle of planning are shown in different ways in many of Helin's buildings. One of the most dramatic is the building of the Nokia Head Office on the Otsolahti Bay in Espoo near Tapiola. Here, edges of suburb, forest and sea meet; a motorway cuts the site off from much of its surroundings, so there is no clear context, but there are some beautiful moments. The main blocks have central top-lit atria and no opportunity of maximising the internal impact of daylight is lost – even the treads of the elegant spiral stairs that

form sculptural events in the atria are translucent to reduce their shadows. Balustrades and the metal elements of the internal walls surrounding the atria are in Helin's metallic grey, while passages of exposed wood in floors and balcony ceilings warm the spaces visually.

Control of internal temperature and humidity is enhanced by double-glass facades. The double facade creates a wide continuous space between the outer layer of glass and the inner one: it acts as a thermal buffer, and allows windows in the insulated heavy-concrete inner skin to be opened at will by inhabitants to provide a supply of fresh air from the buffer to individual offices. On hot days, louvres in the parapets can be opened automatically to transform the whole buffer into a thermal chimney. In winter, the louvres remain closed so the trapped air acts as an insulating layer. Similar devices had been successfully demonstrated further south in countries like Germany and Switzerland, but it was only slowly accepted elsewhere. Helin was determined that the Nokia headquarters should incorporate its first application in the Nordic countries. He calculated that, in terms of energy savings, the payback time for the additional cost of the fabric would be only seven years. The system is backed up by heat exchangers in the air-conditioning system that prevent heat being wasted in



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8 Parliamentary Annexe, top-lit atrium.

9 Nokia Head Office, Keilalahti, Espoo; interior view.

10 Finnforest Modular Office, Tapiola, Espoo.

11 Baltic Square Office Block (Sitra/ Pricewaterhouse Coopers), Ruoholahti, Helsinki.

12, 13 The metal workers' Murikka Institute, Tampere.



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exhaust air, and by chilled ceilings that allow temperature to be balanced in individual offices.

The Nokia Head Office may have been the first example of the use of double facades in the north, but the complex is far from being Helin's first exercise in sustainable building. It is an example of his continuing preoccupation with environmental issues that started before most architects had even heard of concepts like sustainability and global warming. As early as the metal workers' Murikka Institute (1974–77), Helin, then in partnership with Tuomo Siitonen, was experimenting with among other tactics black floors in common areas that were intended to absorb solar heat that entered the complex through large windows, and was then re-radiated by the floors at night. Cooling for the air-conditioning came from the waters of the local lake. The systems worked, but were not widely adopted for lack of client interest at the time.

Helin has been a pioneer in exploring the large-scale use of wood in building. Timber construction is more or less neutral in terms of carbon emissions, for it locks the element into the building fabric, from which it is released only by fire or rot. In the demonstration Finnforest Modular Office at Tapiola, wood is almost exclusively used for structure and cladding above

basement level (there are some exceptions for fire escapes). As a result, Finnforest's construction emitted much less carbon dioxide than a conventional office block of the same size – by some 40,000 tons. Partly for this reason, wood is increasingly used by Helin – for instance in the interiors of both the Nokia building and in the parliamentary annexe.

Double facades were used again in the Baltic Square Office Block (Sitra/Pricewaterhouse Coopers) in the Ruoholahti area of Helsinki, previously devoted to heavy industry, which has recently been transformed into a quarter for service and IT industries. Sitra's accommodation is in a tower, where double walls on east and west sides modulate the climate of cellular offices (the organisation is the National Fund for Research and Development, and Finnish civil servants demand individual offices). The open, flexible work spaces required by the international accountants are in a lower block containing Pricewaterhouse's big, mainly open-plan offices. Here, offices, a top-lit atrium, a café and a shop are also enclosed by double walls, built like those of the tower with a structure of Cor-Ten rusting steel (a substance that can easily be recycled). The atrium is an echo of the lobbies of New York skyscrapers or the glazed arcades of London or Paris, which simultaneously



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contain private spaces and public thoroughfares. Such urban types could surely be explored further in the context of Nordic winters.

Relationships between public and private zones are critical in housing, and Helin & Co have much experience in the field. One of the earlier schemes was at Borås, a small city in southern Sweden, which held a competition for new ideas for suburban housing in 1990. A separate site in the glaciated and forested landscape that surrounds the city was devoted to each of the four major Nordic countries. Helin & Siitonen won the competition for the Finnish site. Their entry involved two different building types, one by each partner, but only Helin's was constructed. It consisted of two rectangular blocks of housing, wedge-shaped in section, and set at a slight angle in plan. The wedges rise from one storey to six at the highest end. Between the two is a tapering semi-public court leading to the lift at the highest end of the scheme from which there is access to individual flats that vary in size, with two-storey units at the top of the wedges.

