# ARCHITECTURE, PROFESSION, AND INTERTWINED POSITIONS. COMPETITION AND DESIGN IN AREAS HAVING TRACES OF CULTURAL HERITAGE

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ABSTRACT

This paper presents intertwined positions in planning and architectural projects taking place in a city in Sweden called Norrköping. The aim is to show, examine, and analyse how intertwines are expressed in competitions taking place in areas with valuable past industrial heritage environ-ments. The understanding of cultural heritage values and architectural qualities as design problems includes both the separation of concepts and integration of key ideas in planning and architectural projects carried out as design-developer competitions. These actions may be outspoken as well as embedded in planning processes, detailed development plans, competition programs, design solutions, judgement, implementation, and building permits.

My intention is to identify and clarify the three research questions in a design-developer competi-tion organised by Norrköping municipality. The first question is dealing with professionals' responsibility in the design-developer competition for cultural values and architectural qualities. The second question focuses on the two top-ranked design proposals and how they have responded to the challenges in the competition programme. The third question is about typical patterns of separation, integration, and intertwined positions in competitions taking place in areas having cultural heritage values and architectural qualities.

The paper has an explorative approach and uses a case-study methodology for investigating the competition in its context. The result is a "thick description" of a single case showing how driving forces for separation, integration, and intertwined positions among professionals in planning and architectural projects involving a competition. The developer behind the winning design has signed a contract for access to the competition site and is obligated to implement the project.

*Keywords: Intertwined position, Cultural value, Architectural quality, Competition, Architecture, Urban design*

## INTRODUCTION

This paper presents findings and discusses experiences from an open design-developer competition in Sweden executed in 2022-2023 by the Norrköping municipality. The competition format is part of the liberal order in which companies wilfully compete, according to publicly presented competition programs, and jurors award proposals after ranking them as winners and losers. Success in the competition format stands for the transformation of land to the developer delivering the winning design. The developer gets access to the competition plot. A second place in the competition is not necessarily an expensive failure. Competitions are also tools for testing design ideas and new partners and for marketing services to municipalities for potential assignments in the future.

The two best design proposals from the Norrköping competition will be in focus in the paper. Drawings and illustrations from submissions ranked in first and second places visualise different approaches to the same task. The organiser sees pros and cons in both proposals. They are summarised in the jury's statement. However, the judgements were expressed more clearly inside the jury room than in the written report (Rönn, Braide & Koch, 2024). The design-developer competitions were conducted in Norrköping as part of an R&D project financed by Vinnova. The global objective was to promote the design of flexible apartments and affordable housing, plus-energy solutions, reduction of carbon emissions, circularity, and innovation. In short, the task was to achieve elastic housing and ecological sustainability through innovation in design and construction. The competition in Norrköping has been a part of a larger planning and architectural project that includes architects in intertwined positions providing professional advice and services in the transformation of the port area into an inner-city district.

The paper reports from the design-developer competition, with special attention to cooperation among professionals and intertwining in planning. The competition is a joint venture between a *public authority* (Norrköping municipality as organiser), *academia* (research support by Chalmers University of Technology and the University of Halmstad), and the *private sector* (design teams made up of architects, engineers, constructors, and developers producing proposals). The competition program was accepted by Swedish Architects after checking. The competition may thus be seen as a combination of professional practice and research expertise from scholars specialising in competitions, housing, and construction management. The involved researchers (Koch, Rönn

& Braide) have taken an active part in developing the competition. The competition in Norrköping is part of an overall plan to transform the harbour into a new urban district. The alteration will most likely have long-lasting effects on the city. The planning context of the competition site and its industrial heritage will be analysed in the paper. The approach by politicians and civil servants for taking care of history and cultural values as well as future-orientated objectives in guidelines is of general interest.

## Objectives and questions

The purpose of the paper is to understand and critically reflect on cooperation, intertwined positions, and conflicting interests in the design-developer competition arranged in Norrköping. The assumption is that the competitions in architecture and urban design produce knowledge about the future by design. The outcome is design proposals expressed in visualised models presenting design ideas as solutions to a specific task. Jurors rank them and single out a winning submission. The contributions are showing how the site would look and operate as a built environment. The competition produces possibilities. The design proposals may, in this perspective, be investigated as a kind of future-orientated archaeology looking at the world of tomorrow visualised in competitions. In this case study, the findings are based on a competition program and two design proposals. These contributions are models presented in drawings, illustrations, schemas, and text describing respective contributions. They have been ranked by the jury as number one and number two in the design-developer competition.

The competition type tested in Norrköping – an open competition – made it possible for the municipality to govern the outcome through four fundamental means. As organiser, the municipality is responsible for 1) programming the competition task and the conditions, 2) marketing and inviting multidisciplinary design teams for the production of solutions, 3) appointing jurors to judge the submissions, and 4) transforming winning designs into a built environment by a land allocation agreement steering the implementation. The municipality has consequently access to a strong toolbox. The challenge for the competitors is to analyse the task, find a driving idea, and design a solution to become a winner. Based on the purpose of the paper, the following research questions will be investigated:

- What kind of intertwined actions and measures can be identified among professionals with responsibility for cultural values and architectural qualities?
- How have the two top-ranked design proposals responded to the challenges in the competition?
- Are there any typical patterns of separation, integration, and intertwining in the competition to support cultural heritage values and architectural qualities in the new urban district?

One reason for reflecting on intertwining is that the presented planning and architecture project brings together design ideas, sites, space, shape, materials, and colours in a transformation of a port area in Norrköping to a new city district. This understanding of intertwining is inspired by Steven Holl (1996) and fits my context. Another cause to discuss entanglements is that planning and the architectural project was introduced at a scientific conference in 2025 organised by the EAA, European Association of Archaeologists. The title of the conference was *Intertwined Pasts*. However, in my case, intertwining is oriented towards the future, reflecting history.

## Case-Study Research

The design-developer competition in Norrköping is executed as a case study in its local context (Groat & Wang, 2002; Johansson, 2000). There is also a wider tradition of architecture and urban design influencing the specific case and its two top-ranked design proposals. The competition is presented in a *thick description* to maximise the learning from a single case (Stake, 2000; Geertz, 2008). Learning outcomes may have a broader context. Flyvberg (2006) argues that case-study research can produce scientific knowledge of general importance. In this study, the research group (Koch, Rönn & Braide) took part in the preparation and played an active role in designing the competition. This participation requires a critical reflection when findings are identified, presented, and discussed.

The primary sources are documents from the Norrköping municipality, interviews with professionals on the winning team, and field notes from the jury meetings. Data have been collected in seven specific steps: ***Step one*** contains key data produced in the design-developer competition, such as the *Competition program* (2022), *Design proposals* (2023), *Jury report* (2023), and *Land allocation agreement* (2023). ***Step two*** includes guidelines applied to the design-developer com-

petition: *Land allocation policy* (Norrköpings kommun, 2015), *Action Plan for Land Allocation for Housing Construction* (Norrköpings kommun, 2018), and *Architecture City of Norrköping* (Norrköpings kommun, 2018). ***Step three*** examines a selection of documents from the planning and architectural project transforming the port area into an inner-city district: *Colour and material strategy* (Norrköpings kommun, 2018), *Quality program* (Norrköpings kommun, 2018), *Activity strip and place formation at the diagonal* (Nyrens Arkitektkontor, 2019), *Building heritage inventory* (Wiklund Arkitektur & Antikvarier, 2019), *Environmental impact assessment* (Sweco, 2021), *Aesthetic Program* (Norrköping kommun, 2022), and *Detailed development plan* (Norrköpings kommun, 2022). ***Step four*** focuses on special attention to paragraphs in national guidelines in areas of cultural heritage values. Of importance in this case is the report, *National interests for cultural preservation* by the National Heritage Board. The report points out warehouses in the port area as being of national interest (RAÄ, 2016). ***Step five*** is observations inside the jury room (Rönn, Braide & Koch, 2024b). ***Step six*** involves re-reading seven in-depth interviews with the winning design team. ***Step seven*** examines documents by content analysis (Krippendorff, 2004), close reading (Brummet, 2019), and through architectural critique (Attoe, 1978) together with relevant literature on competitions to gain a theoretical understanding of the individual case – the design-developer competition in Norrköping.

