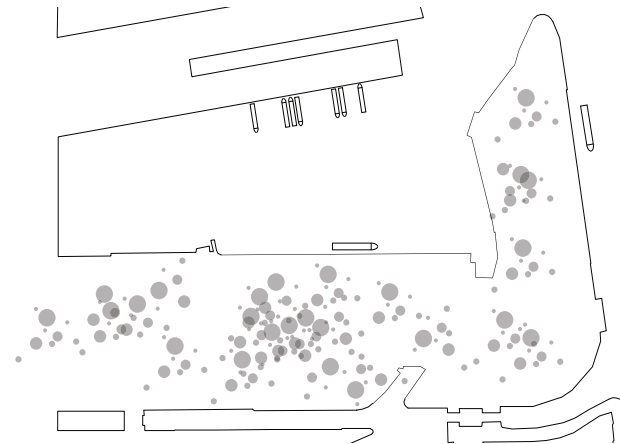


Analysis and ecological valuation of the transformation of the former Cruquius industrial area in Amsterdam East into a mixed use residential and employment area. The transformation is based on a new informal planning tool called a "Spelregelplan" [rules-based plan].



Analyse en beoordeling in het kader van duurzaamheid van de transformatie van het Cruquius Industriegebied. Het vormalige industriegebied dat tot werk,- en woongebied getransformeerd wordt ligt in het oude havengebied in Amsterdam Oost. Deze transformatie gaat op basis van een nieuw "spelregelplan" waarbij participaterende ontwikkelingen de motor vormen.



source: historical eastern port area Amsterdam, NAI publisher

At the start of all competitions there is the game, that is an agreement to complete something within spatial and time limits according to certain rules and in a particular form, which has the effect of releasing a tension and which stands outside normal life.

An extract from HOMO LUDENS

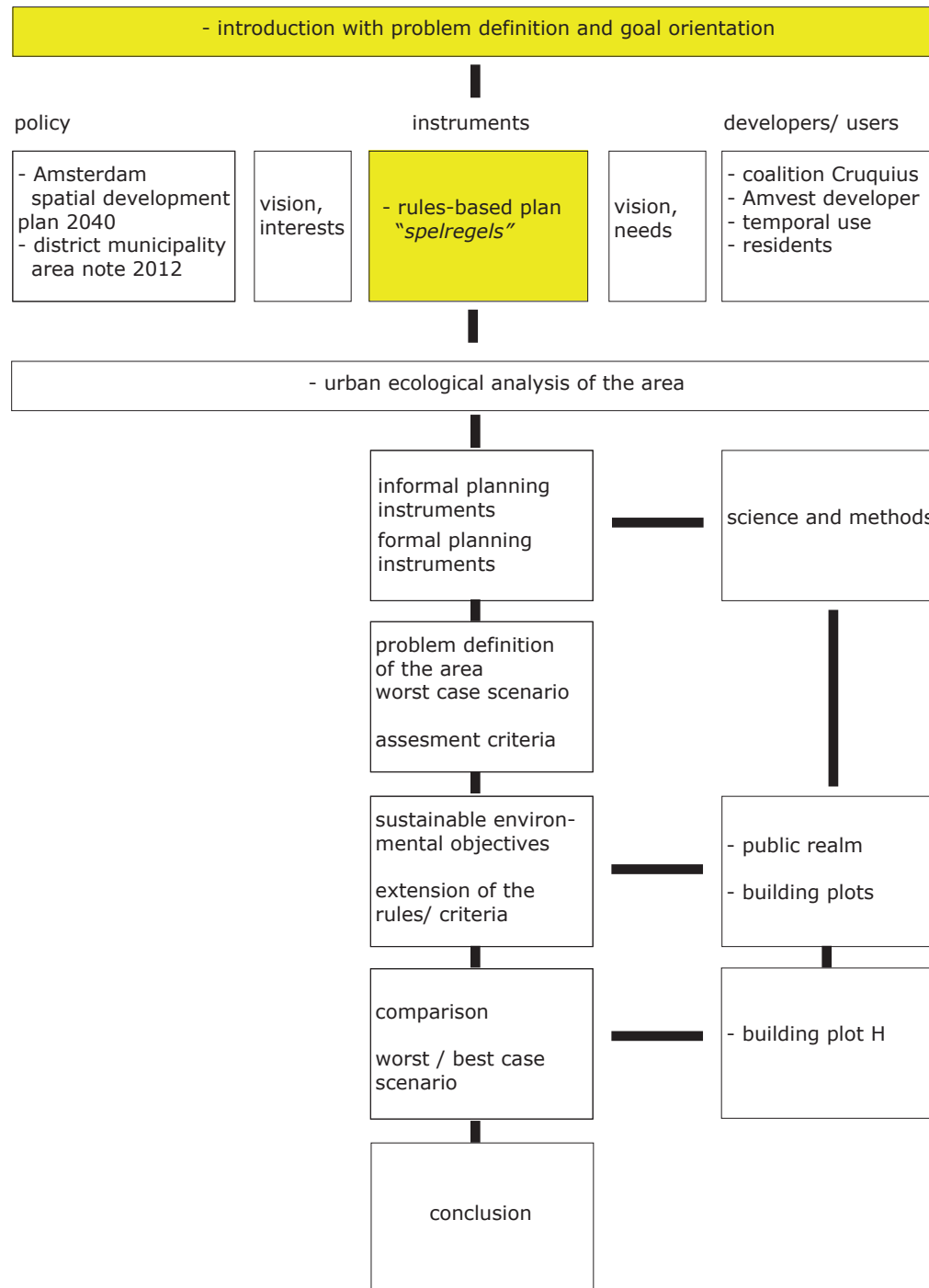
by Johan Huizinga, historian and cultural philosopher 1872-1945