Entrances and kitchens are on the court sides of the slabs, with the more private areas for living and sleeping on the outer flanks of the scheme. Each flat has a generous balcony

detached from the main mass. Fabricated in silvery-grey steel, balconies are stacked above each other among the trees as virtually separate structures from the white-painted main blocks that have concrete frame structures with precast floors, walls and sloping roofs. The latter are covered in layers of peat and soil and sown with grass and meadow flowers. Each unit has a terrace that penetrates the green roof layer, providing inhabitants with close contact with nature yet a great degree of privacy. That combination is what most people hope to gain from living in the suburbs, yet the Borås scheme makes a contribution to carbon management by suggesting forms of housing that offer the benefits of suburban living, but at much higher densities than are obtainable with normal detached houses; potential economies in land-take, transport and heating are obvious.

In inner-city housing, the balance between nature and built fabric must be struck in different ways. The site of the Laivapoika scheme in Ruoholahti is constrained by roads and a new ornamental canal by Juhani Pallasmaa, so the resulting block is a rough wedge in plan, with perimeter housing surrounding central semi-private gardens. Like the Borås housing, the buildings are clad in precast panels, this time textured and



coloured (mostly in white and different kinds of blue). These heavy elements are relieved by passages in steel and glass in balconies and stairwells. For instance, the glass blocks round the stair at the eastern end of the complex act as a focussing device for the light of the rising sun, concentrating it in the inner court. Nature enters the city with quiet drama.

Laivapoika is a scheme that establishes a new context in the immemorial European urban scale of tenement housing, although it is gentler than the big commercial buildings like the Sitra Tower further north. At quite the other end of the spectrum of housing design are the villas created in the forest by Helin & Co for individual families. They all respond intimately to their sites. For instance, the plan of the Villa Vetro at Kirkkonummi, which overlooks the Porkkala fjord from a wild promontory, is determined by the prospects of the nascent archipelago, the need to preserve as many mature trees as possible and by the exposed glacier-scraped rocks. On the fjord side, a sinuous glass wall fringed by a wide larch deck was evolved, winding through apparently untouched nature and offering ever changing views of fjord and forest. Here again is a response to context as sensitive as that of the ministry to the neo-Classical heart of Helsinki. Results are of course very different.

Contextualist and carbon-conscious he may be, but Helin nowhere adopts either of the two currently fashionable approaches. One, the iconic, meaninglessly writhes and capers to draw attention to itself. The other approach is vacuous in its attempt to create an apparently existing context à la Prince of Wales. Helin attempts neither. His powerful architecture is intended to complement the existing rather than either overwhelming or copying it. His work gains its authority from a thorough understanding of human scale and human behaviour that is visible in his planning of everything from office blocks to individual houses. His constructional approaches are always legible and clear, and his commitment to environmental sustainability patently becomes ever more important. Helin & Co's buildings exude integrity and gentle authority: quiet, thoughtful, humane but tough – thoroughly Finnish.

14 Suburban housing at Borås, Sweden.

15, 16 Laivapoika (Shipboy) Housing, Ruoholahti, Helsinki.

17 Villa Vetro, Kirkkonummi.

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RIITTA NIKULA

THE ART OF MAKING PLACES



“The current global shift from one epoch of architecture to another may be real progress if, instead of a single new, quickly outdated truth, an idea of a polyphony of forms, of several independent architectures is adopted. This must not, however, mean that we should throw ourselves into dogmatic relativism; architecture is bound to culture by a changing field of ideology – knowledge, ethics and community ties – not by mysticism, arbitrariness and escapism.” Pekka Helin, 1980

When an architect designs something new for an urban fabric that has been built up according to the conflicting needs and ideals of several generations, he is required to retain control over two particular dimensions that differ awkwardly from one another. Each new building in the cultural landscape always shows equally clearly the designer’s own sense of history as well as how skilful he is in the application of the techniques and materials of his own time.

After the Second World War, Finland became industrialised and urbanised in rapid bursts. In the building industry, prefabricated construction began to be developed comparatively late, but then in the 1960s it took over the market almost completely. New structural solutions and building materials were developed in the belief that with their help a better world could be built and welfare could be spread more evenly. The building industry became a powerful factor in the nation’s economy. Pekka Helin studied architecture at Helsinki University of Technology at a time when anything new was unquestioningly considered better than the old. The architect’s job was defined in terms of problem-solving, and the young generation were taught to look only forward. The history of architecture had a marginal place in the educational curriculum. Indeed, Alvar Aalto had happily quoted Nietzsche’s words “Nur die Dunkelmänner blicken zurück” [Only shady characters look back]. Helin did not quite agree with this formulation. In an interview in later years he fondly remembered an art teacher from his school days who was also a researcher and who had made the pupils in the school in Tampere pay attention to the sturdy architecture of Lars Sonck.

