

The professional 'languages' in urban development – the need for better 'translations' to support decision making

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1. Introduction: the need to identify professional languages and improving translations between them

Given current challenges in urban development, there is urgent need to not only improve our understanding of urban processes but also scrutinise the tools and skills necessary to successfully intervene in them. Sustainable urbanisation has been on the top of international and national agendas in debate, research and policy for several years. The key role of cities has been emphasised in a wide range of contexts, and there are many attempts to grasp the evolution and future development from ecological, technological, social and cultural perspectives as well as from economy, management and governance (D. Simon 2016; Elmqvist, Parnell, and Seto 2013; Amen, Toly, and McCarney 2011).

In the face of contemporary growing social and environmental challenges, urban governance, planning and design are increasingly deemed vital in policy for change, why there has emerged an urgent need for more rigorous knowledge foundations for these practices. We can see three major knowledge challenges of equal concern to scientific disciplines, public authorities, and the professional practices engaged in these fields. First, there is an *interdisciplinary* challenge where the inherent synergies and conflicts in policy and practice addressing social, economic and ecological sustainability need to be resolved. Second, there is a *transdisciplinary* challenge where we need to bridge the gap between theory and practice and new research need to be undertaken in close exchange with practice to safeguard adequacy and applicability. Finally, there is need to update and improve the *knowledge provision system* of the field, consisting of actors such as universities, public authorities and private practices, to procure efficient and accurate *knowledge transfer* in accordance with their societal roles, and to secure an efficient translation between the different forms of knowledge and languages used by the various actors to enable a better integration of knowledge produced in different contexts.

Urban development processes involve a broad set of different actors and practices. These practices in turn often have various forms and conditions, not least depending on when in the processes they intervene and whether they are found in e.g. public administrations, among market actors or civil society. We have in another context broadly identified three levels of practice that in principle also demand different training and expertise: *urban governance*, *urban planning* and *urban design* (see e.g. 'The Soft Technologies of Urban Development' also submitted to the AESOP2018 conference).

Our aim here is not to sort out and construct a model in detail of the practices involved in urban development, and there are of course lots of overlap and interchange between these practices. The reason we emphasise the difference between these practices despite the many overlaps, is to highlight how they all also constitute different forms of expertise expressed in particular forms of knowledge and skills using different tools and languages. The ability and language used to write texts is very different from the ability and language used to construct regulations, which both in turn are different from the ones needed for shaping space, despite all being essential for urban development.

With 'languages' we here mean different forms of *knowledge carriers*, such as texts, diagrams, maps, objects, where these specific languages are essential for the kind of knowledge they carry. However, these languages are far from commonly shared or perhaps not even understood by all actors and organisations in a particular project, or even knowledge provision system. Naturally, such language

barriers may create difficulties in obtaining necessary rapid and accurate knowledge exchange. Such inefficiency in knowledge transfer, we suggest, has an unfortunate hampering effect on inter- and transdisciplinary knowledge development and efficient public governance.

In this paper, we identify 'languages' central for different professions in the urban development process: natural languages, such as English or Swedish; mathematical languages, such as algebra and arithmetics; and geometric languages, such as geometry or topology but also including visual representations and images. Skills for handling these languages are distinctive for professional practices and a prerequisite for successful urban development, but we especially emphasise the need for 'translations' between the languages, something far less addressed. For instance, we may find steering documents constituted by all these languages, skilfully constructed one by one, but which together prove incongruent. This may obstruct strategic and operative decision making, and obviously impedes efficient urban development.

In this paper, these languages are scrutinised in a close reading of steering documents in a major Scandinavian urban development project, including not only texts but to equal degree geometric and visual representations and numbers, to identify such incongruities. The aim is to contribute to means for better 'translations' between professional 'languages' to support collaboration between professions, more transparent foundations for decision makers and more successful urban development processes. Before we get to this close reading we will begin by sketching the particularities of the urban development as an epistemological field.

2. The particular knowledge landscape of urban planning and design: unusual heterogeneity

In the last decades, the modes of knowledge provision have come under scrutiny. The concept transdisciplinarity has opened up new views on *where* new knowledge actually is generated as well as debates on *how* to frame knowledge production institutionally. As such it has come to support new research in close relation to fields of practice but also inspired established academia to an interest in practice-based thinking as a way to acknowledge types of knowledge and research problems difficult to manage within traditional boundaries. Crucial for this emerging Mode 2 of knowledge production is the seminal book *The New Production of Knowledge*, where its main feature is identified to be that it operates within a context where problems not are set within a disciplinary framework (Gibbons et al. 1994, 3–5). Through close involvement with practice, it concerns the interaction of many actors and sets of practitioners in a broader social and economic context by way of which it becomes more reflexive, accounting for several societal perspectives.