This paper is a short summary of the MSc thesis “sustainable architecture and environment” of Holger Muerhrmann, Dipl Architect. The complete thesis with analysis, investigations, comparisons and all source material is available on request from the author at **info@intarcdesign.com**

Introduction with problem definition and goal orientation

Amsterdam, the capital of the Netherlands, has determined how future sustainable urban development in the city should look like in a policy document entitled: Amsterdam Spatial Development Plan 2040 [*Structuurvisie Amsterdam 2040*]. In addition, by 2025 the city wants to have reduced the emission of greenhouse gases by 40% compared to 1990 values. The Cruquius industrial area in the former eastern docks area of the city is one of several waterside areas which are to be transformed from light industrial to mixed use residential and employment areas. The district municipality *Oost* which includes the Cruquius industrial area, has from the outset determined that existing planning processes and instruments be replaced by a new rules-based plan [*“spelregelplan”*], which will serve both as a development framework and as an assessment tool. This rules-based plan is intended to offer developers and project initiators more scope for organic urban district development. The central government views this new planning method as a “pilot”. This Master’s thesis investigates whether the new, informal, rules-based plan is, in holistic terms, an adequate planning instrument for a sustainable and ecological redevelopment of the Cruquius industrial area. Worst case scenarios are created based on the rules-based plan and sustainable criteria drawn up for the development plots. A building comparison with worst and best case scenarios is created on one of the plots, which may be seen as a model and source of inspiration for all further site developments.