## The competition format

The design-developer competitions are a special kind of contest in Sweden organised by municipalities. The objective is quality in design by transferring publicly owned land to developers. The winning design is implemented and governed by a land allocation agreement. The competition format can be described as being in-between the classical architectural competition and the design-and-build contest. The competitors are typically composed of architectural offices with developers responsible for the submission. The developer signs contracts regarding the transfer of the land and implements the winning design. There are no national rules governing this competition format, approved by national associations representing competing companies. Competitions are run locally by municipalities. Surprisingly, the design-developer competition is not a part of the *Public Procurement Act* (2016:1145), although there is a public organiser.

The design-developer competition is a part of the liberal order in which companies wilfully compete for land by design and jurors' award proposals. The

emergence of the competition format in Sweden can be divided into three phases. The birth of the competition format can be dated to the 1960s. The municipalities started to use the competition to develop residential areas with single-family houses and multifamily housing. (Sandblad, 1984; Sköld Partner, 1990). The driving forces behind the competition were housing needs and financial support by state authorities for the construction. The second phase begins with deregulation in the 1980s. (Rönn and Koch, 2023; Bodström, 1994). The practice of competitions expanded as part of the belief in market forces for solving housing demands. The deregulation also created a new need for communication and decision-making around the transferring of public plots to private companies (Rönn, 2025). The end of this phase is symbolically represented by a law from 2014 regulating the allocation of land (SFS 2014:899). The third phase has the new law as a starting point. It is a very simple regulation in one page without sanctions. To fulfil the law, municipalities only have to provide guidelines reporting starting points, objectives, and fundamental conditions for the transfer of land to developers, handling routines, and principles for pricing land. Typical of the third phase is the development of local land allocation policies that govern the transfer of plots through direct allocation to developers or by competitions looking for the best offer (price) and/or proposals showing architectural quality at the site. Even after the deregulation of the 1980s, the municipality has a strong position in transferring land by design to developers as a competition organiser, landowner, and planning authority controlling detailed development plans and as a decision-maker for building permits. The municipalities are thus in control of a powerful toolbox as long as there are companies in search of land and developers willing to compete with design proposals.

The classic architectural competition is steered by international, European, and national rules (Andersson, Bloxham, Zettersten, & Rönn, 2016). This standardisation of the competition conditions is a significant difference between the design-developer competition and the classic architecture competitions. Although there are several similarities, such as a program describing the task, judging criteria, and delivery demands; companies producing solutions; and juries singling out winners, the design-developer competition is reminiscent of design-build contests (Lahdenperä, 2021; William Quatman and Ranjit Dhar, 2003; Kreiner, 2016). The role model for the competition format is both the classic architectural competition formalised in specific competition rules and design-build contests organised by clients to implement winning designs. Research on the design-developer competition can be found in Sweden, Finland, and Austria (Rönn, 2012; Liste, 2008; Östman, 2014; Kazepov & Verwiebe, 2022;

Rönn & Koch, 2023). The limited research on the competition format stands out compared to the classical architectural competition and its long tradition. Several scientific journals have published thematic issues on competitions in architecture and urban design: *Journal of Architectural Education* (No. 1984-2), *Journal of Architectural and Planning Research* (No. 1990-2), *Nordic Journal of Architectural Research* (No. 2010-2/3 and No. 2012-1), *Scandinavian Journal of Management* (No. 2011-1), *Geographic Helvetia* (No. 2011-2), and *FORM-akademisk* (No. 2013-4 and No. 2014-1).

The competition in the literature has two aspects. On one hand, the competition format is seen as costly for competitors and time-consuming. The compensation for producing design proposals seldom corresponds to the working time. The municipalities' land allocation policies have no regulation for financial compensation to companies producing design solutions. This is especially clear in design-developer competitions where the first prize is access to buildable land at market price. In architectural competitions approved by the Swedish Architects, submission requirements have been compared to the level of remuneration. The working conditions for architects are examined. This is not the case in design-developer competitions, which is run outside the control of the Swedish Architects. On the other hand, the competitions are seen as an arena for innovation, experimentation, and new thinking in architecture and urban design. The future is at stake. The drawings are models showing the world of tomorrow. Architects are typically positive toward the contests. Curiosity, creativity, possibilities, and problem-solving are at the centre of designing a winning proposal. The examination of the open competition in Norrköping and the two best contributions involves both aspects: a competition with comprehensive design requirements, compensation for competitors that covers half the working time for a maximum of five multidisciplinary design teams, and access to land for the winner producing the best housing architecture. The study adds new knowledge to the design challenges now offering a better understanding of the competition format as well as showing how organisers can contribute to a future-oriented solution.

## Policy for Land Allocation and the Port Area

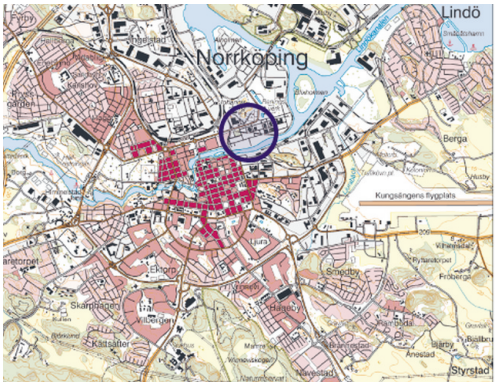
The Norrköping municipality published a land allocation policy in 2011, updated in 2015 following the demands of a new law from 2014. In 2018, a third, more detailed policy was published. This time, the elected officials clearly placed the responsibility for handling land allocation on civil services at the Urban Planning Office (Stadsbyggnadskontoret). The Urban Planning Committee (Stadsbyggnadsnämnden) is the decision-maker. The politicians have consequently,

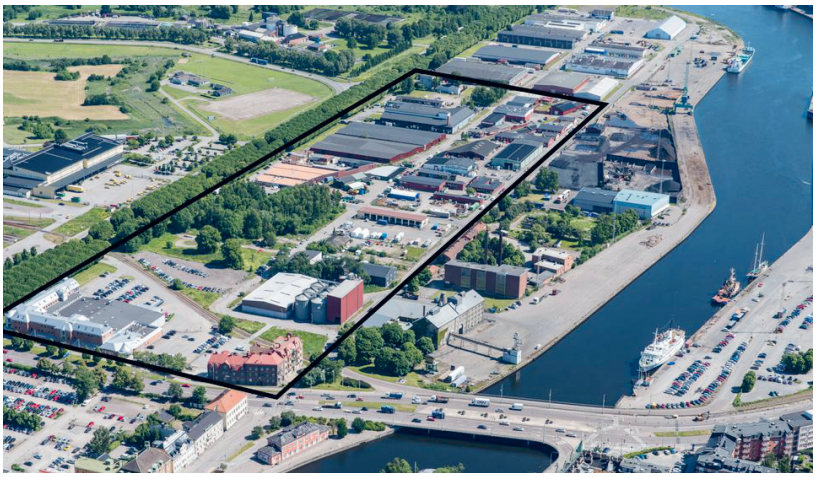
in 2022, approved the suggestion from the administration to run the open design-developer competition in cooperation with the scholars at Chalmers University of Technology and the University of Halmstad. The policy is applied in places where architecture is seen as important, and the municipality may provide special guidelines in competition programs for the design. In this case study, the site in the competition has this kind of location in the port area and is becoming a part of a new inner-city district.

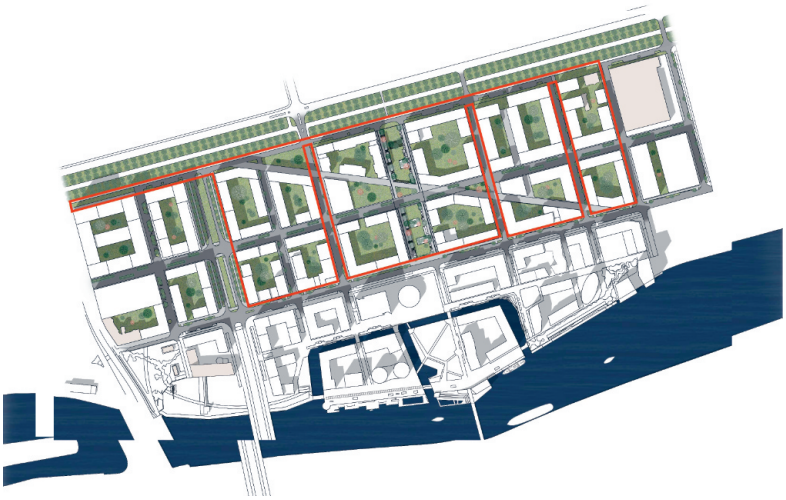
The transformation of the port area in Norrköping is a comprehensive planning and architectural project. The relocation of the harbour has made the land free for exploitation. The planning project ends in a detailed development plan. The architectural project is executed as design, building permits, and construction. The detailed development plan covers the competition site and was approved in 2022 by the municipality. The overall intention is to create an inner-city district in an attractive urban environment (Norrköpings kommun, 2022). The multi-family buildings should have architectural quality and courtyards offering residents important functions and a good environment. A high level of exploitation with mixed use of the land is seen as appropriate due to the proximity to the city centre. Housing, offices, and commercial services at the ground floor in strategic locations are parts of the intentions. The new district should be experienced at eye level as visually and functionally varied. The forthcoming blocks must vary in size, height, and design. Each building should be designed individually and promote diversity in public spaces. The guidelines call for a transformation of the port area into "*an urban, multifaceted, groundbreaking, and responsible architecture*" (Ibid, p. 10) and "*The buildings should be clearly demarcated and distinguishable from each other with their own individual design and character*" (Ibid, p. 18).