Not least have recent years witnessed extensive discussions on the concept of transdisciplinarity and its relevance in the fields of urbanism, architecture and design (See e.g. Doucet and Janssens 2011; Linder 2005; Stanek and Kaminer 2007). A growing number of fruitful approaches have also emerged, whereby design abilities are used to grasp current conditions and complexities in urban situations and built environments, and where images, models and artefacts are used to explore, visualise and communicate complex relationships (see e.g. Burdett 2006). These approaches are recognising other ways of producing and communicating knowledge.

At the same time, it is not unfair to say that the new knowledge demands outlined in the introduction, often have caught the involved disciplines and actors unprepared. There are many reasons for this but we can identify three inherent characteristics of the fields that create major challenges for rapid and comprehensive knowledge development.

First, *the multi-disciplinary character of the fields*; urban planning and design addresses the most complex human system there is, the city, and it is not surprising that the many different disciplines and sub-fields which urban planning and design comprise and rely upon, only to different degrees have been successful in advancing applicable knowledge about this tremendous system. Especially important here is the fact that this knowledge, as a consequence of this complexity, comprises

knowledge of the complete academic range, from science to the humanities, and even goes beyond the traditional academic boundaries into the arts. Therefore, the field naturally also comprises knowledge with quite different epistemological foundations. It is therefore not surprising that the knowledge in the fields proves difficult to synthesise in any simple comprehensive manner and instead often give rise to intense academic debate.

Second, *the practice dominated character of the fields*; we are not only talking about academic fields of research but also about professional fields of practice. As a matter of fact, the disciplines of urban planning and design more often find their identity in the different professional practices that they are related to than in their disciplinary research. Especially architectural professionals tend to look for knowledge primarily in other sources than research literature (Samuel 2017). Practice and research in the fields often develop in parallel with unsatisfactory rapport between them. Moreover, the two major professional practices, urban planning and urban design, actually stem from quite different knowledge traditions, between which there again is unsatisfactory rapport.

Third, *the political character of the fields*; given their aim to deal with both theoretical and practical knowledge that is used to structure and shape the spatial framework of society at different scales, the disciplines of urban planning and design are inherently political, why they are replete not only of knowledge conflicts but ideological conflicts as well. The very idea of a field of knowledge that concerns how things 'ought to be', presupposes alternatives or such a question would never arise. Which these alternatives are and which of them we decide to realise are of course deeply political issues.

This means that urban planning and design not only comprise an unusual range of academic disciplines, but also a diversity of practical knowledges developed in different knowledge traditions and, on top of this, also a wide range of ideological preferences concerning what cities and societies ought to be. Together, this adds up to a remarkably heterogeneous epistemological field, something reflected in the actors involved in the knowledge provision of the field. These naturally have different roles (producers, regulators, appliers) but more importantly, they also handle knowledge that have different forms (generative, analytical, discursive) and, moreover, do so by using different 'languages' (verbal, mathematical, diagrammatical, object-based). This presents a highly problematic setting for knowledge transfer in the field, with high risk for misunderstandings and even conflict.

3. The knowledge processes in urban planning and design: jumping between knowledge forms

In the context of concrete urban development projects this heterogeneous field of knowledge form part of what Herbert Simon called 'the sciences of the artificial' or design methodology, that is, the knowledge and practice to device "courses of action aimed at changing existing situations into preferred ones" (H. A. Simon 1981, 129). It is important to stress how this definition clearly indicates how design methodology here concerns knowledge processes that are far from limited to what we generally refer to as the design practices, but rather is inherent in any humanly directed process of change.

Design abilities have been described by Nigel Cross as multifaceted cognitive skills that fundamentally rely on non-verbal media of thought and communication. In the specific "designerly ways of knowing" employed by designers, knowledge is embodied both in the *processes* of designing and in the *products* of designing. Knowledge is accumulated in, and transferred through, methods and approaches, as well as various models and design artefacts what we above called languages. Designers have trained abilities for non-verbal thinking and communication, where certain "codes" are used to translate abstract requirements, formulated in the brief, in the visions of the client or in the wishes of the users, into concrete objects. Importantly, these "codes", or non-verbal thoughts, both "read" and "write" in what Cross calls "object languages" (Cross 2007, 26–29).

How to use these 'languages' in more inter-subjective and critical discourses is a crucial question for the development and transfer of knowledge in the design disciplines as well as many other practices (see e.g. Nilsson 2013). A challenge is to formalise these languages so that they can be used to communicate knowledge to broader communities of researchers and professionals without losing their specific generative capacities. Such translations are especially critical in our times of increased inter- and transdisciplinarity.

Knowledge development and transfer is a social endeavour where interaction between configurations of people, objects and visual representations is central. Professional and practical skills are especially dependent on the use and manipulation of tools such as objects and representations, and these object-centred relationships come to life within contextual arrangements (Knorr Cetina 1999, 171–72, 218). Visual representations constitute objects that play an important role in mediating knowledge and knowing, and such 'artefacts of knowing' communicate meaning symbolically and help to articulate, exchange and understand ideas, and to generate knowledge individually or collectively. They form 'object-languages' that are used in the processes of design and change. The communicative and interactive properties of such 'languages' of visual representations constitute them as central elements of knowledge work as well as in collaboration between practitioners with different disciplinary background and 'object words' when they articulate their perspectives by use of visual tools (Ewenstein and Whyte 2007, 81–82).