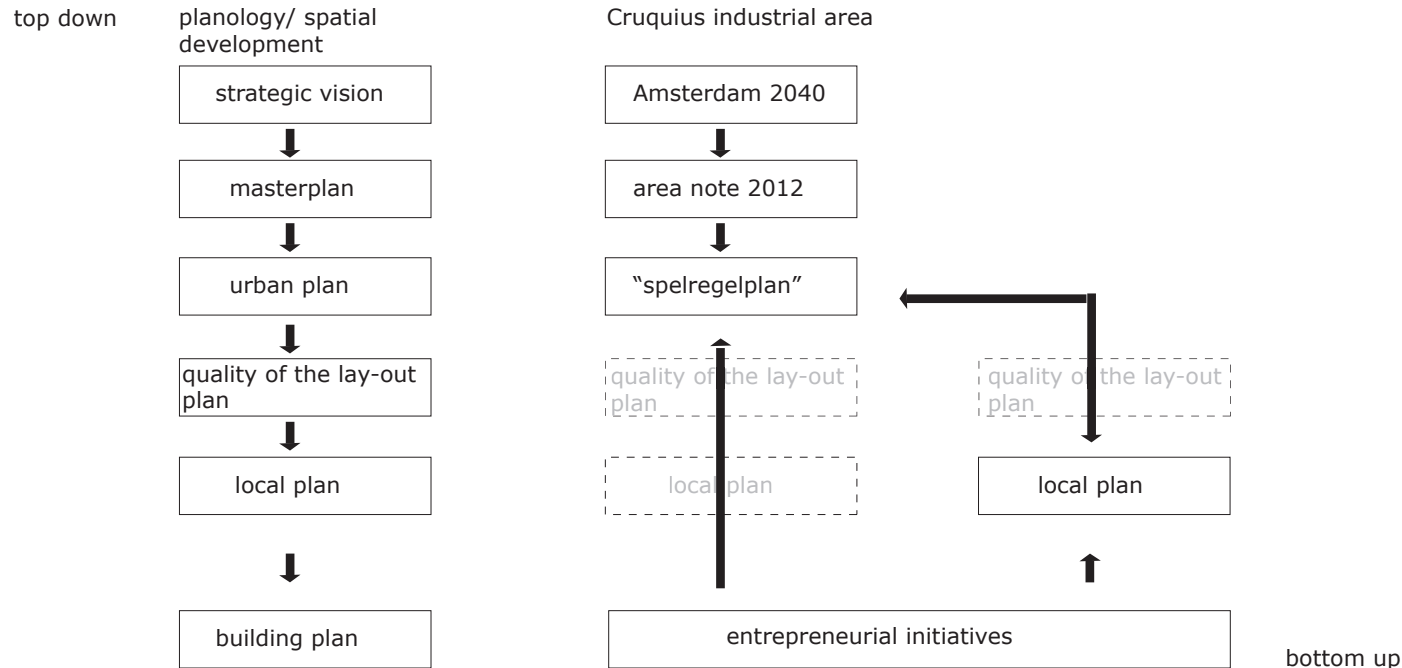
Today there is a growing realisation that future users and citizens of a city and its urban districts will have to play a much more active role in the planning process of projects. The current planning process, within fixed time limits and with a development plan as a legal document, is becoming less relevant to the demands of a dynamic urban and district development process. Current planning processes are too rigid and oriented on the long term to be able to react to complex transformational processes. In the Netherlands the central government [*Rijksoverheid*] has indicated that there must be an intensification of density in inner urban areas. However, there is hardly any experience of district development based on unconventional planning processes.