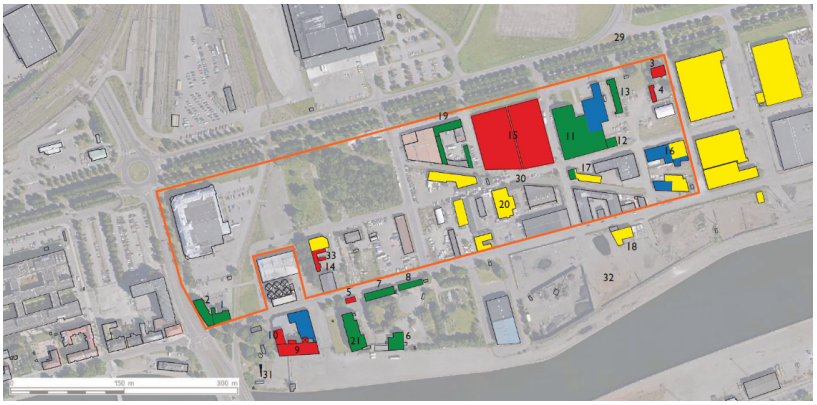
The exploitation of the port area has been given a block structure following the historical pattern. This urban pattern is highlighted as a cultural heritage environment of national interest by the Swedish National Heritage Board (RAÄ 2016). The new district is an extension of a grid in the inner city, and the pattern is intended to be experienced as urbanity. To transform the harbour into a new inner-city district, the detailed development plan has been supplemented by investigations and recommendations reminding of the lost industrial heritage. The policy for choosing colour and building material is reminiscent of the harbour and will be used in the review of building permits. This evaluation is seen by the municipality as a means of safeguarding objectives in the overall planning and architectural project.

*Figures 1, 2, and 3. The illustrations show the location of the port area in the city, the industrial environment, and the detailed plan organising the transformation in the district into blocks. Source: Norrköpings kommun, 2022, and Statens historiska museer, 2020.*








*Figures 4, 5, 6a, and 6b. The cultural heritage values are classified in four types: high, great, some, and none. Class 1: Red-marked buildings have a high cultural historical value. Class 2: Green-marked buildings have great cultural historical value. Class 3: Blue-marked buildings have some cultural historical value. Class 4: Yellow-marked buildings without conservation value. Fig. 5 is the office building. Fig. 6a is the stable having a carriage shed, and Fig. 6b shows two demolished warehouses in the area. Source: Wiklund Arkitekter & Antikvarier.*

The competition site has a diagonal railway track from the 19th century cutting through the area. It is an industrial historical remnant preserved in the detailed development plan. Prior to the transformation of the harbour, an inventory needed to be executed to identify the built heritage in the area (Fig. 4). In 2019, Wiklund Arkitekter och Antikvarier reported that five objects have a special kind of high cultural historical value: An office building from 1919 designed by city architect Karl Flodin (Fig. 5); A stable having a carriage shed that informs about the living conditions of earlier times (Fig. 6); Two warehouses from 1939 with a particularly interesting wooden construction technique; Finally, a fragment of a farmhouse in the area has been classified as of high cultural historical value. This object is a remnant of an early demolished urban district with housing for dock workers.

As a result of the inventory, the office from 1919 is preserved through a demolition ban in the detailed development plan. The façades are also protected against distortion. Despite a lack of maintenance and decay, the stable and carriage shed are given corresponding protection. In contrast, the two warehouses are treated differently and get no protection. For them, it's not enough to have a high-value cultural heritage from a historical perspective. Nor does it help that the warehouses are pointed out as being of national cultural heritage interests (RAÄ, 2016). The warehouses have been demolished by the property owner before the detailed development plan was sent for review and approval to the County Administrative Board. According to the municipality, the two warehouses have been demolished to facilitate the transformation of the port area into a new inner-city district (Norrköpings kommun, 2022).

The inventory by Wiklund Arkitekter & Antikvarier concerns buildings' cultural value. The diagonal railway track from the 19th century has not been included in their report. This is surprising given the importance of the diagonal's impact on the exploitation of the area. However, the railway track is commented on in other investigations. Tyréns (2020) highlights the diagonal as an important artefact in a landscape inventory. The diagonal is also briefly described as a historical object in the area by Sweco (2021). Nyrens Arkitektkontor (2019) has received an assignment investigating how the diagonal creates triangles in the area that may be turned into public places, plantings, seating, and outdoor cafés. The architect's office shows several possible ways to reuse the diagonal to design qualities and eye-catchers.

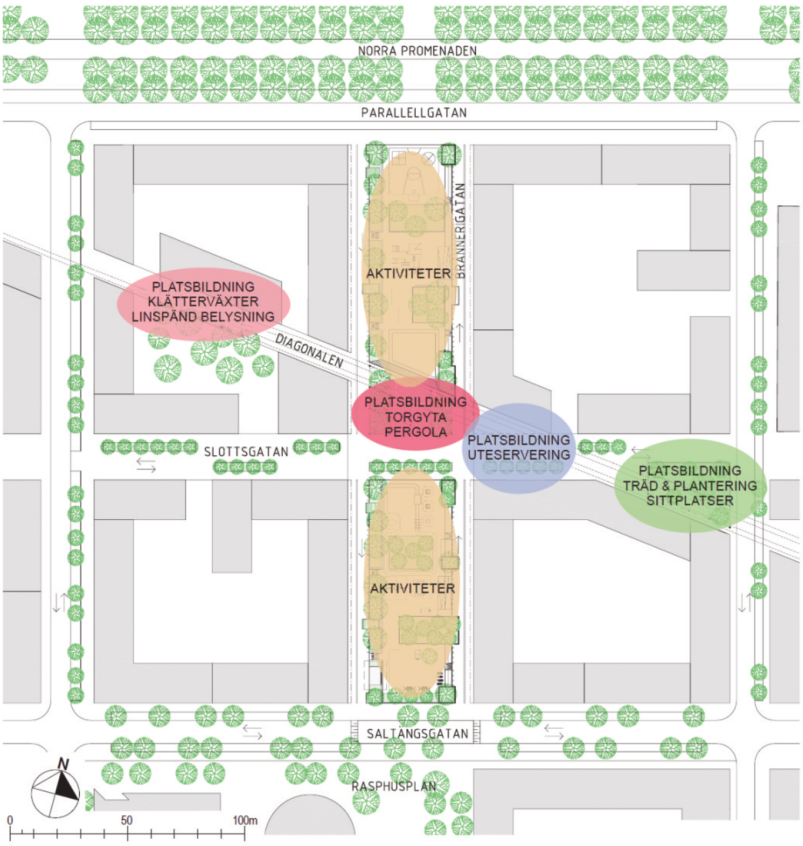
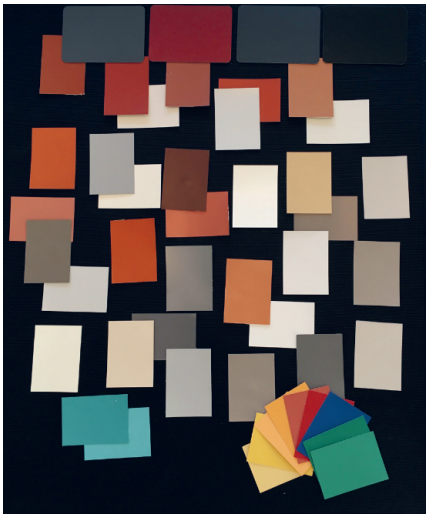



*Figure 7. Illustration pointing out suitable places and spaces for plantings, activities, cafés, and seating. Source: Nyrens Arkitektkontor, 2019.*

## Colour and material strategy

The planning and architectural project have a special policy for choosing colour and materials expressed in façades (Norrköpings kommun, 2018). The competition site is covered by this policy developed by Joanna Pierre, Kulör of Sweden. Sources of inspiration for the colour palette are brick buildings, sheet metal façades, port cranes, containers, and railways in the port area. The design strategy has emerged in three stages. First, the harbour environment was documented in a preliminary colour scheme. Then the relationships and typical characteristics were analysed. In the third stage, the findings were converted into a policy showing a palette for colour and material as the basis for new buildings in the district.