During Helin’s student days, Aarno Ruusuvuori represented the strictest line in modernism among the professors at the Department of Architecture, “a cultivator of pure form, pure space and pure light”, as Helin characterises him. An opposite viewpoint to this arose outside the department with architect Reima Pietilä’s aesthetics of the free form, in which Helin took an interest early



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1 Tasankotie housing blocks, Tapanila, Helsinki.

2, 3 Woodnotes House, Kauklahti, Espoo.

on. When discussing his Finnish educational background, significantly he mentions only these two masters of modernism. Perhaps the tension between Ruusuvuori's strict right-angled proportioned geometry and Pietilä's robust free forms could be a key to explaining the starting point of Helin's own architecture. It seems as if Helin was from the beginning receptive to the influence of Ruusuvuori's detailing that was polished to the extreme. Helin's early main work, completed in 1977, Murikka, the Finnish Metal Workers' Union training centre in Tampere, despite its geometrically strict basic design, softly completes the forms of the surrounding natural landscape, while its materials and detailing pay homage to the hard precision of metalworking.

Those who want to see architecture as a battle of styles like to refer to the opposing pairs of supermodernism versus the organic. The battle of names is always pointless, but if treated as a game Helin could be defined as the supermodernist who is not shackled by the right-angle, a builder of systems with a rich geometry who intervenes in nature and culture so that the original beauty of the location is highlighted. This is the approach I have taken when discussing Helin's main works from the early years up to the present.

A rapid beginning: offices for modern work environments

The Finnish architectural education system has been both praised and criticised for its pragmatism. Since the times of Eliel Saarinen, Armas Lindgren and Hermann Gesellius, students have launched their careers with victories over the established masters in architectural competitions. They have also received apprentice training, working as assistants for their professors in the private offices that the professors have run in parallel with their teaching duties. On the other hand, having a job whilst studying complemented in an important way the strengths of the professors and directed the students into completely new areas. As a student, Helin worked in the City of Helsinki Regional Planning Association and Helsinki Planning Department and not in small private studios.

Helin's proposal in the town planning competition for Luolaja in Hämeenlinna in 1971 was also his final diploma project. It won first prize and the City of Hämeenlinna subsequently drew up the town plan on the basis of the proposal. Helin graduated as an architect with a project that was not only a competition-winning entry but also suitable for implementation. Pragmatic architectural education produced a maximal result.

In 1973 Helin, with architects Tuomo Siitonen, Matti Nurmela, Jyrki Tasa and Kari Raimoranta, formed the joint office Katras,

which was successful in several architectural competitions. In 1979 Katras was divided into two practices. The office of Helin & Siitonen then began a successful cooperation that lasted two decades and in which each partner also had his own projects. Helin & Co was founded in 1998.

Helin's résumé of work is long and encompasses almost all areas of architecture. Even though grand public buildings and innovative office buildings understandably draw most attention, it is important also to mention housing design, which from the 1980s onwards has continually been significant to Helin. Throughout this period, he has designed both luxury private houses and social housing in different settings; student housing, housing for the elderly and disabled as well as houses for millionaires, situated on shorelines and open fields, in old city districts and in new areas. Helin's work in housing can be illustrated with a just a few schemes.

An interesting early example is the group of high-rise blocks on Tasankotie road in the district of Tapanila, Helsinki, completed in 1980. It is a sturdy courtyard milieu comprised of three- and four-storey blocks, with a circulation system of access galleries. The blocks are rental accommodation produced within the strict budgetary limits set by the City of Helsinki. Particularly notable in this unostentatious solution is how easily the new housing block sits within the lively wooden housing of the existing old villa district as well as the surrounding open field landscape. The housing block is constructed from prefabricated elements combining red and yellow brick and grey concrete. The pitched roofs softly press the multi-storey blocks into the landscape of open fields. Even in the small flats the floor plans and lighting have been solved with exceptional attention to detail.

A more recent achievement in housing design by Helin, which has also received more attention, is the Woodnotes House built for the 2006 Housing Fair in Kauklahti, Espoo. It is a spacious, single-family house that received praise from both professionals and the general public. Critics' favourites have probably never before come top in public opinion polls.

The multi-storey housing group from 2008, designed by Helin for the Eiranranta district of Helsinki, on the other hand, has raised heated discussion in the capital, the question being whether it is necessary in Finland to build housing areas for rich people in the best locations with the finest views. The special solutions and top-of-the-range fittings have raised the price of these apartments sky high. There has, however, not been any disagreement about the excellence of the design. Swimming halls, together with other facilities for the well-being of the general public, have generally been seen as

socially important and are praised by both critics and users. The design solution for the elegant Tampere Swimming Centre came about already in the winning proposal in an architectural competition held in 1972, the joint designers for which were Pekka Helin, Tuomo Siitonen, Antti Laiho and Klaus Lindh. The uncomplicated spaciousness of the swimming hall, completed in 1979, situated in the district of Kaleva, turns recreational swimming into a serene environmental experience. The clarity of this powerful building is uncontrivedly linked to the surrounding park and 1950s cityscape of multi-storey residential blocks. It is pleasant to swim in a landscape amidst the varying colours and lighting conditions of the changing Finnish seasons.