Written and oral language is not the primary means for conveying knowledge in several professions, and not least architects and urban designers distribute their knowledge over a variety of human faculties – intellectual, intuitive, and embodied – where written language is only one tool beside a range of visual representations such as sketches, images, photos, scale models, etc, used as means for both developing and sharing knowledge (Styhre and Gluch 2009, 109). Visual representations, images and three-dimensional scale models are capable of embodying diverse objectives and demands of various stakeholders, and therefore are useful for both developing knowledge about complex tasks and communicating and sharing knowledge and ideas with others.

Experienced professionals also develop a specific 'professional vision' which is central for how professionals make decisions based on professional judgement (Styhre 2010, 2013). Since not all knowledge is possible to codify and transcribe into documents and texts, there is also some kind of 'operative knowledge' which is a constitutive element of a professional practice; situated and contextual, connected to routines, social relations, artefacts, technologies and other relevant resources (Styhre 2013, 2). Here the 'object languages' and the capacity of visual representations to embody diverse objectives, together with the professionally trained eye and vision, become central.

The principal insight here is to realise that we in the particular field of concern, urban development, are dealing with several different representational forms or languages and the need for knowledge to be translated from one representational form to another. The analytical framework we envision for sorting in this epistemological landscape is that a field such as urban development is an integrated part of a societal *system of knowledge provision*, constituted by a set of *actors* (universities, public authorities, private practices) that *generate* and *transfer knowledge* according to their particular roles (producers, controllers, appliers). The knowledge that is generated and transferred within this system typically have different *epistemological forms* (analytical, discursive, generative), which in extension are embodied in a great variety of *knowledge carriers* or languages (texts, mathematics, diagrams, objects).

4. The case of steering documents in Frihamnen

As a more specific case and example of a close reading of steering documents in a large scale urban development we have used the development of the Frihamnen area within the large RiverCity development in Gothenburg, Sweden. We have conducted several pilot cases and workshops on

different areas of the RiverCity development, which all point in a direction that there are difficulties in forming productive and creative processes that enable strategic and operative decision making towards common goals. These difficulties also seem to be on several levels in the decision hierarchy and between various actors in both policy and professional processes and situations. Even though there is a broad range of different steering documents to help guide the process, there seems to be a lack of consistence between the documents as well as the use and reading of them among different professionals and actors. Research is needed on how translations actually work between the different 'languages' used in different groups and documents, and this brief case study is intended as a first step in such a research endeavour.

The area of Frihamnen (Swedish for the Free Harbour) is centrally located in Gothenburg on the north side of the river Göta Älv just opposite the current inner city with its historical city centre. Its size is approximately the size of the city core within the old bastions.

The area is currently in redevelopment, with the ambition to transform the former harbour area into an integrated part of the inner city. The planning of the area is guided by a set of steering documents, of which the most important are the RiverCity Gothenburg Vision; the Planning Programme; the Project Directive; a Manifesto; and a Sustainability Programme. All these documents form the base for the development of the detailed development plan, which the City in the Swedish system has the final mandate and decision over and which is finally prepared by the City Planning Office.

4.1 The RiverCity Gothenburg Vision

Gothenburg is in the midst of extensive transformations and expansion. The city is the centre in a region that has been prosperous and expanding since the last two decades with flourishing industry, trade and culture. But it also has huge challenges. Centrally located large-scale transport infrastructure and the urban planning of the 1960s and 70s have created barriers and ruptures in the urban fabric. The city struggles with problems of segregation and inequalities, both concerning socio-economic aspects and accessibility to the city, simultaneously as issues of climate change and resource efficiency need to be addressed. To approach this, and make use of and support the positive developments, the City of Gothenburg initiated the work to formulate what the future city would be.

The RiverCity Gothenburg project was initiated by the City Executive Board, and in 2010 a task force was formed to devise a vision for the central parts of Gothenburg that run along both sides of the river Göta Älv. This was the start of a two-year intensive work involving a broad range of different groups, actors, experts and the public in order to get a holistic perspective on the city and its future developments. The whole culminated in the adoption of the RiverCity Gothenburg Vision by the City Executive Board in October 2012, with broad political agreement among all political parties. The whole vision process and its workshops have been extensively studied and documented in academic contexts (see e.g. Brorstrom 2015c, 2015a, 2015b; Hagan 2015).

The overall vision is formulated as "RiverCity Gothenburg will be open to the world. It will be inclusive, green and dynamic" (RiverCity Gothenburg Project Group 2015). The RiverCity Gothenburg Vision underpins the City's work on the planning and development of the area, and to set the direction for the realisation of the vision, three core strategies for implementation were formulated: Connect the city; Embrace the water; and Reinforce the Centre (Figure 1).