According to this document, a good colour scheme may be judged by the way it dresses the house at hand. Firstly, colour and material should fit in terms of style, history, and shape. Secondly, colour and material should address the surroundings. Thirdly, care is required for all the details of a building in a good colour scheme. This stands for well-thought-out colours for joints, ventilation ducts, water drainage, awnings, etc. (Norrköping kommun, 2018). The overall objective is to create an urban environment that is visually cohesive through colour and material choices that are based on the identity and expression of the place. This guideline has been applied in the planning and architectural project. The two top-ranked submissions in competition follow the policy.

*Figures 8, 9, and 10: The recommendation by Johanna Pierre, developed from objects and façades at the port, is to design a strategy. Source: Norrköping kommun, 2017.*

### The competition site

The direction for the design of the competition site can be found in several documents in addition to the competition program and detailed development plan. The *Aesthetic program* (2022) presents an overall vision – the municipality wants an innovative architecture. The concept is specified in the *Quality Program* (2018) as seven design principles. The architecture should 1) enrich the new inner-city district, 2) respect and take its point of departure in the place, 3) strengthen cultural life, 4) have high quality in design and pay attention to details, 5) embody social integration and interaction as well as capture the spirit of diversity in the city, 6) promote city life through lively ground floors and carefully designed urban spaces, and 7) be beautiful and dignified by choosing honest and sustainable material and thorough, careful processing on both small and large scales (Norrköping kommun, 2018).

The *Aesthetic program* shows the area divided into blocks ready for exploitation. One of the still-free blocks is the competition site planned to be allocated to the winner of a competition. The plot is located directly adjacent to the diagonal and has an attractive location in the area. The buildings facing the diagonal track in connection to a park should be higher than the rest in the block. The historical railway cutting through the area creates a green space that is expected to be an important front (Norrköping 2022). The *Aesthetic program* highlights the possibility of designing the site as exciting and creative architecture to be experienced from the park as a space for activities for premises on the ground floor, which then became regulated in the detailed development plan governing the planning and architectural project. The basic conditions have now been outlined for the competition.

## TWO DESIGN PROPOSALS

Design-developer competitions are based on programs having rules, norms, and conditions. There are three fundamental logics in competitions. Georg Henrik von Wright (1967) describes them as *prescriptive*, *proactive,* and *permissive*. These logics govern the competition's three key actors: organiser, competitors, and jurors. Prescriptive norms inform what should be done in the competition by the key actors. For example, companies seeking land should present proposals that fit the competition task, and the organiser ought to award the competition site to the competitor producing the overall best solution, which in turn the jury is obligated to single out as the winner. Proactive norms are about prohibitions and actions that are not allowed. Competitors are not allowed to be in contact with jurors when proposals have to be presented anonymously.

They must work in isolation from jury members as well as the co-competitors. Submissions that violate the competition rules should be excluded. Permissive regulations define what is allowed and inform about the freedom for design. Because the competition program in this case lacked a clear description of housing needs and the target group for apartments, the design team has been allowed to decide for themselves who the dwellings are planned for and how the requirement for flexibility could be met. In short, the logic of the competition is about "should," "should not," and "permissions." The design-developer competition in Norrköping follows this general pattern for logics.

In the competition, the organiser wanted to create proposals at the site that: a) have high architectural quality and fit into the new context; b) produce more renewable energy than is used during the year; c) reduce CO2 emissions by at least 40%; d) promote circularity in architecture and construction; e) contribute to social sustainability through flexible apartments that meet a diversity of needs, allowing households to grow and shrink over time and provide space for communal activities; f) have affordable rent/costs and fulfil demands for climate-smart architecture; g) support good housing, functions, and experiences of beauty; and h) address challenges in the local community with creativity and innovation in design, construction, and management (Competition Program, 2022).

Design proposals are typically compared and ranked in competitions. "*Compare*" is originally from Latin and has two meanings: "com" stands for "bring together" and "par" is translated to "equal." Competition is understood as an act of putting proposals together and judging them by the same standard. These two meanings are fundamental parts of the professional practice. The competition in Norrköpping attracted six design proposals. The two top-ranked submissions' responses to flexible housing differ. In terms of ecological sustainability, both present good outcomes in terms of climate declarations, energy calculations, and recycling in design and construction. They have low $CO_2$ emissions, 144-145 kg $CO_2e/m^2$ GFA in Modules A1–A5 compared to the standard. The CO2 emissions are 318 kg $CO_2e/m^2$ GFA for dwelling buildings in Sweden. The decision to select a winning design with a lot of small apartments for young tenants in combination with collective space for social activities may be controversial, as it partly contradicts the focus on housing flexibility. The decision was motivated by the jury as follows:

> *After completing the assessment, the jury has concluded that Ramverket is the proposal that most convincingly combines architectural quality and the high*

> *goals set in competitions and recommends the proposal for further processing and implementation. The proposed framework is an exciting concept with an important point of departure in recycling and a strong character of its own. In order to get the climate impact to be as low as calculated, it is necessary that climate-smart solutions be implemented in the coming stages of the project. Great humility is required around recycling. The industry is facing a huge journey in this area, which places high demands on the continued process, but it is nevertheless important that recycling can become a key point of departure in the development of innovative climate-smart homes* (Jury report, 2023, p. 4).

This submission has been produced by a multidisciplinary design team made up of professionals in architecture, landscape architecture, project management, and construction. In the design review, the jury was impressed by the façade fronting towards the public park at the triangle area (Fig. 11).

The winning design is a residential block including 178 dwellings. The proposal is a framework of industrially produced modules. There are a high number of small apartments designed for single households and young citizens (See Appendix A). The demand for flexibility in housing is visualised as different furnishings and use of space in small apartments.

*Figure 11. Façade facing the public park. Source: Kaminsky, Mareld, Preservia, Kian Properties, and Moelven.*

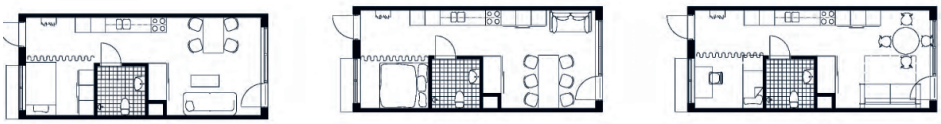


*Figure 12. The illustration is a demonstration of flexibility in micro housing. Source: Kaminsky, Mareld, Preservia, Kian Properties, and Moelven.*


*Figure 13. The residential block showing the outdoor design, façades, and variation of floor plans. Source: Kaminsky, Mareld, Preservia, Kian Properties, and Moelven.*

The residential block consists of four to seven floors (Fig. 13). The courtyard is divided into private areas and public spaces. An opening on one side lets sunlight into the yard. The ground floor has room for business and mixed space for apartments and businesses. The façade facing the park is designed with recycled sheet metal, reflecting a lost industrial heritage at the plot and simultaneously demonstrating circularity. The architecture is in accordance with the strategy for colours and materials.

The second-best submission is delivered by a multidisciplinary design team including four actors: an architectural office, a housing company, an energy company, and a university. The design team is cooperating with two local associations having student housing and dance performances as businesses. This contribution is described by the jury as follows:

*The design of the block has a simple and self-evident scale with a repetitive window arrangement, almost monotonous, but the intended recycled and re-designed sheet metal façade gives the building its distinctive character. The ground floor with recycled and mud brick gives a calmness to the façade. With good solutions, the proposal's climate footprint is low. The circular process is generally described in an educational, credible manner and is also a large part of the architecture. The possibility of reusing heavy building frames stands out and would be almost unique. The façade and the idea of recycling sheet metal in the form of cut, shaped parts give a craft-like feel to both the process and the intended result that is very appealing. However, from an architectural perspective, the overly stripped-down, un-nuanced volume management and window placement don't convince, especially not towards the location at the diagonal. It also does not respond to the design policy for the port area in terms of the division of blocks. The proposal provides a possibility for a venue for associations with a focus on dance. How this may be ensured is not clarified. The strong social values in the proposal are considered to be in the solutions presented for different shared accommodations, whether in the individual home for different family constellations or the shared home. The outdoor environment is beautifully composed and is, in its simplicity, unpretentious but also provides the opportunity for many impressions* (Jury report, p. 4).