The Hollola swimming hall and multi-purpose centre was built in 1986, the design of which was also based on a competition-winning proposal. The joint designer with Helin and Siitonen was Petri Eerikäinen. Combining a youth centre with a swimming pool makes the spatial layout of the building complex more multi-faceted, but without compromising on clarity. The swimming hall for the city of Forssa, completed in 1993, is more complex than previous ones. Helin himself wrote of the scheme that when planning began in 1988, both the ascetic, performance-centred stage and the spa cliché with the plastic foliage and pink flamingo had already passed. After these came "comfort through the authentic means of architecture". Due to the building's oblique corners and varying window shapes, the solution skilfully catches external light and reflects it back into the water. Even the foliage is genuine, a product of nature.

There is, however, one interesting gap in Helin's production. He has not designed a single church, even though modern Finnish church architecture is regarded, particularly from an international perspective, as an important phenomenon, an area of design where work is of a particularly high standard, where aesthetic ambition can blossom most freely.

Helin explains that when studying the history of architecture he was shocked by the fact that architects in the nineteenth century focused their skills on the decoration of ceremonial buildings of the ruling class still at a time when engineers were changing the principles of all building by developing refined steel construction. He was impressed by the ethical mission of early modernist architecture, the understanding that it was possible to improve the world through design of housing and cities. For these reasons Pekka Helin and Tuomo Siitonen decided early on to leave the architectural competitions for churches to others and to focus instead on tasks that had larger social



4 Tampere Swimming Centre.

5, 6 Swimming hall and multi-purpose centre, Hollola.







7 Nokia Head Office, Keilalahti, Espoo; roof terrace.

implications, such as various kinds of housing and work environments, and cities.

7 But not getting involved in church design did not prevent Helin from appreciating the finest achievements of Nordic church architecture. Noteworthy among his scarce literary output is a well researched article, published in the *Finnish Architectural Review* in 1986, on the architecture of the Swedish master architect Sigurd Lewerentz, who died in 1975. In the article he succinctly analyses the Skogskyrkogården cemetery in Stockholm, designed by Lewerentz with Gunnar Asplund. Helin writes almost affectionately about the landscape of the cemetery and the architecture of its different chapels as well as the fascinating way one moves around this unique place. Of course, he also discusses the intrigues of the history of the design of this expansive totality. Helin does not fall into sentimentality.

To date, Helin has designed a total of two to three million cubic metres of built space. It is impossible for the layperson to perceive such a large volume, but even a brief visit to the commercial centres he has designed in Kamppi in Helsinki and Sello in Leppävaara and the office buildings of Nokia, Sitra, Ilmarinen and Finnforest, opens up new dimensions of thinking, where the old concepts of 'house' and 'building' have to be redefined.

Helin has daringly attempted to ascertain how large totalities can be built in a controlled manner following a single plan, and how many functions it is possible to intersperse within a single architectonically innovative totality. He has purposefully broken down the borders of the job descriptions of the town planner and architect. This is the scope of his ambitious and intellectually, aesthetically and practically engrossing architecture. How much can a single architect achieve, and how large an office and expert group does it take to achieve productive cooperation?

I contemplated these particular questions when following the construction of the Kamppi Centre in the centre of Helsinki from 2000 to 2006. First an enormously wide and deep hole was excavated replacing the former military parade ground from the era when Finland was a grand duchy; each digger seemed like a toy sitting in a doll's house. Then something began to be built rapidly in the middle of the city, every week offering something new to marvel at, but for a long time offering no clues to the curious passers-by why the concrete and steel were placed exactly as they were. Following the building site was popular entertainment for the general public. When occasionally public tours of the building site were arranged, people

of all ages queued for hours to be allowed to the bottom of the excavation to hear what was going to be built there. After its completion, the Kamppi Centre changed the focus of the commercial centre of Helsinki more than any other individual building project since the Senate Square designed by C.L. Engel in the first half of the nineteenth century.

The work of Helin's office in the capital has grown to such an extent that an older colleague wrote that the city should remove a letter from the name of the city, because the name 'Helinki' corresponds better to the modern appearance of Helsinki. The quip can be understood as a joke tinged somewhat with jealousy, in that Helin's *grands projets* are always unique buildings designed for specific places; in a historical environment emphasising the value of the old, and in a new area creating identity not only for the specific site but also for the whole area. I will now try to analyse this claim through examples of Helin's main projects.

