A new research approach on the creative potentials of Rotterdam
Mapping as a tool for policy development

1   Introduction

Rotterdam and the congress theme

Rotterdam is well known across the world because of its harbour. The harbour is still one of the largest and most modern in the world and is the main gateway to Europe. The city developed alongside this fast growing, large-scale harbour- and industrial complex, which provided a lot of jobs until the 1970's. Once the main employer for blue-collar work, the harbour became a logistic, labour extensive, high tech hub for containers, oil and raw materials.

The city nowadays is of a medium size with approximately 650.000 inhabitants within the city boundaries and 2,5 million in the city region. Depending on the benefits of the harbour alone is no longer possible, so the city has to adapt itself to the standards and demands of new economies. The rise of the service economy during the 1980's was followed by the leisure industry and housing. A broad debate about creativity and the city as a new perspective on change and development takes place nowadays.

The question today is how to deal with creative industries, one of these "new" phenomena. They provide new chances for the development of the city, Rotterdam has already proved to be outstanding within some of these industries, e.g. the architectural and design cluster driven by names as Rem Koolhaas (OMA/AMO), Winy Maas (MVRDV), Adriaan Geuze (West 8), Joep van Lieshout (Atelier van Lieshout), Marlies Dekkers (Undressed|Sundressed) and others.

The city is seen as an essential habitat for knowledge and talent based activities, typical for the creative industries, but at the same time these industries are very footloose. So what can Rotterdam do? What can we build on? Do planning and creativity go together at all? Should we look at the city as a dynamic system of people and places rather than an object of (top down) planning? In the first place another kind of survey and scope on the city is needed. Much more outside in than inside out as we used to do. This requires a professional research attitude and new skills by planners.

To trigger this change in thinking and (planning) attitude we have developed a new type of research called "Sense of Place". It offers a new scope on the city. It tries to reveal the dynamics and forces behind developments and the way people and businesses use the city in a network society. "Sense of Place" is a first attempt to create a new tool in planning. But this is all still young, a first step.

2   A new approach

Changing reality and the role of planning

This new research and planning approach is necessary because of the rapidly changing urban reality and conditions for development. No longer we can work with planning schemes based on extrapolation of certain specific demands, master plans, blueprints and fixed geographic scales. Top down planning is not fruitful in these fields of talent, innovation, mobility and international orientation. Some other reasons why a new approach is needed:

- In Rotterdam a shift in thinking and planning is extra relevant because of its pregnant history of rebuilding and reconstructing the city and the harbour after WW II. Creating a new city was the main fixation of the city council after WW II until recently. The local

government was in control. For example the construction of a completely new inner city on the SIAM principles started as a tabula rasa without little "sense" of the pre-war city as a place. The belief was that this approach would shape a new society. Hardware planning was our main skill.

- The continuous presence of a lot of building cranes was long-time the proof of a successful city. And in those days it really was. Massive urban renewal schemes, new office parks, high-rise buildings, the "Kop van Zuid"-project: all contributions and promises for a better future. Demand for new space was high. Our main focus was on the supply-side.

- At the same time the mental map of people, especially the outsiders, was confused about the actual city. Coming from the central station some ten years ago a stranger could ask: "Where is the city centre, where is the shopping mall, the nightlife district, where can I find the waterfront?". The whole inner city was under construction. There was a sharp demarcation line between the demolished, rebuild inner city and the surrounding pre-war areas. The stories told by planners were often about planning ambitions, visions for 2010/30: "Then the city will be transformed from a "half product" to a full-blown city centre, just wait and see". Our critics said: "The moment building cranes disappear from the scene, the Rotterdam soul will be in distress". What to do next?

- Until a few years ago developing partners, architects and others often came with planning proposals without an explicit analysis or idea of what the project could contribute to the surrounding city and vice versa. There was little discussion about the value added to public life by the project. How do people actually use the city? What is the image of public domain and how does it change over time? What is the influence of different flows (pedestrians, cars, public transport) on economic and cultural potentials of places? Is safety a condition for settlement or departure or is it still a taboo? These kinds of questions were not an explicit part of the planning discussion.