The proposal in second place has also got an architectural design that follows the cultural heritage at the site through adopting the guidelines for colours and materials in façades. This approach is further supported by the use of recycled bricks and sheet metal in the façades presented in the illustration.

Also, this submission contains 178 dwellings and has common space for social gatherings on the ground floor. The social intention can be characterised as diversity and flexibility (Fig. 16). The dwellings in this design proposal have been divided into four design types:

1. *Small apartment for compact living:* Dwellings having 1-2 rooms and a kitchen for researchers and doctoral students (Plan A has more space than Plan B and Plan C)
2. *Spacious apartment:* Dwellings having 4 rooms and a kitchen for larger households (Plan D)
3. *Elastic apartment:* Dwellings having 3+1 rooms and a kitchen for households having changing spatial needs. One room may be rental (plan E).
4. *Shared apartment:* Dwelling with a common kitchen and space for collective housing. Private room at the courtyard (plan D).

*Figure 14. The façades at the front show reused materials. The dancing woman is a salute to an association in the area that has space for performance in the proposal. Source: White Arkitekter, Sveafastigheter, AEON Sverige, and KTH.*

*Figure 15. Illustrations of buildings along the street showing colour and number of floors. Source: White Arkitekter, Sveafastigheter, AEON Sverige, and KTH.*

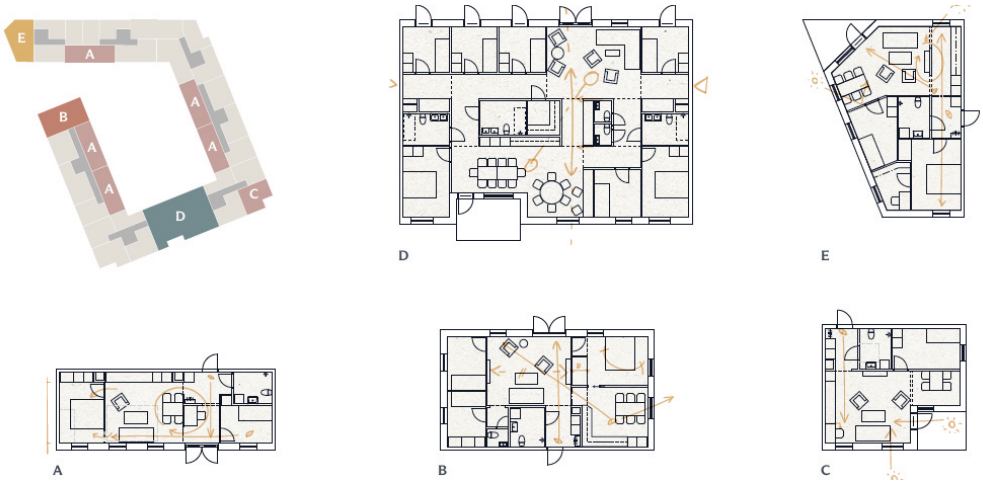



*Figure 16. Drawings showing the different types of dwellings and their location in the block. Source: White Arkitekter, Sveafastigheter, AEON Sverige, and KTH.*

Ecological sustainability is presented by the design team as a pioneering project for circularity in construction. The buildings in the block are designed as a technical system of components to facilitate recycling in design, construction, and housing management, and are visualised in a pedagogical way in the proposal (see Appendix B). Again, the colour and material chosen in the proposal for recycling reflect the industrial heritage of the port area.

## FINDINGS AND CONCLUSIONS

The design-developer competition in Norrköping has been planned to serve as a tool for the organiser and as a testbed for research. For the competitors, the invitation was intended to operate as a professional laboratory and an experimental arena for new thinking. There is a long tradition of experimentation in architectural competitions (Lipstadt, 2010). According to Maria Theodorou and Antigoni Katasakou (2018), well-executed competitions may promote "*a laboratory-like setting in which architects can experiment*" (Ibid, p. 3). The Norrköping competition was organised to operate both as a tool and as a professional laboratory for competitors. In this case, based only on a competition program, multidisciplinary design teams should produce innovative solutions. The design teams were working in parallel on the same task. There was no supervision from a demanding client in the design process since the proposals had to be anonymously presented. The lack of external control was supposed to encourage professionals to test fresh design ideas and visualise new concepts.

From this perspective, the competition may serve as an arena for finding innovative design solutions responding to challenges in a competition program.

The freedom for architects is limited in the design-developer competition through the involvement of a developer in the design team. To have the developer, who is signing the land lease agreement with the municipality and thereby responsible for the implementation, inside the design team instead of having the client outside the design process differs the competition format from the architectural competition. In this contest, designing is no shadow dance with an absent partner. The developer must ensure that the submission is buildable and provide financial resources for implementation before signing the land allocation agreement and getting access to the competition site. Based on these fundamental conditions in the competition format, the response to the research question in the Norrköping competition can be presented and discussed in four fields:

*1. Internal conditions and housing needs*

The dwelling solutions differ strongly between the two top-ranked submissions. This fact reflects both power shifts inside the design team, openness to interpretations in the competition program, and the willingness to take a risk by challenging one of the basic objectives: flexible apartments. The organiser is looking for dwellings that meet a different set of needs, allow households to grow and shrink over time, and provide space for social activities. The developer behind the winning design made two strong preconditions partly in the housing objectives: the size of apartments and the need for adjusting design and construction to a specific system for industrial production of modules. The building company was invited into the team. The success seems to depend on how well the architects tackled this limitation, how they presented the design, and the acceptance by juries of the proposed housing needs in the area. For the competitors, their solution stands out as risky business including possibilities and uncertainty. This quote shows the tension between the developer and architects in finding a driving idea for the design:

> *At first, we had an internal meeting with us, and then we presented our ideas to the companies in the team. After we identified the objectives, it was important to analyse the detailed development plan, understand the challenge… Our client had requests for what kind of apartments we should have in the proposal. Then we did volume studies and apartment plans. We continued by trying to get a handle on the task in a feedback loop with the client (in the team).*

The winning design has a high number of small-size apartments. The lack of a clear target group pointed out in the competition program made it possible to suggest micro housing for compact living. A study on small-sized apartments in Finland summarises the criticism as a lack of spatial qualities, low usability, and absence of social sustainability (Pelsmakers, Saarimaa & Vaattovaaara, 2021). However, the developers' demand for small apartments has support in a doctoral dissertation in Denmark on compact living in two cities: Copenhagen and Aarhus (Hedegaard Winter, 2021). The new inner-city district in Norrköping will most likely lack small dwellings.

The design team presents four types of flexibility and adaptability in the proposal to minimise criticism of micro housing. They add a) collective space for social activities; b) illustrations showing varied types of furnishing and use of living space; c) special apartments on the ground floor that integrate space for living with commercial space; and d) prepare the garage in the basement for other uses in the future and make the space accessible from the courtyard. The small apartment can be assumed to attract single-person households and young people. The surrounding housing is made up of larger apartments for an established middle class. The proposal will, therefore, most likely contribute to social diversity. The solution for housing is intertwined with an inner-city context.

The proposal in second place follows the required housing flexibility and has a more convincing solution, visualising three very different types of apartments: small apartment, elastic apartment, and shared apartment. The outcome of the competition demonstrates that the winning design doesn't need to be superior in every key aspect. In the Norrköping competition, the jurors had to weigh eight criteria of equal importance: architectural quality, social sustainability, affordable rent/cost, energy use, climate footprint, circularity, affordable rent/cost, innovation, and developability. The task was to find the overall best solution (Rönn, Braide & Koch, 2024). The jurors needed five meetings to rank the proposals and complete the jury statement. The flexibility of the dwellings did not become a decisive feature.