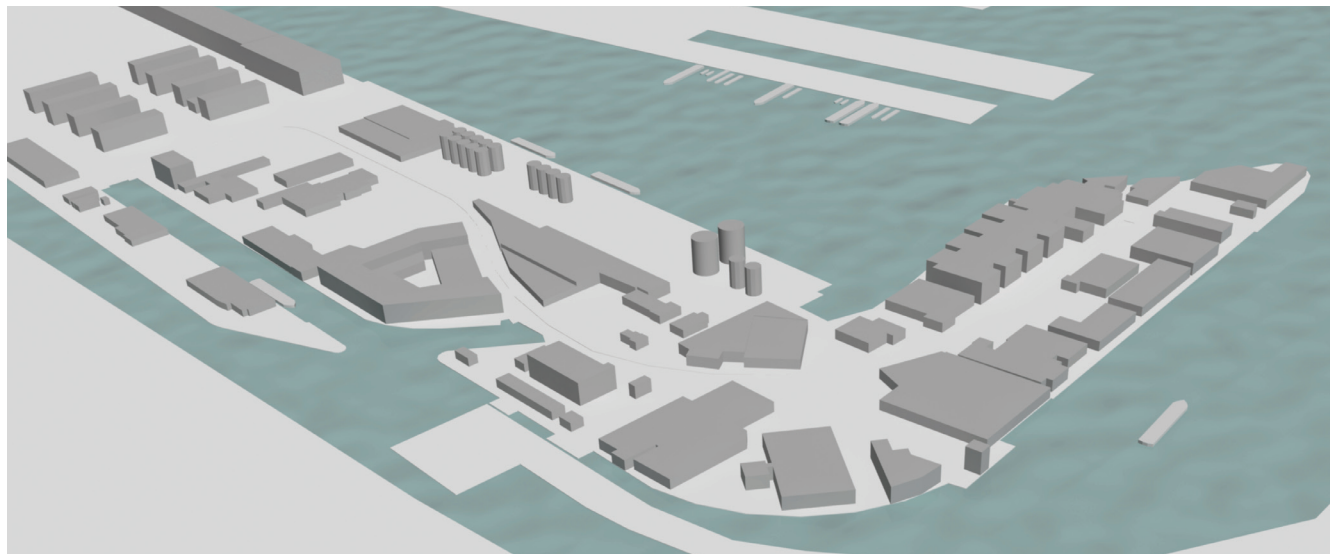


research method

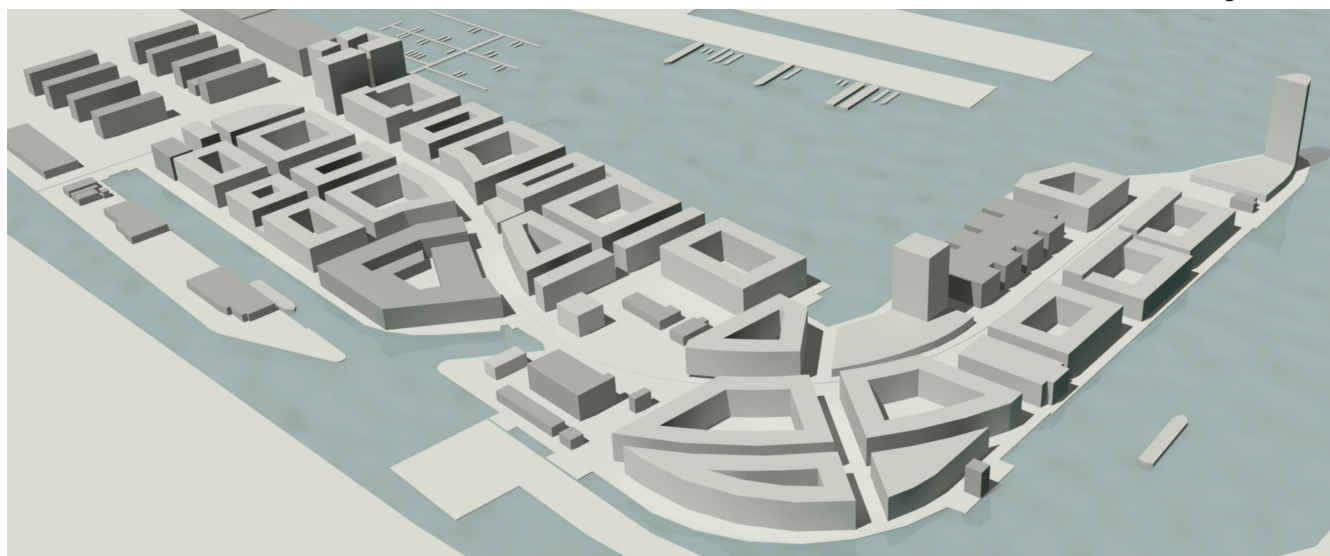
Problem definition of existing environmental policy objectives in the rules-based plan

In the rules-based plan as currently established, which functions as an “informal planning instrument”, the district municipality *Oost* has no environmental vision and there are no sustainable targets indicated. According to the rules-based plan, under the heading of sustainability it is “desirable” to retain a few characteristic existing buildings. Also in the district development strategy consisting of the document *Cruquius Industrial Area Note* [*Notitie Cruquiuswerkgebied*], there are no descriptions of sustainable environmental targets. In discussions with the urban municipality *Oost* represented by a project manager for the project area and the alderman [*wethouder*] for the *Oost* district responsible for spatial planning and urban renewal [*ruimtelijke ordening en stedelijke vernieuwing*], reference was made to a list of questions about the ecological development of the area and to existing regulations applicable for building projects. According to the alderman [*wethouder*] the district municipality has not envisaged a “defined end state” for the area, nor has there been any previous experience with this new planning method. The only urban design studies pertaining to the development area are in the form of strategic development perspectives [*strategische Ontwikkelverkenning*], but these studies have not developed any environmental policies or best/worst case scenarios. Other studies by the district municipality *Oost*, are either unavailable or “in process”.