- A main question today is how to investigate and understand the more actual and situational qualities of the city. And which networks of people and institutions are taking part in it? This is important because Rotterdam (due to its specific industrial past) has not proven to have much urban appeal. This urban appeal is necessary to attract talented people to Rotterdam where they can create new economies. The inner city is still young, the "Kop van Zuid" is still under construction, the high speed central station still has to be completed, the old quarters are not yet in the phase of full gentrification, the river and its banks are only partly discovered as attractive areas, the population is poorly educated and students have to be seduced to stay and enterprise in Rotterdam. This is all about the so-called quality of life more than efficiency in planning.

- To keep pace with developments of European cities and to exploit the assets of Rotterdam we must open ourselves up to the dynamic combination of urban and site specific qualities, talented people and networks of activities, the role of podia and institutions as stepping stones to economic profit, housing and education. The seeds for these new fruitful combinations are already there. For example the medical cluster, with its combination of care, education, research and economic spin offs, and the high quality and international renowned architectural cluster driven by big names and dedicated institutions like Nai (Dutch Architecture Institute), the Berlage Institute and publishers like 010. But also the "Van Nelle" design factory, the audio-visual complex "25 KV", RDM/Heijplaat and international festivals.

- And let's not forget the contribution of the (sub)cultural and entrepreneurial potential in the ethnical mixed and relatively young population of Rotterdam to the creative potential

of the city. It's all about crossovers, innovation, experiments, open sources, tolerant atmosphere, etc. This takes place "on the streets" and within the new media ("unreal" estate) more than in real estate.

The question is what the planner can contribute to these qualities and considerations? What kind of spatial and economic planning is successful?

First we will give a short explanation of the ideas behind the *Atlas of Cultural Ecology of Rotterdam*, applied to the inner city as our first proof of the new approach. After this a short review of another survey project in progress will be given, which is directly related to the congress theme.

3   Sense of Place: the atlas explained

Origin and intention
The "Sense of Place"-project stands for a new survey method in addition to the more functional methods of survey and pre-planning activities we used to work with. We call it the *Atlas of Cultural Ecology of Rotterdam*.

The *Atlas of Cultural Ecology of Rotterdam* was commissioned by the High-Rise Team and has been drawn up by Arnold Reijndorp, urban sociologist at Rotterdam and member of the High-Rise Team, bureau NEXT Architects from Amsterdam and the Department of Urban Planning, Housing and Traffic (dS+V), working in combination. The High-Rise Team was set up by the city of Rotterdam to further the spatial and programmatic quality of the planned high-rise and other large-scale developments in the city centre. The atlas, being a new instrument, plays an important role in this process.

The atlas primarily lends itself to active use as well as for revisions and updates. In this way, it acts as an instrument for investigation, transfer of knowledge and communication; not only for the municipal services but also for other parties that can influence the functioning of the city. The atlas stimulates a proactive and open way of working. The knowledge the Department of Urban Planning, Housing and Traffic has gathered about the city has been set side by side with the knowledge of others. It tries to increase the sensitivity on the job, the involvement with the city and the surplus value of projects.

Content
Three kinds of maps have been produced for the *Atlas of Cultural Ecology of Rotterdam*: basic maps, inventory maps and perspective maps. Although these maps cover the same area and have the same scale, they are entirely different in form. The basic maps and inventory maps contain precise and on scale reproduction of reality. These two types have been designed in a uniform way, so that they can be easily compared with one another. The perspective maps, in turn, can be described as illustrative map-like images: they are free interpretations of aspects that are difficult to visualise, like economics, flows and other forces. They are, by contrast, very different in design. The aim of each map is to evoke a different image. They give various representations of diverse elements of the city and have been designed accordingly.

The basic maps, representing the structure and the geographical layout of the city, make up the foundation for the other two types. It has been decided not to make the usual division into built-up and vacant areas, but a division into degrees of public accessibility: public, semi-public and private. Furthermore, several basic maps have been developed to show the pace of the city at various points in time. They are based on the awareness that the exposure and the social meaning of the city changes in the course of day: by day, in the evening and by night.