*2. Design for ecological sustainability*

The two top-ranked proposals in the competition show that design and technique are intertwined in ecological sustainability. A strong reduction of $CO_2$ emissions, circularity in design and construction, and low energy cannot be designed separately from each other. The solutions are intertwined parts of a wholeness. The proposals in first and second place present credible climate declarations showing

144-145 kg $CO_2e/m^2$ GFA (gross floor area) in Modules A1–A5, according to the expert evaluation. There is a significant potential for improvements since the $CO_2$ emissions are 318 kg $CO_2e/m^2$ GFA for standard dwelling buildings in Sweden (Malmqvist et al., 2023). The climate declarations follow a template adjusted to the new law in Sweden (2021:787). The demand to present $CO_2$ emissions in the Norrköping competitions was the very first direction of climate impacts by the municipality. Since this is a new requirement, the competition stands out as a promising tool for reducing $CO_2$ emissions. However, it's also a time-consuming demand in an early phase. Some reflections in the interviews on the climate declaration are:

> *I think we have low emissions because we were able to work with the construction company's modular system. Their lightweight construction of walls worked well in this competition and provided a low climate footprint. The low $CO_2$ emissions are also due to the dwellings having a compact form. The proposal is a cohesive residential block – not free-standing buildings.*

> *To fulfil the requirement for climate calculations, the proposal must be fully drawn up with materials. Otherwise, you cannot count on the climate footprint. You must insert windows and internal walls and know about cold bridges, etc.*

The proposals in first and second place both have a designed framework for the reuse of materials. The architecture expresses recycling based on a business model applied in the submission. The organiser contributes by offering a site for the storage of reused material near the competition plot. In the winning design, circularity is executed through the industrialised production of modules in a factory. The plan is also to involve an entrepreneur specialising in recycling sheets visualised on the façade, expressing a climate-smart architectural design. Reflections in the interviews on circularity are:

> *Since we work with recycling, we know what current practice is, what is reasonable to promise as recycling, and what promises we can keep. Simultaneously, it felt good that the municipality seemed to push for recycling and intends to monitor demolition permits that can be used as donor buildings.*

> *The idea of working with frames emerged as a strategy to manage the reuse of materials in the modules. The intention is to fill the frames with recycled sheet metal and windows. This minimization of climate impact takes place at the same time as manufacturing in the factory provides full control over circularity.*

The submission in second place is described by the design team as a cutting-edge project in sustainability building. They present a vision for circularity in design, construction, and management in five steps. The first step is the design of the proposals as a technical system for enabling the reuse of materials, including an inventory of recycling. The second stage is an in-depth search for donor buildings. The third step is the establishment of a local centre for recycling. The fourth step is the construction phase in connection with forming a workshop involving craftsmen, engineers, architects, etc. The fifth and final step in the vision is a circular management and long-term care of the residential block.

The energy solutions in the Norrköping competition show that the buildings can produce the same amount of renewable energy that is used during the year. This is made possible in a block having four to seven floors. The roof in the winning design has solar installations for electricity production. Batteries and electric cars are to be used for storage. However, the solution is presented in a simplified manner according to the expert-hired evaluation of energy solutions, although combined with a detailed energy calculation. Comments in the interviews on energy demands are:

> *We try to achieve a plus-energy solution through solar cells… The question was how the form factor affected the energy solution… Energy was already part of the design from the beginning.*
>
> *The energy system is presented as an overview in terms of the storage of solar energy. This is because we have not decided where the storage will take place. We must follow up on where the technology fits best and how much (battery) storage will be needed in the future.*
>
> *It took a long time to calculate the energy use since the proposal is a large block with extensive areas. The work was done manually. There should be a simpler system for making energy calculations in earlier stages. Our program for energy calculation is constructed for projects.*

Several contributions have a plus-energy solution when household electricity is excluded. The top-ranked submissions demonstrate energy possibilities. The buildings in the residential block are fulfilling demands on net-zero energy housing even if they don't show plus-energy solutions.

*3. Designing and reviewing the future*

The competition resulted in submissions demonstrating different solutions to the task. The design proposals are models that, in the form of drawings, illustrations, diagrams, and schemes, show how the dwellings look at the site as a built environment and can be used by future households. Architecture in this context is a future-orientated practice, a design process, and methodology to transform the present into a world of tomorrow (Cross, 1992; Lundequist, 1995). Seen from this perspective, the assessment of design proposals can be understood as archaeology investigating the future in architectural and urban design. Reviewing submissions is both a contemporary "excavation" of a virtual environment and an interpretation of alternative solutions to the same task visualised in graphic models, computer models, or physical scale models. The competition produces knowledge about the future through design, and the proposals show the world of tomorrow – not as it is but how it could look if the submissions are carried out. The proposals in competitions become traces of a possible future. For this reason, jury members who assess the quality and value of the design contribution in a competition can be seen as archaeologists exploring the future in models demonstrating solutions, open for interpretation. The small apartments and space for business on the ground floor in the winning submission will both attract and repel end-users in the future. One response to this uncertainty is flexibility in design.

The long life of the planning and architectural projects transforming the port area will affect land use in Norrköping in the very distant future. For this reason, it is appropriate to refer to a comment by Georg Henrik von Wright (1994, p. 29): *"If thoughts about the future have any value for the one who seeks the truth, it is because they teach us to better understand what takes place in our time. The path to insight could thus be described like this: we try to read the future from the past to get a better understanding of the present."* The planning and architectural project is a decisive step into the future of the city. This is a fact that becomes particularly clear in the urban pattern governing both design and land use in the new inner-city block, regulated in the detailed development plan. This impact will have a lifespan of several hundred years and can be assumed on good grounds to outlive the individual housing in the area and may steer the future as a remnant of the present. An understanding of cultural heritage as a process in the present, rather than historical traces of the past, has also emerged in research (Smith, 2006). The longer perspectives embedded in a competition make it extremely important that design proposals present a credible picture of tomorrow and that jurors are able to judge the submissions in a qualified

manner. Delivery demands and financial compensation to competitions should respond to this relationship, which in turn is a critical aspect in design-developer competitions due to the lack of national rules approved by competitors, which may affect the pros and cons as quality and added values of the forthcoming heritage at the site. The key documents in a competition – the competition program, jury report, and design proposals – create a cultural heritage that, after the competition, can be found both in museums and archives and as a built environment, if the winning design has been implemented.

### *4. Intertwining's in architecture and urban design*

The book titled *Intertwining* by Steven Holl, published in 1996, has been inspiring. The aim of his book is to broaden the argument for intertwines and show these types of connections in architecture and urban design. Holl uses overlapping perspectives to reflect on the design of space, sites, materials, colour, light, and ideas in architecture, clarifying intertwines in twenty projects. Different kinds of intertwines and twisted positions can be seen in the transformation of the port area in Norrköping. Intertwining can, for instance, be found both as actions by practicing architects and by civil servants employed in the Urban Planning Office, focusing on implementing politically approved policies. Civil servants have produced the competition programs and operated as jurors assessing design proposals on behalf of the organiser. Architects are also producing design proposals having intertwined qualities, which may be experienced as a whole. Architects have also been hired by the Urban Planning Office to investigate the port area and develop required planning documents for governing the alteration by design methods. Even if the land allocation and contracts transferring sites to developers are handled by civil engineers, the architects appear to be a powerful profession influencing the transformation of the port area on three different levels:

#### *The design-developer competition*

At the first competition level, the architects in the role of civil servants have been a driving force in the preparation of the design-developer competition. The Urban Planning Office has developed the competition program in cooperation with scholars from Chalmers and Halmstad University, including the Swedish Architects unit for competition service. Architects are in charge of the jury. Five out of seven jury members are architects by profession. In the multidisciplinary design teams, architects are a decisive force in suggesting, designing, and visualising fundamental ideas in the proposals. However, in the winning team,

the architects have been under the guidance of the developers, and they accepted, with some doubts, the high number of small apartments as a starting point for designing a proposal, hoping for success. This is done in voluntary cooperation. Identified housing needs then became a driving idea in developing solutions. Drake (1979) calls this fundamental force a primary generator pushing design towards a specific outcome. In summary: intertwined positions among architects at this level are typically connected to advocating, planning, and programming the competition; designing solutions; and singling out the winning proposal. Intertwining has been a fundamental part of the competition from the start, intended to facilitate the exchange of professional experience and knowledge in design solutions for the complex and multidisciplinary task.