Figure 1. In the vision document the key aims of the project are formulated in short sentences: Connect the city; Embrace the water; and Reinforce the Centre, illustrated with photographic collages. It is clear how these sentences are rather open and can be interpreted in many different ways, which is natural in a document of this kind. The photographic collages do the same thing, where the form of collages in itself underline the fact that what is depicted are not real things but exactly collages of different interpretations. However, the specificity typical for photographs as a medium by necessity depict very concrete situations that may colour the future development process in a rather uncontrolled manner.

The strategy 'Connect the City' intends to bring the city together across the river to become a physical and social whole. The intention is to create a city for everyone by counteracting segregation with strategic urban links and more cohesive urban street networks designed as inclusive urban spaces. Gothenburg is a seaport, and the strategy 'Embrace the water' intends to recreate the city's historical identity and relationship with the water by creating new meeting places on the water (Figure 2). The strategy 'Reinforce the Centre' builds on Gothenburg's growing reputation for innovation and as located at the very centre of the region where the inner-city area will expand across the river (Figure 3) with the ambition to become a vibrant urban environment acting as a driving force for the region.

The RiverCity Vision is the overall steering document for the development of all areas within the RiverCity. The vision document is produced as printed report of 46 pages with careful layout and graphic material that present the vision, but also briefly the process behind it and further on. Its form and language, as in many vision documents, seem to be intended to inspire to positive feelings and future orientation but with a broad openness on how it can be interpreted and materialised.



Figure 2. Illustrations to 'Embrace the water' showing on the one hand a rather precise and worked through drawing of a low-density, floating city, in typical architect's manner, and on the other hand a very conceptual graphical image most generally depicting the idea of activating spaces along the river. From the point of view of supporting the further planning process, one may wonder why these images are chosen. One seems to give very weak support if any for further steps towards 'embracing the water', while the other seem to have a finished proposal relating to a very particular interpretation of this strategy, that excludes other interpretations or ideas. It could be said to leave things open while also giving a precise idea, but it would seem more useful to, for instance, in a general manner illustrate let us say three different interpretations of the strategy.



Figure 3. Illustrations to 'Connect the city', in a similar manner as for 'embracing the water', now a bit contradictory with a high-density extension of the city centre across a bridge, accompanied by a conceptual image of how the inner city grows across and along the river. Again, the conceptual images are both clear in their general ambitions but very imprecise in how this strategy can be materialised (which partly is the intention with such images). At the same time, the more detailed drawings in fig. 2 and 3 seem almost to be finished architectural proposals, which more over contradict one another, leaving little support for the next step in the planning process.

4.2 The Planning Programme for Frihamnen

The aim of a planning programme is to investigate the appropriate land-use for an area and to briefly process questions about building density, traffic, environmental issues and implementation. The programme delineates the city's intentions with the area and forms the base for the following work on the detailed development plan. The programme for Frihamnen was established in 2014 by a group led

by the City Planning Office and is an extensive document of 70 pages, mainly consisting of written text with conceptual and general illustrations, diagrams and images (Figure 4).

The aim of the programme is described as, in the form of a *dynamic framework*, to indicate conditions and guidelines for Frihamnen to become part of the dense and mixed urban city centre, containing workplaces, service, socially mixed housing, parks and good public transport. The work with the programme aims to create conditions for the city core to grow over the river and to knit the northern and southern parts together. The dynamic framework intends to support and drive a sustainable development and also aims to make the water and docks accessible and let the character be formed by the historical remnants (Göteborgs Stad 2014, 9).

The overall idea is described as:

“Here will a modern inner city develop with a rich urban life, a variety of actors and a broad offer of activities. With a park close to the water and a unique location in the central core of Gothenburg, the city will be built together over the river. Closeness to park, greenery and water contributes to character and qualities in the new city district.” (Göteborgs Stad 2014, 14)