existing situation



development based on the spelregelplan

-A- What is to do? Worthwhile environmental objectives

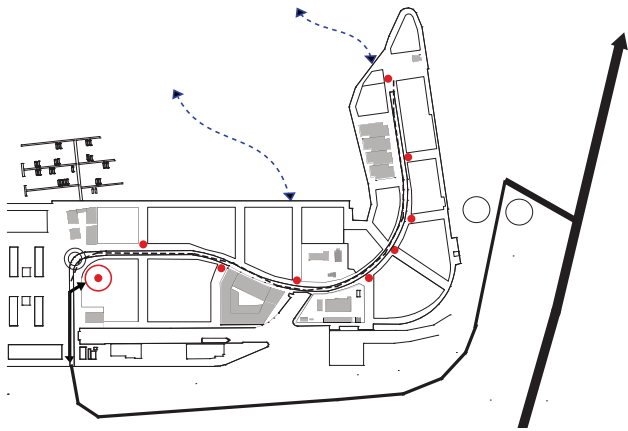
An independent panel or committee, consisting of professionals with a sociocultural, spatial design, ecological and also economic background and including the residents is supposed assess construction proposals. This committee is expected to advise the district municipality and also be given full status in the assessment. Furthermore, based on the current rules-based plan and planning instruments (plans and descriptions) with the intended process-based development, it is also necessary to set out the following sustainable environmental objectives at the urban design scale. According to the Strategy Memorandum [*Strategienota*], the district municipality Oost has responsibility for the public realm and is expected to assume a proactive and leading role. Measures are to be formulated under the following headings:

- A** - Mobility
- B** - Public Realm
- C** - Planting/ Green Areas
- D** - Paved Areas
- E** - Waste
- F** - Building Plots
- G** - Housing Types
- H** - Gentrification

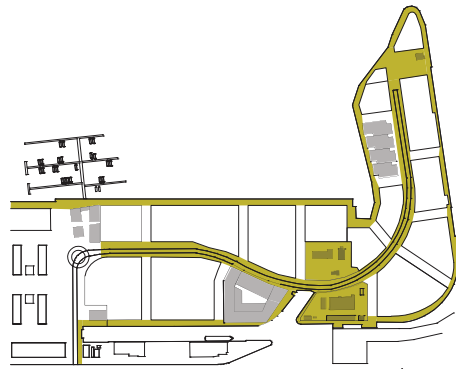
- B- What is to do? Extension of rules-based plan, building plots / criteria

In this thesis both passive and technical proposals are suggested for the successive development of the development sites using the current rules-based plan as planning instrument. Six sustainable criteria are intended as a guide and orientation for developers and construction initiatives. The following sustainability criteria are indicated for a sustainable and environmentally-friendly development of the plots. These are intended to be simple and transparent measures with which to communicate with investors and project initiators. Not every building has to fulfil all of the criteria, although ideally, this would be desirable.

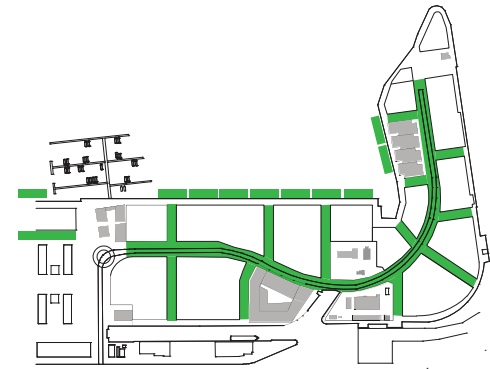
- 01** - Cubage / built volume
- 02** - Built form
- 03** - Mitigation areas
- 04** - Energy
- 05** - Materials
- 06** - Mobility