*The planning and architectural project*

At the second level, the intertwined positions for architects can be seen in the planning documents for governing the transformation of the port area into an inner-city district. The planning project has resulted in a detailed development plan regulating building on-site and the use of land in categories such as housing, business, and service. Both architects employed at the Urban Planning Office and practicing designers from private companies have been involved in the production of documents for steering design and the degree of exploration, rethinking cultural values in the port area, and selecting buildings of historic importance for protection. The assignments also include guidelines for governing architectural quality. The whole picture in this large planning and architectural project, the transformer, can only be obtained by civil servants coordinating reports from hired architects working on specific assignments. From a professional horizon, intertwined positions may partly have been an operation in the dark, as a hidden agenda, even if investigations and guidelines are presented for the public by the Norrköping municipality on the website showing the transformation of the port area.

The most important document at this second level is the *Detailed Development Plan* (Norrköping, 2022) for governing the new inner-city block. The plan has been approved by the politicians in the City Planning Committee and accepted without objection by the County Administrative Board, a state authority having the task of controlling adjustments to national interests. According to the *Plan and Building Act* (2010: 900), the detailed development plan consists of three interconnected parts: 1) A site map having planning regulations. These rules state what should be done on each site, what is prohibited, and what actions are permitted. 2) A plan description informing of the objectives, considerations,

background, content, and conditions for exploitation of the land. 3) An implementation description showing timeframe, financing, and running costs, and consequences (Planning and Building Act, Ch. 4, §§ 30, 31, 33). The *Detailed Development Plan* (Norrköping, 2022) is a comprehensive document of 92 pages with references. At the end, there is a list of a total of 16 officials who have participated in making and executing the plan project. Out of these, 14 officials are employed at the Urban Planning Office. At least half of them are architects and landscape architects by profession. The planning project is a typical example of intertwined positions among officials in the Urban Planning Office, producing guidelines to archive spatial qualities and remove obstacles on the way to feasibility.

Attached to the planning project is a separate *Colour and material strategy* produced by a building antiquarian and colour expert (Norrköpings kommun, 2018). This guide has clearly influenced the top-ranked design proposals. The document is also referred to in the competition program together with the *Quality program* (Norrköpings kommun, 2018) and an *Aesthetic program* (Norrköpings kommun, 2022) as well as the municipality's architectural policy called *Architecture City of Norrköping* (Norrköpings kommun, 2018). The *Quality program* is intended to create a common foundation for the new inner-city block in collaboration with private developers, specified in six themes: 1) Living urban environment; 2) Active district; 3) Sustainable travel; 4) Ecosystem services; 5) Resource efficiency; and 6) Innovative architecture. Authors of the quality program are two architects in the Urban Planning Office. The *Aesthetic program* shows how the planning and architecture project will look after implementation. Nine blocks are visualised and presented by named developers and architectural offices. Five blocks have not yet been assigned. One of these is the competition site. The *Aesthetic program* also refers to the guide for colour and material for the new district, including illustrations from the buildings already designed by architects. The intention is to use the program for the review of building permits for quality assurance of design and construction. The governing ability is in the building permit prior to implementation. The authors of the *Aesthetic program* are again two architects at the Urban Planning Office.

Three documents, called investigations, are interesting in this context: an inventory of the buildings' cultural heritage value in the port area (Wiklund Arkitekter & Antikvarier, 2019), an inventory of the landscape in the harbour (Tyréns, 2020), and an archaeological investigation (Statens historiska museer, 2022). They show that the past, present, and future are intertwined positions in the planning and architectural project. The report on the cultural and historical value of the building has had a decisive impact on the decision to protect two objects in the

detailed plan. However, this is not the case for the warehouses in the harbour, which are reported to have value of national importance. They were demolished. These two buildings were part of the national interest for cultural preservation and should therefore have been protected by both the municipality and the County Administrative Board. National interests may not be damaged according to the law. The warehouses were documented before the demolition, and their cultural and historical value can be found in archives. The diagonal railway track in the area is seen as a fixed element of the landscape, which, together with high lighting poles, gives the district character (Tyréns, 2020). The archaeological investigation consists of archival studies and excavations at a number of locations in the area. Identified remains from older houses in the area, streets, cultivation space, etc., have not resulted in any protective measures in the detailed development plan.

*The municipal policies*

At the third level are policies adopted in councils to be applied by officials in planning and architectural projects such as the *Comprehensive Plan* (Norrköpings kommun, 2017), the *Action Plan for Land Allocation for Housing Construction* (Norrköpings kommun, 2018). From this perspective, the planning process appears as the execution of guidelines for the transformation of the port area. The architectural policy, *Architecture City of Norrköping* (Norrköpings kommun, 2018), did not make any significant impact in the competition, although it was referred to in the competition program looking for high architectural quality in the design proposals. The *Comprehensive plan* from 2017 describes the harbour as a forthcoming district with approximately 5,000 residents having architectural qualities specified in seven points. The architecture should 1) enrich the city; 2) respect its surroundings; 3) strengthen the cultural environment; 4) have a high-quality design language; 5) promote social integration and interaction; 6) promote urban life; and 7) age beautifully and with dignity. Guidelines for the planning are "*urban, multifaceted, groundbreaking, and responsible architectu*re" as well as *"saving older buildings of good quality as far as possible"* (Norrköpings kommun, 2017, p. 50). The *Action Plan for Land Allocation for Housing Construction* is a governing policy to be applied to all competitions transferring municipally owned land to developers for housing. Initially, it can be noted that competing is an overarching ideology in the land allocation policy. Plots shall be allocated to developers in a contest. Good competitive conditions and diversity in the market are to be promoted. Direct allocation of land without competition requires special reasons and must be justified. When allocating land, the municipality has to take into account competence,

financial stability, and long-term interests. At the time, new companies shall be offered the same opportunity for land as well-established developers, according to the policy. The ability to implement housing projects is seen as significant in the policy. For this reason, it is permissible to consider how the developer complied with agreements in earlier projects when deciding on land allocation.

The policy from 2018 clarifies the relationship between politicians and administration. Politicians are the decision-makers, and civil servants are administrators and proposers. The civil servants at the Urban Planning Office shall prepare the competition program and describe the main content of the competition for decision by the politicians on the City Planning Committee. If politicians choose to proceed with the competition, a program has to be drawn up by the administration that contains information about the competition site, submission requirements, jury and evaluation, assessment criteria, and expected agreement. A first-prize winner shall be presented to the City Planning Committee. The politicians decide on the allocation of land. The ambition is to convert the assessment criteria into follow-up requirements in agreements. The land allocation agreement in the design-developer competition includes the competition program, the jury report, and the winning proposals. They are appendices to the contract and therefore a legal part of the agreement.

Within the Urban Planning Office, the unit for land and exploitation is responsible for handling land allocations according to the policy. The degree of collaboration with architects responsible for spatial planning, urban design, and architecture is determined by the requirements for architectural drawings and illustrations in the competition program. This collaboration is not regulated in the policy, although the intertwined positions there are among professionals in design-developer competition. To put pressure on developers to keep promises, the municipality demands building in the land allocation agreements within a specified time frame. The pricing of the municipality-owned land is based on contest according to the policy. This method is used to identify the market value of plots. If the price of the land is an assessment criterion, the winner is the one who submits the highest bid. Quality is then in second place. In the case of a fixed price for the land, then the winner is the proposal that has the best solution to the task. Perceptions of quality come to the centre of assessment. It was this method with a fixed price in the competition program that was applied in the design-developer competition. The multidisciplinary design team competed with architectural quality, flexible housing, affordable costs for the end-user, and ecological sustainability ($CO_2$ emissions, circularity, and low energy).

The *Action Plan for Land Allocation for Housing Construction* (Norrköping, 2018) is lacking regulation on compensation to companies for their development proposals. The lack of information is typical for the land allocation policies in Sweden, which in turn differentiate the design-developer competitions from architectural competitions, following rules approved by representatives from the building sector. The financing of the submission is seen as the responsibility of the competitions. The market is supposed to solve this financial dilemma. From this point of view, the remuneration of 170,000 SEK in the Norrköping competition to a maximum of five design teams producing approved proposals is reasonable. In total, a sum of 850,000 SEK was available for compensation to the design teams. Despite this, the financial substitute may only correspond to half of the costs for fully paid professionals in trying to make a winning design. The companies competing for land by design must share risk and costs and contribute resources of their own, which applied business models demonstrate in this competition format (Rönn & Koch, 2023).