The Nokia Head Office – Keilalahti, Espoo

Not a single road sign directs the traveller from Helsinki to the neighbouring city of Espoo. The person who drives along the Länsiväylä highway that leads westwards to the coastal town of Hanko, however, arrives through a gate that expresses explicitly the unique character of the young city. On the left side of the highway is the first of the two columns of the gate, the decorative Sinebrychoff summer villa built on Karhusaari island in 1892, which solemnly gazes out to sea. Karhusaari island, with its buildings and tree-lined avenues, beautifully built by a brewery family, is an impressive memorial to the former rural parish of manor houses and villas which after the Second World War became a strange quilt of industrial areas and commuter suburbs. Espoo has been a city only since 1972 and now has a population of 240,000.

The Keilalahti shoreline, on the right side of the highway, is lined by a row of modern office buildings. The steel and glass facades are a gleaming testimonial to the competitive optimism of the IT industry that began in the 1990s. In the row closest to the Sinebrychoff villa is the second column of the Espoo city gate, the angular volume of the Nokia Head Office designed by Helin. The first stage, completed in 1997, is sited at the point where the curve of the bay meets the highway. The second stage was completed in 2001.

The eventful cooperation between Nokia and Helin began in 1983 when the Helin & Siitonen office won the invited architectural competition arranged by the company for the design of their new head office in Keilalahti. The competition proposal

was based on the principle of connected squares and the triangular shapes contained within them. As a cubic composition strictly demarcated from nature, the first form of the Nokia Head Office had a heavier appearance than what was eventually built. There were discussions with the company about the choice between granite and the cheaper alternative of concrete as facade materials. The architects' own preference, granite, won. Nokia did not get a granite building in the end, although the basic geometry of the volumes and spaces was already established at this early stage.

The completion of the first Nokia building, based on the 1983 competition proposal, had to wait a long time due to the City of Espoo's cumbersome town planning process. During this time the company reduced its operations and began to focus on IT technology, which coincided luckily with the right moment in global economic history.

Nokia, as a conglomerate, had already at the beginning of the 1980s strengthened its position in the IT and consumer electronics market. Towards the end of the decade Nokia became the largest IT technology company in the Nordic countries. When global markets were deregulated, Nokia's Keilalahti office building did not become the head office of a conglomerate but rather the decision-making centre of an IT company that developed and produced the latest in communications technology, and which expanded its operations. Economists have analysed the Nokia phenomenon from different angles, but one can see the economic history of the company represented in the various stages of Helin's design, from the first planning delay via one economic recession to the great economic upswing.

When construction of the building finally became possible, Nokia arranged a new invited competition at the turn of 1994 and 1995 to ensure a suitable solution for the new situation. Helin and his assistants submitted as many as eight proposals and received first and second prize.

To quote the architect's own presentation in the *Finnish Architectural Review* following the completion of the first part of the Nokia Head Office in 1997:

"The basic idea was to pack a large volume into a compact form in a manner that would leave the central characteristics of the Tapiola landscape intact. Vertically, the mass was articulated to match the horizontal skyline drawn by the woods. The plot is situated close to a motorway interchange; the curving multi-level car park shelters the yard and the main building. Between the sea and the building lies the pedestrian and



bicycle way included in the city plan. The unique vistas towards the surrounding nature have contributed to the orientation of the spaces as well as the planning of the terraces.

The leading objective of the design was to build a working environment for the new millennium that could inspire creative thinking and interaction. This has been achieved through a repetitive, easily altered spatial unit catering equally well for both individual and group working. Communication is enhanced through transparency between the different areas and spatial groupings and through the cellular landscape office and desk areas. A versatile and flexible working environment is achieved through the repetition of the basic spatial unit and the large number of options for the secondary spatial division. The plan is developed around a triangle of 1,000 net square metres in which the number of restricting, fixed structures and installations has been kept to the minimum.

The communication plan within the building encourages positive encounters; informal interaction has been acknowledged as a platform for innovative thinking. The spaces are arranged around two atria, whose ground levels act as versatile agoras housing a restaurant, meeting place and exhibition area.

The building has the first double facade ever realised in the Nordic countries, marking a step towards more sustainable development. Passive means are used to save the energy needed for cooling during the summer and heating during the winter. The exterior thermal stress is relieved through the double facade, the interior stress through cooling beams and convectors."

When the building was completed, Maj-Lis Rosenbröijer's landscape planning brought a verdant copse of birches into the new Finnish landscape of technical innovation.

Unexpected experiences unfold within the interior of the building. The warm colours of the many different types of wood and the greyish green and blue of the hand-floated stucco lustro on the walls create a warm atmosphere in the tall atrium spaces. The organic material and the hand-crafted wall surface create a sympathetic alliance with the technical geometry of the steel and glass.