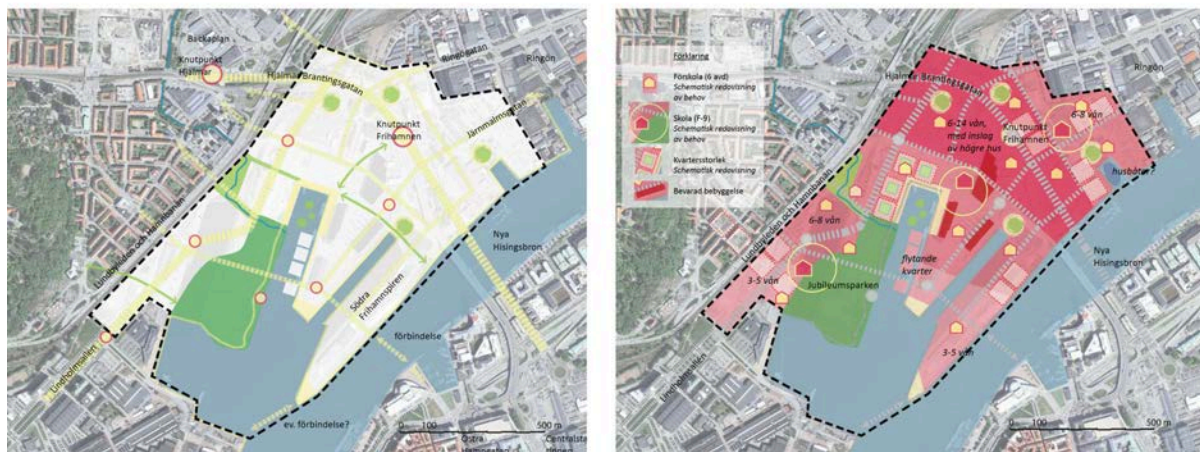


Figure 4. Diagrammatic plans of Frihamnen in the Planning Programme illustrate the overall street network with public places (left) and land-use in schematic ways, showing overall spatial relations. In comparison to the vision document above, this is a decisive step towards greater concreteness, where the graphics also have a rather formal manner indicating legal weight to the document. Major connections, functions and building densities are indicated in a manner that seems in a rather direct way to define the next steps in the process. At the same time, we totally lack alternatives here, why the development strategies written in text which still are kept rather open, here are given a rather specific interpretation, without explaining why and where other options are left out.

It is also stated that Frihamnen will knit together the city across the river and that several important passages and connections connect Frihamnen to the surrounding districts. A fine mesh of streets is proposed where car traffic is filtered through several streets to reduce barrier effects and increase the urban character, and pedestrians and bicyclists are prioritised. Frihamnen should be a green and sustainable district, also including some sub-districts with different character (Figure 5).

The whole programme is accompanied by illustrations mainly as sketchy watercolour images and conceptual plan illustrations, but also some general street sections, renderings and reference photographs are used. The watercolour images are overlapping different sorts of environments, people in various activities (often leisure and recreation) and different objects of various scales.

4.3 The Project Directive

The Frihamnen Project Directive was adopted by the steering group for the RiverCity on 12 August 2015, which also was the decision to start the actual project of developing the plan for the area. The steering group includes the top management representatives of the City Management Office, the involved public administration offices and the municipal companies. It is a short document of 7 pages with three images, which are an illustration of the districts in the overall RiverCity area, a diagram over the urban development process, and a diagram of the project organisation of the RiverCity (Figure 6). The document primarily states the aim and goal of the Frihamnen development, but also includes delimitations and relations to other projects. A project directive would ideally have come before the planning programme, setting its priorities, but the overall process structure is evolving and here it was produced and decided upon later.

The aim in the directive takes its starting point in the RiverCity Vision and summarises the vision and its three strategies, and states that the overall aim is to fulfil the vision and support its strategies from the conditions at Frihamnen. In relation to this it is explicitly stated that the inner city shall grow over the river and that Frihamnen is strategically important to knit together the inner city across the river and with its surrounding districts Kvillestaden, Backaplan, Lindholmen and Ringön. The goal of Frihamnen is formulated with this target:

“Frihamnen shall develop into a modern inner city with a broad mix of housing, commerce, culture and offices. Frihamnen, with its location in the middle of the RiverCity, is strategically important to tie the city over the river but also to knit together Kvillestaden, Backaplan, Lindholmen and Ringön. Frihamnen is part of the urban passage that will be created across the river to the Central Station area”. (Älvstaden 2015, 3)

This is mainly all the fully formulated goal of Frihamnen, even though there also are some indicated targets of a development of 1,6 million square meter floor space, around 9 000 apartments and around 18 000 work places. The focus is clear with that it should become a modern inner city, it should connect over the river and with its neighbouring districts and be part of central urban passages.