Because the usual distinction between housing, work and leisure areas is less relevant in contemporary life, the inventory maps distinguish two other categories: production and consumption. The consumption maps show public functions and domains in relation to public space. They provide information about places that are visited, ways consumers spend time and thus about the use of the city by inhabitants and visitors. The production maps show venues for cultural and artistic production. Not only theatres or auditoriums but also rehearsal rooms. Not only museums and galleries, but also shops with artist's supplies. Not the products of architecture, but schools of architecture. The maps visualise the spreading or the clustering of functions that are not by definition accessible to the public but do tend to agglomerate together and possibly cause a spin-off in public functions. In other words, places that have bearing on the vitality of the city. Finally, the perspective maps reveal forces acting on the city. In this way, the maps reflect the perspective on transformation. Three types have been developed: time (movement by day and movement in time), forces (the invisible influence of money and policy) and domains (who uses and claims which area, where do new cultures emerge?).

Each of the maps can be interpreted as one of the strata of the city. The combination of maps reveals a different reality of the city and can produce a new reading. Especially the combination of the inventory maps with perspective maps can result in illuminating new insights. The perspective maps, as it were, explain the inventory maps, the underlying influence on the current situation.
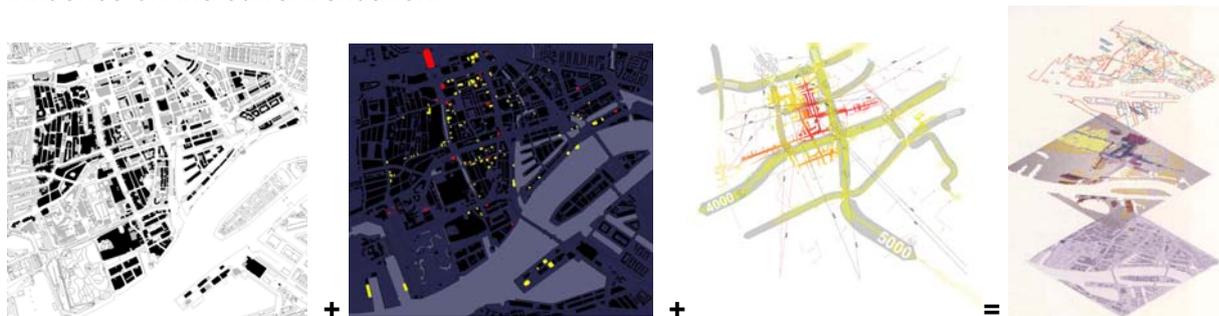
Basic, inventory and perspective map, Sense of Place: Atlas of Cultural Ecology of Rotterdam

Survey while planning
The *Atlas of Cultural Ecology of Rotterdam* is a first attempt to look at the city in a different way. It also strives to explain why certain developments occur in certain places in the city and what this tells us about the use of the city and the urban life. Therefore, this atlas should not only be considered as a final result, as an image of the functioning of the city, but much more as a plea for a method. It is a plea for carrying out a similar investigation of each place or area (of substantial size) that is subject to design or development. It is possible that there exist other indicators giving more information about the character of a specific place than the ones used in this atlas. The idea behind this atlas is to stimulate developers and designers to set to work with a feeling *for* the place, not to evoke the feeling *of* a certain place.

Format
In the "Sense of Place"-project the architectural firm NEXT Architects was involved in the conception and making of the maps. It is important to use the aesthetic qualities of architects and urban designers in making communicative maps with impact. The atlas has been developed as a tool. It reaches out to policy makers, plan makers and property developers, inviting them to take a different look at Rotterdam. The CD-ROM that is included in the atlas makes it possible to rediscover the city by exploring numerous combinations of maps. This CD-ROM will be available on the congress.

Combination map, Sense of Place: Atlas of Cultural Ecology of Rotterdam

4   Why maps?

Cartography as research tool

An interesting question is: Why maps? And what kind of maps? There is a growing flow of maps and atlases, especially from the hands of designers. What does that mean? In the planning profession maps are often used to cover the limited geographic space with (static) planning proposals and designs, using categories such as city centre, periphery, suburban area and green lands and legends such as working, housing, leisure and mixed use. But the dynamics and forces behind developments are the really important things to know (instead of the status quo or the "designed" future). Just as people move through different networks at different scales and different times. But how do you reflect this in maps? This was one of our challenges for the atlas.