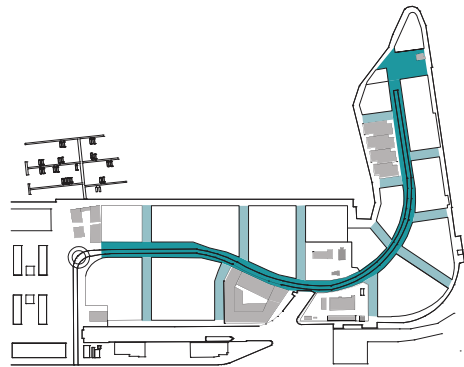
A - Mobility



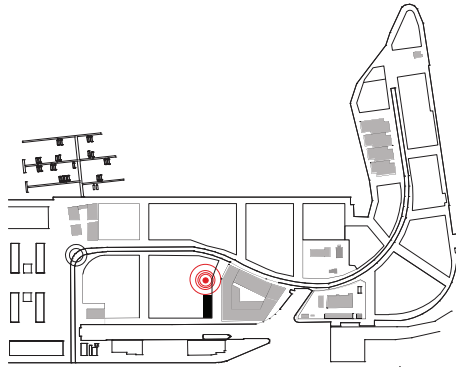
B - Public Realm



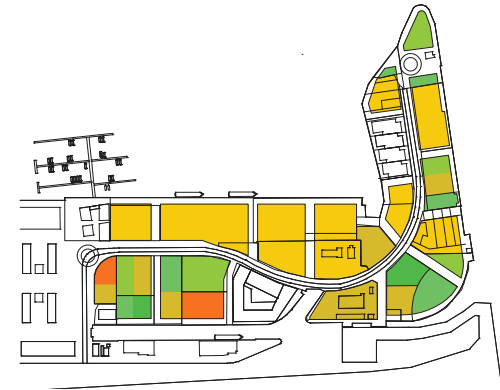
C - Planting/ green areas



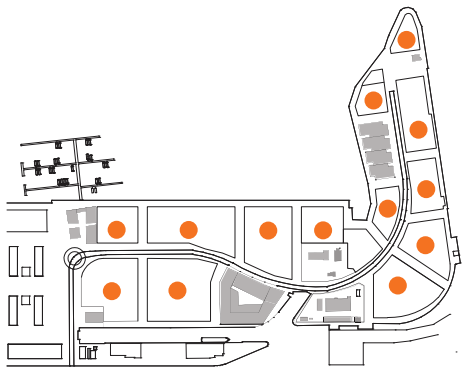
D - Paved areas



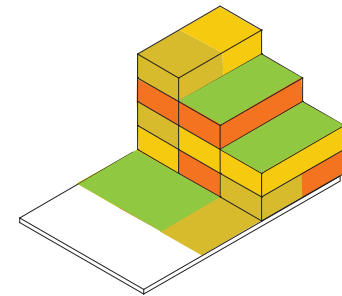
E - Waste and Recycling



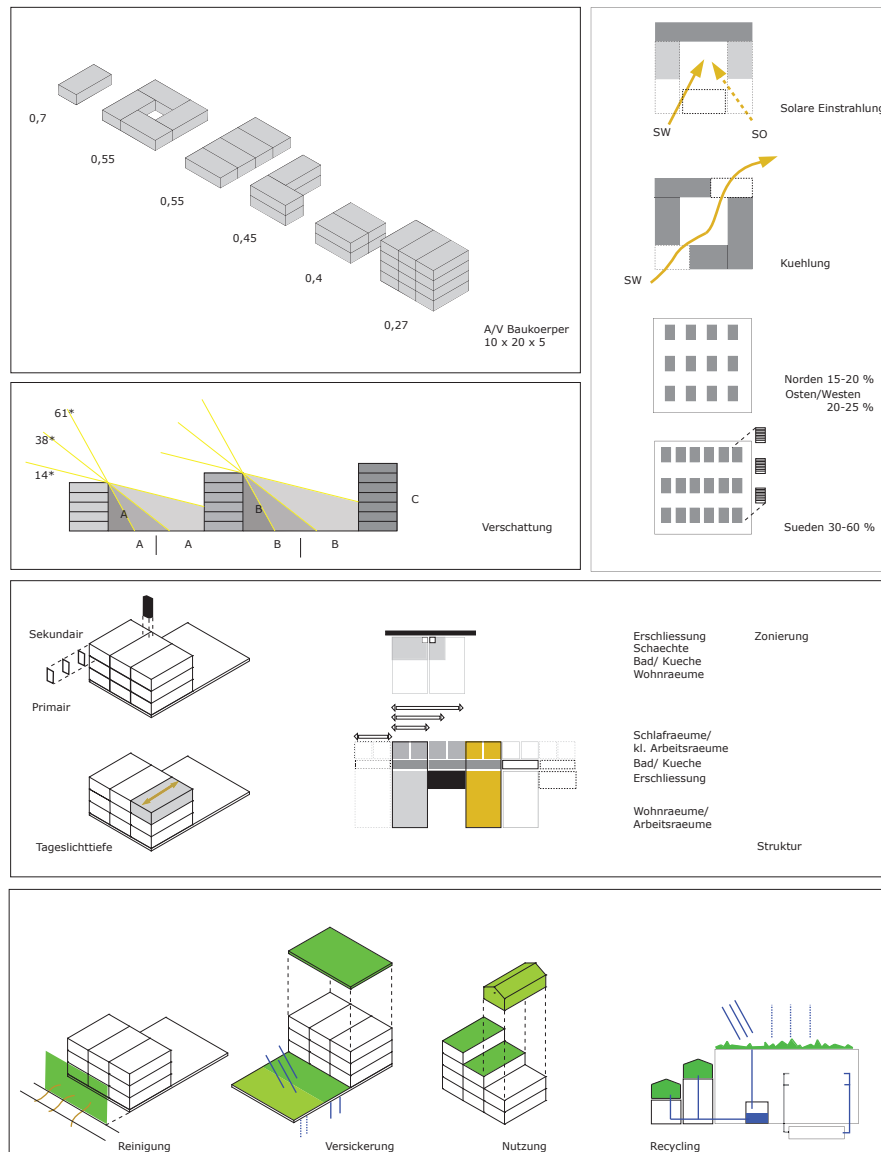
F - Building Plots



H - Gentrification



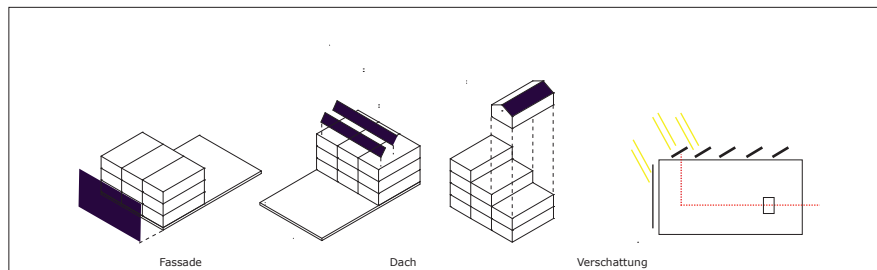
G - Housing Types



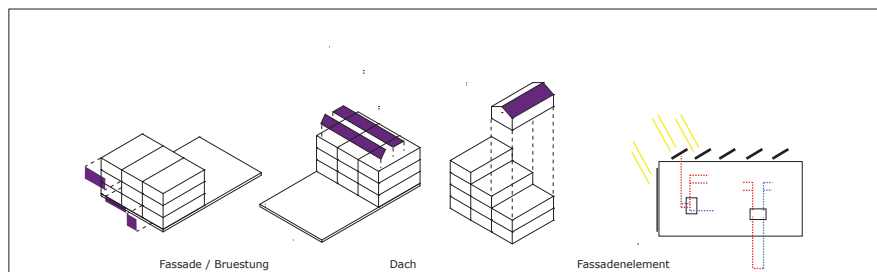
01 - Cubage/ built volume

02 - Design/ built vorm

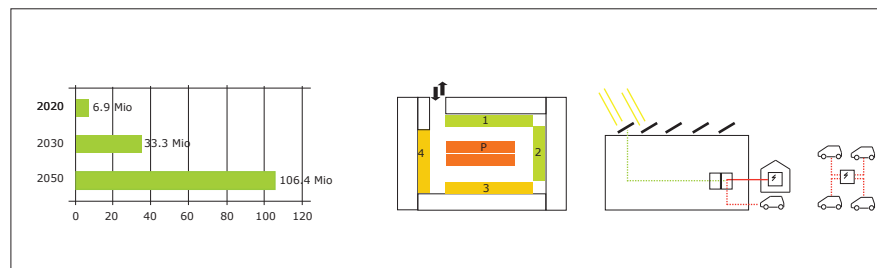
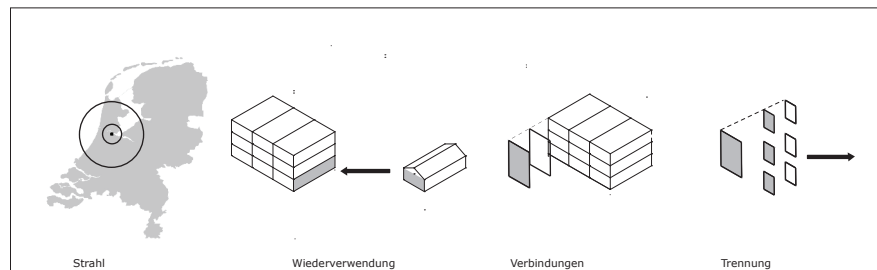
03 - Mitigation areas



04 - Energy



05 - Materials



06 - Mobility

Conclusion

The intended objective of achieving a stronger development momentum for redevelopment areas by means of an informal planning instrument (rules-based plan) is correct and responds to the change in society towards increased participation on the part of residents and potential users. This is a new and unknown planning process for all stakeholders i.e. developers, municipality and residents, in which roles and responsibilities have not yet been clearly defined.

However, various design presentations and project initiatives by developers have shown that they interpret the rules-based plan in their own interest in order to achieve maximum economic density and utilisation. It is not a case of trying to attain a better district development through a dialogue with the residents, but to present or justify their planning presentations and project initiatives at the building level. The district municipality defines