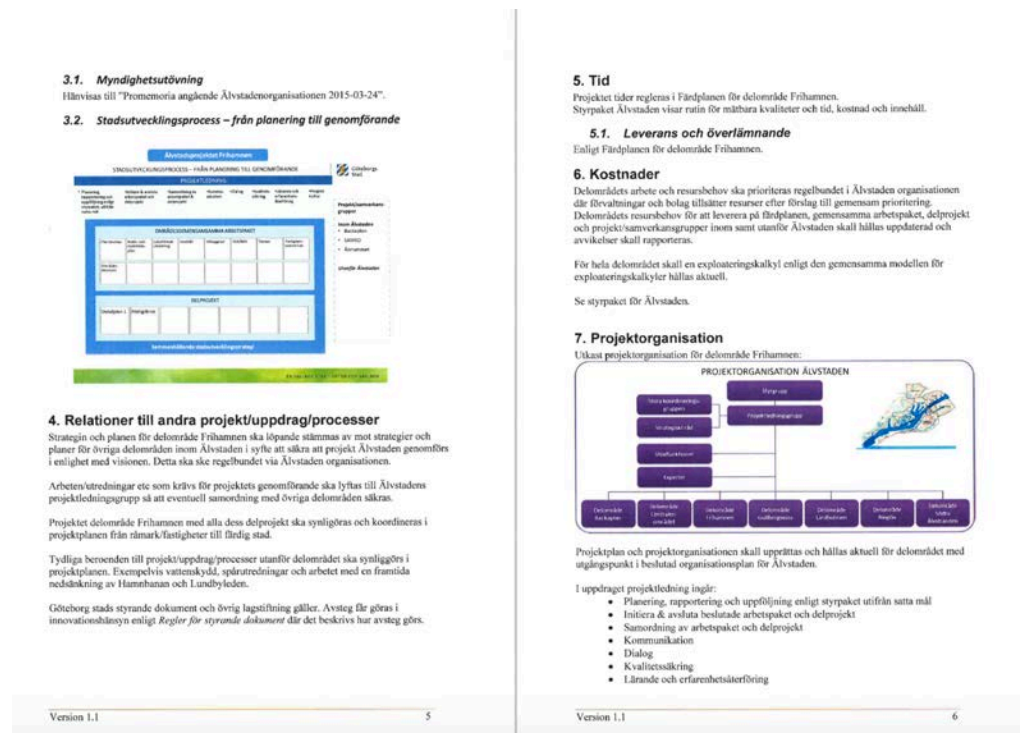


Figure 7. A spread from the Projective Directive, which is primarily text-based in an administrative and bureaucratic language with a few process and organisation diagrams.

4.4 The Frihamnen Manifesto

In relation to the work with producing a basis for the detailed development plan for Frihamnen, a workshop series was arranged during 2015 with participants from the City of Gothenburg, the municipal development company Älvstranden Utveckling and from the involved consortium of developers. As an outcome of that series a Manifesto was formulated as an annex to the plan. The manifesto replaces a quality programme and is intended as a complement to the detailed development plan and to maintain the high level of ambition. It is stated that it is important to describe the background to the positions, intended collaboration processes and the qualities that is aimed at since the development will need collaboration between many different actors, developers and public administration offices during a long time (Älvstaden 2017b, 4).

In the Manifesto, the point of departure for the detail plan is described in three points: 1. To proceed from the specific character and historical traces of Frihamnen; 2. To build in the area around the planned park; 3. To connect the area to surrounding districts and create a passage from Backaplan, through Frihamnen and over the river to the main street in the city centre (Avenyn).

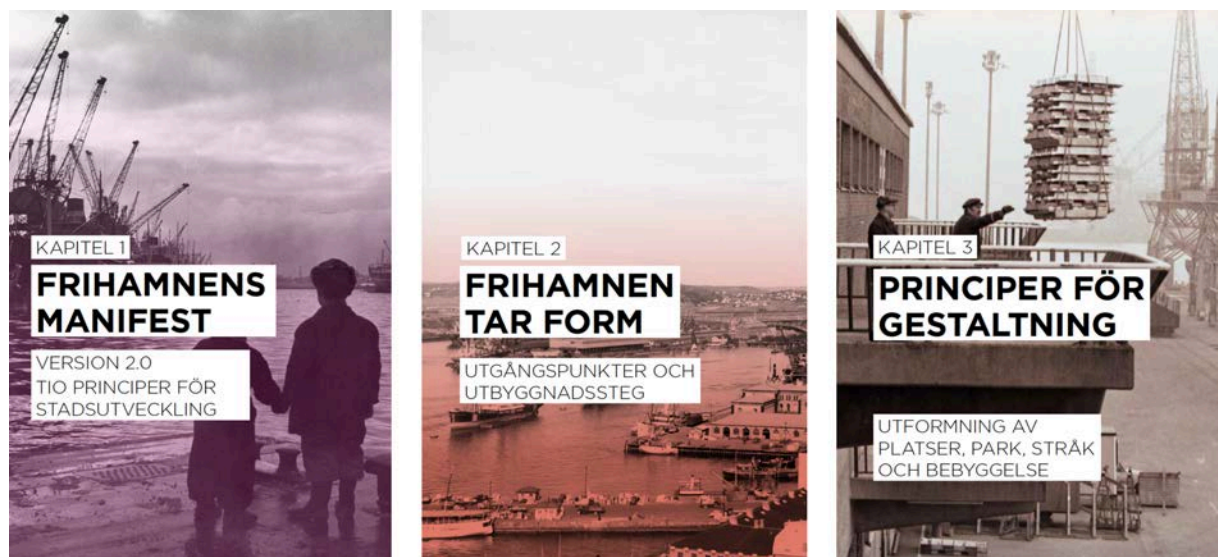


Figure 8. Several images in the Manifesto refers to the history of Frihamnen and its previous harbour activities, and those images are also given prominent place in the document. Here the starting pages for chapters, which can be said to by visual means argue for the importance of the specific historical character of the area. However, the historic connection of the area was not emphasised in earlier documents, neither in text nor in images, rather they took their point of departure in issues concerning both social and environmental sustainability, which makes this a new prominent feature in this document.