*National regulation in the law of exploitation in cultural environments*

At the national level, there are laws that shape the conditions for planning and architectural projects when exploiting land in the area of valuable cultural environments. Regulations governing the design and planning can be found in the *Planning and Building Act* (2010:900), the *Environmental Code* (1998:808), and the *Cultural Heritage Act* (1988:950). The *Detailed Development Plan* (Norrköpings kommun, 2022) has no references to the *Cultural Heritage Act*. The decision to protect two culturally and historically valuable buildings in the detailed plan is based on the *Planning and Building Act*. The demolition of the two important warehouses in the harbour does not have legal support. The County Administrative Board shall control national interests in detailed plans on behalf of the state and shall reject proposals that risk significant damage to cultural environments identified by the Swedish National Heritage Board. The demolition of the warehouse in the harbour can, on good grounds, be seen as a significant destruction of protected national interest. The Environmental Code contains a prohibition on significant damage to national interests. The power over alteration of land use is shared in the detailed plan of having areas of national interest. Shared responsibility can, in this case, be seen as an invitation to intertwined interest in the view of legal requirements on locally desirable transformation.

The approval of the transformation of the port area into an inner-city block by the county administrative board means that the demolition of the warehouses

has been accepted without any demand for preservation, reconstruction, or compensation for the intervention in the national interest. As an explanation, an administrator refers in an email to the fact that the authority "*has not reported and claimed a geographical boundary for the national interest that includes the relevant blocks in the detailed plan...*" (County Administrative Board, 2025-06-11). The municipality believes that the detailed development plan is outside of the national interest, in defence of the destruction. In the review plan proposal, the County Administrative Board finds it valuable that the municipality highlights the grid-city and the alley of planted trees (Norra Promenaden) as important elements of the urban development. The protected avenue is going to receive new street lighting. The County Administrative Board points out that the alteration of street lighting is a measure that needs a permit according to the *Cultural Heritage Act* (1988:950). Even if the law is addressed in this case, the *Cultural Heritage Act* has a weak position in planning processes and is rarely referred to as a support for the preservation of architectural qualities or as a basic requirement for consideration of cultural heritage values (Rönn, 2017; Rönn, 2020). The protection of two buildings of cultural and historical interest in the *Detailed Development Plan* (Norrköpings kommun, 2022) appears together with the guide for choosing colour and material reminiscent of the harbour in accordance with the plan. These adjustments are driven by self-interest and applied objectives rather than a strategic preservation of cultural heritage through strong national legislation for safeguarding cultural heritage values and historical architectural qualities.

## CONCLUSION

This paper has been developed for a scientific conference in Belgrade, having *intertwined pasts* as a key concept and unifying theme. The concept has been tested in a case study examining a planning and architectural project framing a design-developer competition. The concept of intertwining is very flexible and broad and can be understood differently depending on the context. Based on the conference concept, the study can be summarised in three major conclusions.

Firstly, intertwined positions among professional actors, regulations, and policy documents are a feature that increases in the planning and architectural projects containing competitions. This seems to be a typical pattern, starting with the early stages of the production of design proposals, including the selection of winners. Architects are gradually gaining an increasingly stronger position as civil servants in the municipal administration as well as practicing designers in the design teams. Contemporary actions, including the development of detailed

development plans to support the implementation of large transformations, such as in the port area in Norrköping, have a high degree of intertwining. Separation and conflicts are not obvious in public planning documents. The degree of intertwining thus grows in the planning processes up to implementation.

Secondly, intertwined positions in the competition are reciprocal relationships in the submissions between design and technology. The outcome seems to have increased knowledge exchanges within the multidisciplinary design teams. Solutions that significantly reduce $CO_2$ emissions, have low energy use, and apply circularity in design and construction supporting a high degree of recycling stand out as an indivisible whole. Intertwining of design and technology proposals is advantageous but may also be sensitive to later changes of winnings and risk advantages achieved in the competition. It is therefore important to keep the design team intact and not separate professionals and companies behind the winning design.

Thirdly, the analysis of the documents produced in the planning and the architectural project shows a typical pattern of intertwining and separations in the view of the cultural environment and the industrial heritage in the port area. For the identification of cultural values and qualities, external consultants have been hired for investigations and recommendations on how to proceed. Their reports have then been taken care of internally by the civil servants at the Urban Planning Administration. Suggestions that fit into the vision for transformation of the harbour to a new inner-city quality have been welcomed and integrated into the planning and architecture project. The urban pattern, the colouring of buildings, the materials for façades, and the protection of two buildings with design qualities and cultural values are evidence. Measures that contradict the transformation have been rejected. This is the case for the two warehouses in the port area of national importance. They were demolished because of being obstacles to the implementation of the plan architectural project.

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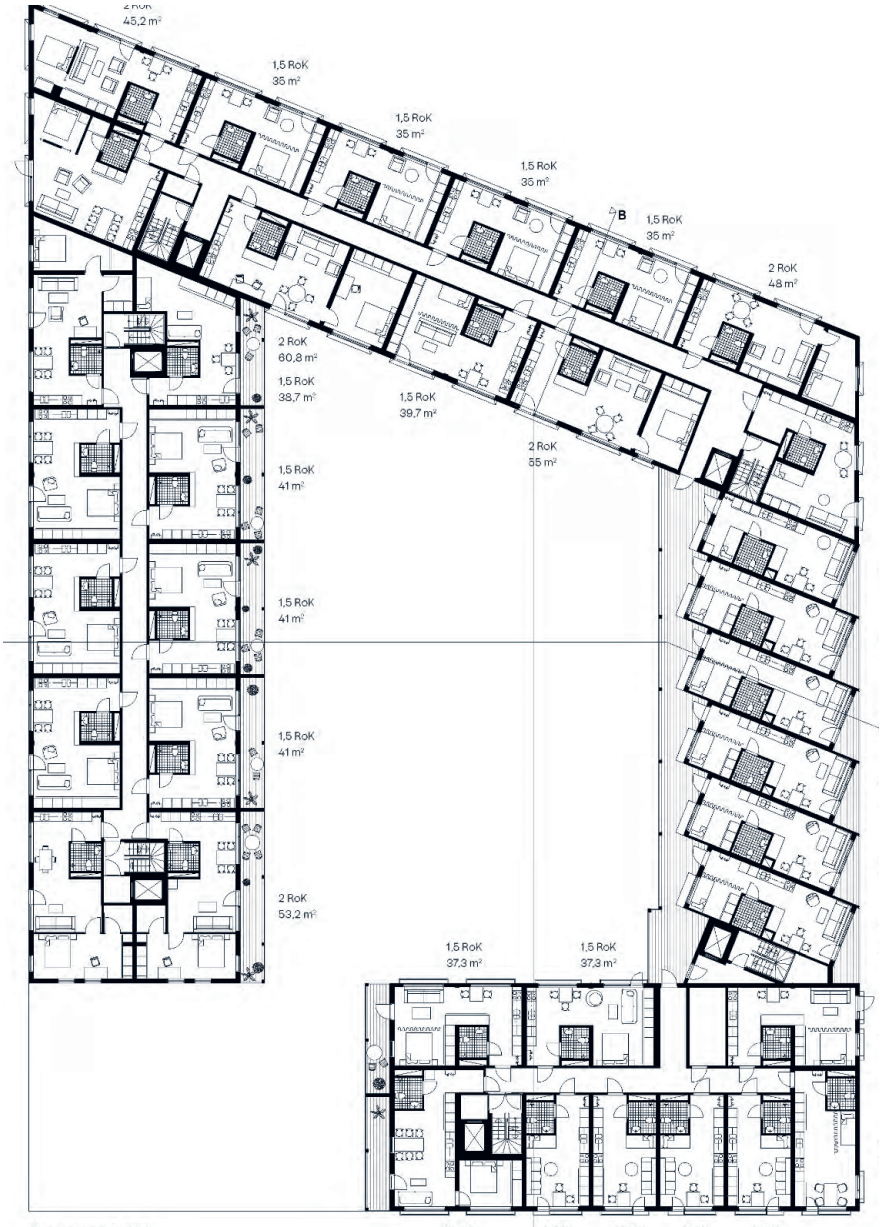
## APPENDIX A. HOUSING

A plan showing apartments, their size, and their distribution in the block. Source: Kaminsky, Mareld, Preservia, Kian Properties, and Moelven.



## APPENDIX B. CONSTRUCTION ELEMENTS

An illustration showing the compilation of construction elements to support recycling and circularity from a design perspective. Source: White Arkitekter, Sveafastigheter, AEON Sverige, and KTH.