Nokia employees heap praise on the functionality of their workspaces. One of the directors lived in Tapiola, a ten-minute bicycle ride from his workplace. He happily recounted that it was necessary, however, to reserve more time for the journey because walking from the entrance via the atrium and spiral stairs to his own office always took him at least fifteen minutes because the route allowed him to meet so many colleagues

and to discuss so many issues along the way.

My own unforgettable personal experience of the Nokia building is set in the sauna facilities on the top floor. They are stylish yet restrained, and the usual problems of company saunas for entertaining guests, the clichéd luxury or the heavy Finnish nationalism, are not present to disturb the mood of Nokia's guests. It is a place for carefree relaxation.

Both Nokia and the city of Espoo developed in unforeseen bursts of activity. The extension to the Nokia Head Office was completed in 2001. Helin presented the work in the *Finnish Architectural Review* under the headline "Half-cylinder and cone":

"The extension to the Nokia Head Office became necessary due to the company's rapid growth. Extra space was needed, some 16,500 square metres gross, equalling half the existing floor area, or room for approximately 700 employees. Out of the three proposals, the company management chose a scheme comprising a tall curved mass and a lower rectangular block. A semi-cylindrical atrium situated between the principal masses is used for dining, conferences, and festive events."

Helin's succinct presentation provides an in-depth explanation of the use of the various spaces. Technology, however, is the main focus. A lot of development work had been carried out for energy-saving purposes, including the further development of the double glass facade system from the first stage. When it comes to the final result, it is very rewarding to walk around the outside of the building. The composition is, with its reflections and enclosed and transparent sections, something of a Gesamtkunstwerk. On the side of the building facing the sea, a semi-circular facade wraps around a composition of two triangles, increasing the compactness of the composition. Viewed from the main road, the new extension harmoniously joins to the curve of the adjacent multi-storey car park, the latter having an increasingly important role in the facade facing the road.

Ruoholahti

Pressures to build in Helsinki in recent decades have been aimed at both increasing density in the old city districts as well as building along the shorelines east and west of the city centre. Large areas have already been built along the coast and the pace of development has been increasing. The construction of a new large port in Vuosaari, east Helsinki, led to wasteland and parts of the old harbour area being cleared, creating space for the construction of new housing. These new buildings compliment the historical areas of the Helsinki cape in many ways, bringing

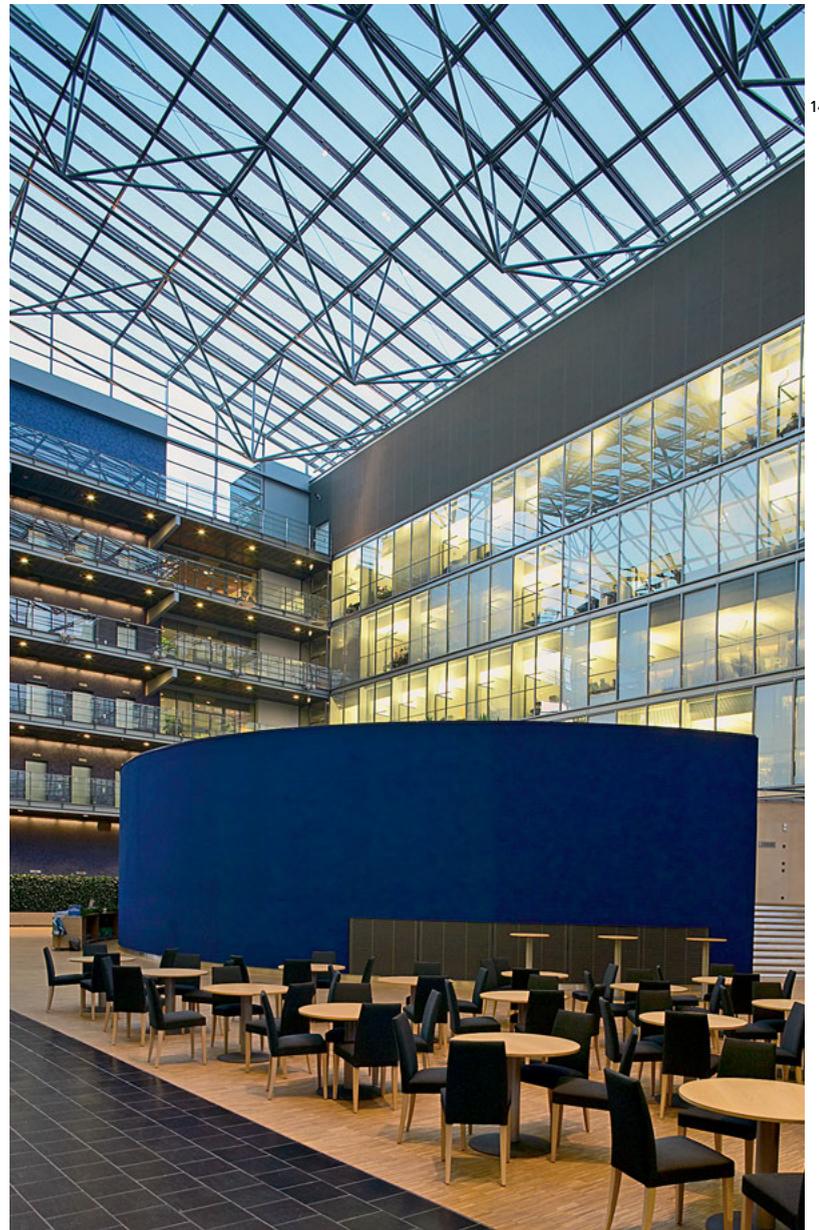
8–10 Small business enterprises in Ruoholahti, Helsinki, in the 1980s.