The Manifesto is formulated in ten points for urban development as a target for the development of the area. The ten points are described as grounded in the RiverCity Vision and its three strategies, the area's conditions and challenges, and reflect the future goal and qualities that should characterise Frihamnen. The ten points are:

1. Frihamnen is a test arena for innovative solutions to urban challenges
2. Frihamnen heals the city
3. Frihamnen is for everyone

4. Frihamnen develops through inclusive processes
5. Frihamnen is a living city district rooted in history
6. Frihamnen develops public spaces for everyday meetings
7. The mobility of the future can be found in Frihamnen
8. The physical environment of Frihamnen contributes to peoples' wellbeing
9. Frihamnen is resource efficient
10. Frihamnen is adapted to the effects of climate changes

The Manifesto has been updated in several versions, where especially the ten points have been grouped in different themes and the descriptions of each section have become more elaborated. The themes of the draft of the Manifesto 2.0 dated 21 December 2017 are "Test-based urban development", "Not only for good old men", "Anchoring and inclusiveness", and "Habitat equipped for the future".

FRIHAMNEN ETAPP 1 - STEG 1
ETABLERA FRIHAMNENS KÄRNA



FRIHAMNEN ETAPP 1 - STEG 2
PARKENS BEBYGGELESKANT ETABLERAS



FRIHAMNEN ETAPP 1 - STEG 3
KVARTERSSTADEN VÄXER

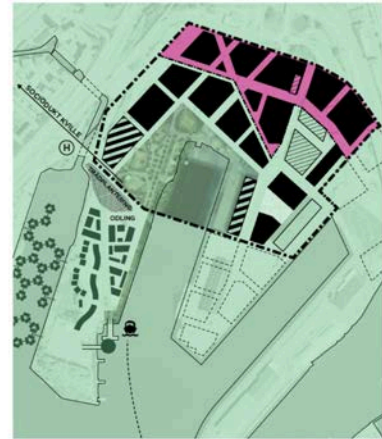


Figure 9. The different stages of the development of Frihamnen described with successive plan drawings. We see here how the new emphasis on the historic connections of the area are carried through in a particular plan that accommodates to remnants of the harbour activity, such as warehouses, railroad tracks and docks.

The Manifesto version of December 2017 is a document of 56 pages ordered in four chapter, that especially describe the starting points of the plan and its order of development, the principles for design with general design rules and more specific and detailed rules for the streets and buildings, the green spaces and parks, and the historical layers, quays and harbour basins. The document is carefully designed and includes a mix of texts, plan drawings, street sections and perspective drawings in various scales, images, photographs of both historical and contemporary Frihamnen and other urban environments. The document seems to aim at both to inspire to design of high quality and to control the actual design to different levels of detailing through the means of both written text and images.

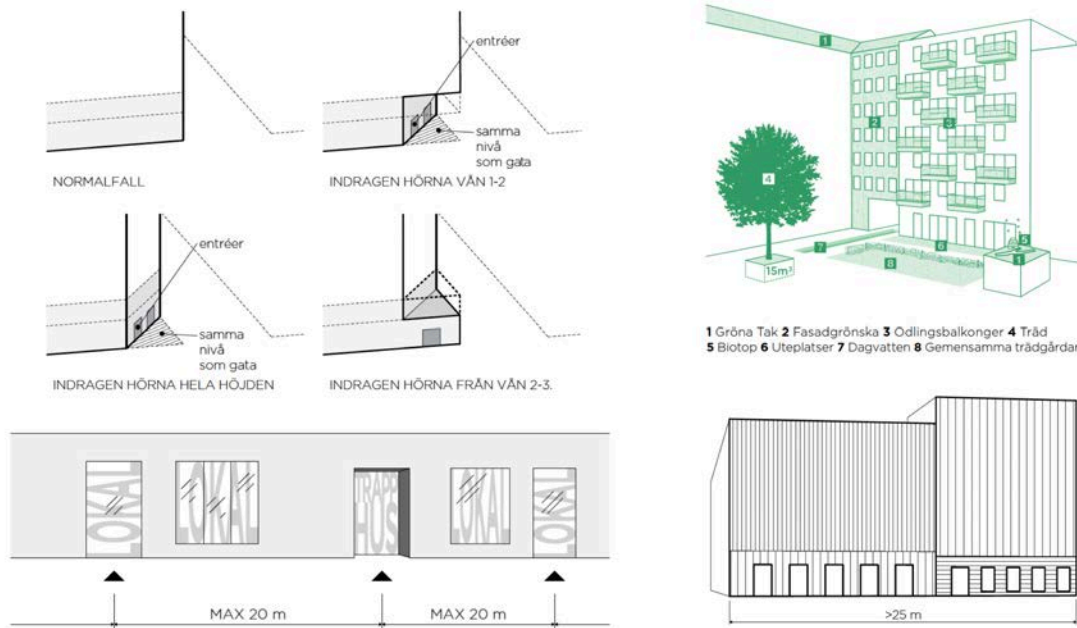


Figure 10. The Manifesto also includes drawings of guidelines for specific architectural features on a very detailed level concerning e.g. the placement of entrances, design of corners, and design elements of courtyards.