its own role at these presentations not as being a moderator but as a "passive" observer. Both residents and project initiators deal with each other from opposing positions, in which the developer tries to present his project in a positive light and the residents defend their concerns and interests or block the proposals. It is apparent that in this process the residents do not have an equivalent position to that of the developer. A developer can always invoke the legally determined rules-based plan. It should be noted that in this planning process the residents are forced to grapple not only with the submitted planning proposals but with the whole planning process. This task, which in the conventional planning process was performed by professionals and employees of the district municipality, is now dealt with by "committed" residents, who may appeal against the submitted proposals. It creates an unbalanced shift of responsibilities at the expense of the residents. It is clear that a vaguely circumscribed rules-based plan leaves developments too much scope for interpretation. For their part, the district municipality defines its position as one of "passive observer" but is nevertheless pleased to receive schemes presented by major developers. An intended participatory planning process with many small varied project initiators can only be discerned for the temporary transformation process of the existing sheds and buildings.

There are no discernible environmentally sustainable projects at these planning presentations, because ultimately these are not further defined in the rules-based plan. Hoping to rely on the goodwill of a developer is naive on the part of the municipality, because the initial investment for the investigations and construction methods involved in sustainable construction projects is higher than in conventional building and a long-term utilisation and return must be achieved. Both the rules-based plan, and in particular the absence of environmentally sustainable parameters, and the planning process in intended dialogue with the actors, must not only be improved but also be judged in the context of the Amsterdam Spatial Development Plan 2040 [*Structuurvisie Amsterdam 2040*].

Investigations and scenarios should be generated and accessible to everyone. The district municipality must become much more involved as a moderator and generator for the participants with an interest in the development process of the area.

In his book *Homo Ludens* Johann Huizinga writes about the rules of games:

"The rules of a game are absolutely binding and do not tolerate any doubt. As soon as the rules are infringed, the game world collapses. The player who defies or evades the rules is a spoilsport."

That means that the rules must be very well developed in advance and clear to all equally entitled participants. This form of participatory development ceases to function from the moment doubt is expressed about the rules. This became apparent at planning presentations by property developers. Affected residents always have in the existing development process more doubts about the intentions and competence of the municipality to manage the transformation into a future-oriented, sustainable residential and employment area.