11, 12 Laivapoika housing block, Ruoholahti, Helsinki.





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13 Baltic Square Office Block (Itämerentori Tower, Sitra/Pricewaterhouse Coopers Office Building), Ruoholahti, Helsinki.

14 Ilmarinen Head Office, Ruoholahti, Helsinki; top-lit atrium.

15 Ilmarinen Head Office and tower of the Baltic Square Office Block.

gradual yet complete change to the entire city.

As recently as the 1980s, the Ruoholahti seafront was still a diverse area of small business enterprises: heaps of sand, tatty wooden fences, masons' yards, piles of old tyres and derelict telephone boxes made the place ruggedly romantic.

The potential of the area that lay dormant next to the city centre was then discovered and in 1988 a town planning competition was held, won by Pauliina and Juha Kronlöf. Based on their winning entry, from 1992 to 2002 a new city district was built south of the main traffic artery, Itämerenkatu street, on each side of a canal, the sides of which were clad in natural stone. The new city district was effectively tied to the city centre by the introduction of the western terminus of the city's metro line and a tram line. The objective was to create a city district for 20,000 inhabitants and over 10,000 workplaces.

The street grid of the residential blocks of Ruoholahti continues the scale of the old city centre, the pedestrian traffic of the residential courtyards and public areas is supported by the stone-clad canal landscape designed by Juhani Pallasmaa. The housing blocks were built with the aim of social equality: the city's own rental flats and market-rate housing were placed around common courtyards in five- to seven-storey blocks. The city's housing production office kept tight control of the process and costs. Experienced architects were chosen for the individual design tasks.

Helin was commissioned to design the eastern gate of the canal scheme. The Laivapoika housing block, completed in 1995, is the most prominent element of the whole area, a building composition free of conventionality. Whenever walking around in the area you can still find yourself stopping to wonder about some detail or other in the scheme that you have not noticed before, due to the lighting conditions at any particular moment.

The housing block is divided up into three buildings comprising a total of six lamella-like units. The predominantly white tower at the corner rises to a height of eight storeys, while the rest is six storeys. The north side terminates Eerikinkatu street which continues from the old city centre; the southern side offers unrestricted views over the harbour seafront to the sea, while the west side overlooks a park.

Much attention was paid to the development of the structures, materials and floor plans of the flats. Helin wrote that the difficult relationship between the formula for the detailed town plan and a finely detailed room programme was only solved after three months of hard work. The fact that prefabricated-element technology had to be used for the facades due to

economic considerations was turned into an advantage.

The facades of the Laivapoika housing area differ on each side of the block. The fenestration, together with the colours and skilful changes in materials, have an exhilarating effect on the cityscape. Vertical and horizontal lines come together in a composition that is simultaneously strongly enduring yet always shifting. The balcony towers between the lamella blocks, built in glass bricks and steel, provide a rhythm to the thunder-blue facades.

The blue of the prefabricated concrete elements of the facades is integral, and by means of grooves applied by a special technique a tough and solid appearance with strong tactile qualities was achieved in casting. The contrasting white elements are smoothly cast in white concrete. Choosing the Finnish Concrete Architecture Award for 1995 probably did not require long debate. Anyone moving around Ruoholahti in the 2010s cannot help but wonder why more durable innovations comparable to the solution of Laivapoika were not built.

In addition to ordinary flats, the Laivapoika housing area also comprises special units for disabled persons, artisans, old people and those with mobility handicaps. There are common spaces for the use of all residents at street level and the stairwells have been designed to provide a dignified atmosphere. The common spaces and passages in the sheltered courtyard are clad in schist and plants have been carefully selected. Already, one can note the passing of time from the growth of maple trees and ash trees.

The banking crisis of the early 1990s paralysed office building construction. The housing blocks in Ruoholahti had to wait a long time for the row of office buildings that from the beginning had been intended as a protective wall between them and the main road. Plots reserved for the office buildings were left fallow for a decade and, at some point, willow bushes were planted on them as an environmental artwork. During that period there was a sufficient supply of empty office space in the city.