4.5 The Sustainability Programme for Frihamnen

In parallel with the work on the Frihamnen Manifesto, a sustainability programme was developed as a tool to direct the high ambitions on sustainability as a foundation for urban development towards its realisation. It is based on the ten points developed in the Manifesto, and the aim of the programme is to secure that the level of ambition in the ten points is reached. The overarching principles of the ten points are broken down to more concrete and monitorable sustainability goals, actions and measures. The aim of the sustainability programme is to contribute to a holistic view, structure and monitoring of set goals and constitutes the common point of departure for the development of Frihamnen (Älvstaden 2017a, 11). The programme was produced by White Architects and Älvstranden Utveckling in collaboration with the consortium of developers and the public administration offices of the City of Gothenburg.



Figure 11. A large part of the images in the Sustainability Programme consists of photographs of situations with active people in public spaces. It also includes diagrams on mainly leadership and organisation issues. Both the images and diagrams work on a very general level and communicate ambitions of a particular city life without clear connection to the specific conditions of the site. They seem to aim at open and inclusive characteristics of both the planning process and resulting social life without dealing with, or even covering, possible conflicts of interest and goals.

The document is structured around the ten points of the Manifesto, where more general sustainability strategies as well as more concrete sustainability goals are formulated for each point and its principles. The document is of 42 pages and is mainly text-based, but includes many illustrations in the form of photographs of environments with people in various activities and interactions, diagrams (Figure 11), and some large renderings and architectural visualisations of future urban environments (Figure 12). The whole graphical form and layout seems to be intended to convey a lightness that has both inclusive diversity and controlled structure to be inviting and easy to assimilate.



Figure 12: Images of large public spaces convey a cohesive and yet open atmosphere as architectural renderings in a contemporary and airy style. The character described in fig. 11 is also present in these renderings which seem varied and diverse but in a controlled way.

5. Conclusions: Translations between and within the documents

The close reading of the steering documents for Frihamnen shows some inconsistencies in how they relate to each other and also between the several different 'languages' involved. There are obvious difficulties both in translations between the different 'languages' (verbal, numerical, visual) but also within these 'languages' between the different documents.

The Vision document is very open in both its verbal formulations and imagery, as such documents often are and should be, but the visual representations may colour the future interpretations in uncontrolled ways and the images used also include some contradictory scenarios.

The Planning Programme uses a more detailed but still rich verbal language accompanied by schematic plans, numbers and diagrams, which seems to communicate more clearly, but both the translations between the 'languages' as well as the images include inconsistencies concerning what is probable, or even possible, to realise in the same spatial setting.

The Projective Directive is very clear in its priorities on creating a modern inner city, and the primary task of Frihamnen to strategically connect the surrounding districts and to the city centre through

urban links. It says nothing about preserving the historical traces and environment, nor that the creation of a socially mixed and ecologically or socially sustainable district is the top-priority.

The Manifesto seems to almost ignore this in its summary of the points of departure which starts with the importance of the current specific character and historical traces. It is only the last point that relates to what is the highest priority in the Project Directive. This perspective is also conveyed by much of the visual material of photographs in the Manifesto which strongly alludes to and forward the history of the area.

The Manifesto and Sustainability Programme have many written formulations that connects to and support the clear target set in the Project Directive. But they also include several formulations and ambitions that contradict the primary goal of a dense inner city, especially with the strong emphasis on the conservation of the large harbour basins, water surfaces and some existing buildings. There are also contradictory formulations concerning the piers and basins, in that they for instance both should be used as qualitative parts of the urban space and that they are barriers that need to be bridged. The physical structure should both have a fine mesh and be simple, clear and robust; large continuous blocks are desirable simultaneously as there should be short block measures.

This brief first step in analysing steering documents and the different 'languages' involved in them points to the need to greater awareness about what means and tools that are used also when producing steering documents, and that more research is needed to clarify how to more precisely translate between these languages. The different disciplinary and professional expertise and its specific 'knowledge carriers' and 'languages' need to be acknowledged and consciously dealt with to support a professional urban development and decision-making process.

With this as a background, we may also identify a set of other questions concerning the processes of production of various documents and the involved professionals and actors: are the actors the right ones, are there actors missing, is someone unnecessary? On particular when we move into the defined roles and mandates of the actors in the process; are there overlaps that may lead to conflict or lacunae necessary to fill in? Next, what type of knowledge do the different actors bring to the table and use as a means to discuss and argue their case, to what degree does conflict arise from misunderstanding or from which point arguments are made and to what degree are they due to actual disagreement? Is it clear what is facts, values and proposals in the discussion?

Finally, one need to be aware of what knowledge carriers or 'languages' that are present, and if the present and crucial actors can read, understand and speak these 'languages'. Even though we normally see the verbal language as the clearest, most intersubjective and the one that directs the process, perhaps certain languages dominate over others. And even though certain professions to a higher degree use 'object languages' and visual representations for their knowledge generation and sharing, we all use different kinds of 'languages' and visual representations to think and communicate.

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