As the turn of the millennium approached, however, the situation changed, when the IT industry began its meteoric rise. The operating culture and working methods of the organisations changed. The old office buildings, with their individual offices, were deemed unsuitable as cooperation and communication were given priority. Hence innovations were sought in the layout of open-plan offices, and new kinds of office buildings were needed.

When in recent years there has been talk about "Nokia Finland", the often harsh critique of the architecture has been

directed at the glass-facade office buildings that quickly grew up along Itämerenkatu street in Ruoholahti. The row of office buildings, all of an even height, has been criticised due to an apparent contradictoriness. The glass of the facades is, due to its transparency and how it is traditionally interpreted, a material that suggests openness; but in the new office buildings the glass is the mysterious envelope of enclosed spaces, beyond which the uninvited cannot enter. Anni Vartola wrote in 2005: "One of the paradoxes of our time is how this architecture of the democratic IT society, that has created a new working culture, an architecture of open spaces and glass facades, has in fifteen years become the symbol of a repressive social aloofness."

The tall Itämerentori Tower, which can be seen from afar, provides a compositional rhythm for the tall row of buildings of Ruoholahti. The tower, designed by Helin and completed in 2000, has become the landmark for the area. From the 1920s to the 2000s there was generally a strong negative attitude in Helsinki towards buildings that rose above the old city skyline. There have been many arguments, but the "tower faction" has won only in the case of the Keski-Pasila area of the city, which is still at the town planning stage. Kenneth Frampton has, like many others, particularly praised Helsinki for its restraint: the Helsinki skyline is not broken by the tower blocks of competing companies, and the church towers still retain their esteemed position.

Helin explains the urban planning premise for his tower design as follows: "This entity, comprising offices, a café and a shop, is located in the core of the new Ruoholahti area in Helsinki, which within a short time has grown into an important centre of IT companies and expertise. The building also acts as significant landmark over a wider area of the city and as a townscape node, with clear elements according to the theory of Kevin Lynch."

Helin further explains that "the surroundings and the design's emphasis on sustainable development and ecology, set by the objectives of the users, led to a combination of Cor-Ten steel and refined steel in the facade materials. [...] Innovative use was made of steel in the structure, from the frame to the details. Energy saving and the durability of the envelope are promoted by the double facade, carried on Cor-Ten sections and stiffened by acid-resistant steel bars. The construction also substantially attenuates traffic noise."

Cor-Ten steel was invented in the USA at the beginning of the 1940s. According to Helin, Eero Saarinen made architects aware of the material when he used it in a couple of large

projects in the 1960s. He estimates that the first project in Finland to use it was an office building in Veräjämäki, Helsinki, designed by Jaakko Laapotti in the 1970s. According to Helin, the use of Cor-Ten steel cannot be regarded as a fashion trend. The material is expensive and requires particularly careful detailing and construction. Its use, however, is justified in terms of sustainable development. Cor-Ten walls do not require surface finishes and the manufacturer will recycle any material taken out of use.

The design of the tall tower and the adjacent five-storey lower section opens up both practically and visually the wall of enclosed glass buildings. The rich geometry of the primary volumes breaks down the heavy stereometry that threatened the area. On its east side the Itämerentori Tower terminates the row of glass buildings, while on its west side it links with the early twentieth-century industrial buildings, the brick former factories and power station. The newcomer lightly takes visual support from the chimney of the power station. The tower functions as a joint both visually and in practice. The spiral staircase demanded by fire regulations is placed in a glass cylinder which emphasises the height of the tower, giving it a lighter appearance. The combination of dark steel and clear glass is vibrant. The wall that overlooks the lower section of the office floors of the tower has a bright blue stucco lustro surface, Helin's elegant signature, at the junction of the two. The spacious atrium and shops keep the flow of people in movement. Opposite Itämerentori, at the point where the multi-lane Länsiväylä highway takes an awkward tight curve eastwards, between the historic hospital and the cemetery, is Helin's second office building designed for Ruoholahti. The head office of the Ilmarinen insurance company, completed in 2002, is a counterpoint to the tower, with its large low volume mysteriously hidden on the site so that its cobalt-blue steel facade elements help to provide a structure together with the different materials, creating a totality with a well-controlled rhythm. One would not assume that there are six floors in the Ilmarinen building, and the glass roofs of its atrium spaces rise to a height of almost 30 metres. At the rear of the building, the enclosed courtyards subtly mute the atmosphere in relation to the solemn surroundings. Schist-clad walls protect the courtyards, with pedestrian routes separating them from the natural stone wall of the adjacent cemetery. Vigorously growing trees give the finishing touch to the overall calmness of the place.

The Finnish Parliament Annexe

The Finnish Parliament Annexe is a dynamic union of steel,



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16 Parliamentary Annex between the old Parliament House and the Hankkija Office Building.

17 Old black poplar trees on the plot before the construction of the Parliamentary Annex.