Maps are about "what, where and how" and are about relations, (new) combinations, mobility and time. Maps are about how people use the city and give meaning to specific places and networks. Maps also localise two things. First of all how general processes manifest themselves in specific places and secondly how specific places behave themselves in the global world.

This requires maps to be selective. They should show interdependent phenomena. They need not cover the entire space of the city, as traditional land use maps do. It's more important that maps show how people use the city. Standard categories are not suitable anymore. Mapmaking and choosing the right categories is an important new skill of planners and urban designers. Cartography is a research tool that can be used to understand the

strategies, tactics and experiments of people and businesses that shape the city. They all act and all create their specific relations with and within time and space.

5   Understanding creative industries

Work in progress
Is it possible that the "Sense of Place"-method, as described above, can help us to understand the features and dynamics of the creative industries better? Does it enable us to become more precise about interventions or non-interventions? The first step is to understand what happens within the creative industries. Mr. Richard Florida's theory helps, but you still have to do research into the developments of these industries in your own city. In Rotterdam we started this learning process with associated scientists, like prof. Robert Kloosterman. Kloosterman showed us in figures, mechanisms and words the emergence and importance of Dutch Architecture as a Rotterdam based and emerging innovative cultural industry.

The status of Rotterdam within the creative industries in The Netherlands is measured by TNO Inro:

	Rotterdam	City region Rotterdam	Region Rijnmond	Netherlands
Arts	9%	9%	9%	7%
Media and Entertainment	13%	11%	2%	3%
Creative businesses/services	5%	5%	3%	4%
Total creative industries	8%	7%	3%	4%
Total of jobs	3%	3%	3%	2%

Job growth in the creative industries in the Rotterdam region and the Netherlands (1996-2003), TNO Inro

In these figures only the formal creative industries that are registered in the company register of the region South-Holland are taken into account. The use of other sources will lead to a considerable rise of the number of creative industries in Rotterdam.

These kinds of quantitative approaches are important to start with. But the problem is that figures often move us in the direction of benchmarking, ranking on lists, and best practices. That's not how to play the game. As Kjell Nordström and Jonas Ridderstråle say in a recent interview: "Everybody goes to the karaoke bar and sings a version of *My Way.* The one better than the other, but in the end it still is a second hand imitation of Frank Sinatra." Therefore we extended the quantitative set of data, about the absolute and relative position of Rotterdam in the world of creative industries, with cartography as a research tool..

Specific maps of Rotterdam are made by using aspects such as spatial clustering, development in time, influence from policies, underlying factors, path dependence vs. path creation (what's first and what follows) and cycles in development. This is often complicated due to poor availability of proper data. Specific and local knowledge of places, networks and strategies becomes more important.

The main questions of this research project are:
• Where are the creative industries located en how do they develop over time?
• Which types of spatial ambiances can be distinguished?

- What factors can be stimulated and what strategies are effective?
- What is the role of spatial planning and design?

Preliminary conclusions
Creative industries in Rotterdam are mainly located in the city centre and the old quarters west and north of the city centre. In these mixed use areas of the city the creative industries cluster and it seems that they benefit from concentration and vicinity. (Since 1994 the creative industries have substantially grown in numbers in these areas). The maps also show a movement from these industries to the south of the river Maas, to the "Kop van Zuid". Mono-functional areas such as residential areas, business parks or industrial sites are less attractive for the creative industries. Crossovers and the exchange of ideas are difficult without other companies or podia nearby.

It seems that creative industries prefer the cheaper locations in the city. That probably is an important condition for businesses to settle themselves in a certain area. Accessibility by car or public transport isn't that important. Institutions and podia nearby are of more significance. These are nearly all located on the north bank of the river Maas. The creative industries also flourish best in the north on bicycle-distance from supplying businesses, colleagues, customers and a vivid urban atmosphere.

In this stage of the research project we focus on the difference between policy driven developments, like the "Van Nelle" design factory and an audio-visual cluster in the "Lloyd-quarter", and the spontaneous clusters where influence of the city government didn't play a part in the existence of these concentrations.
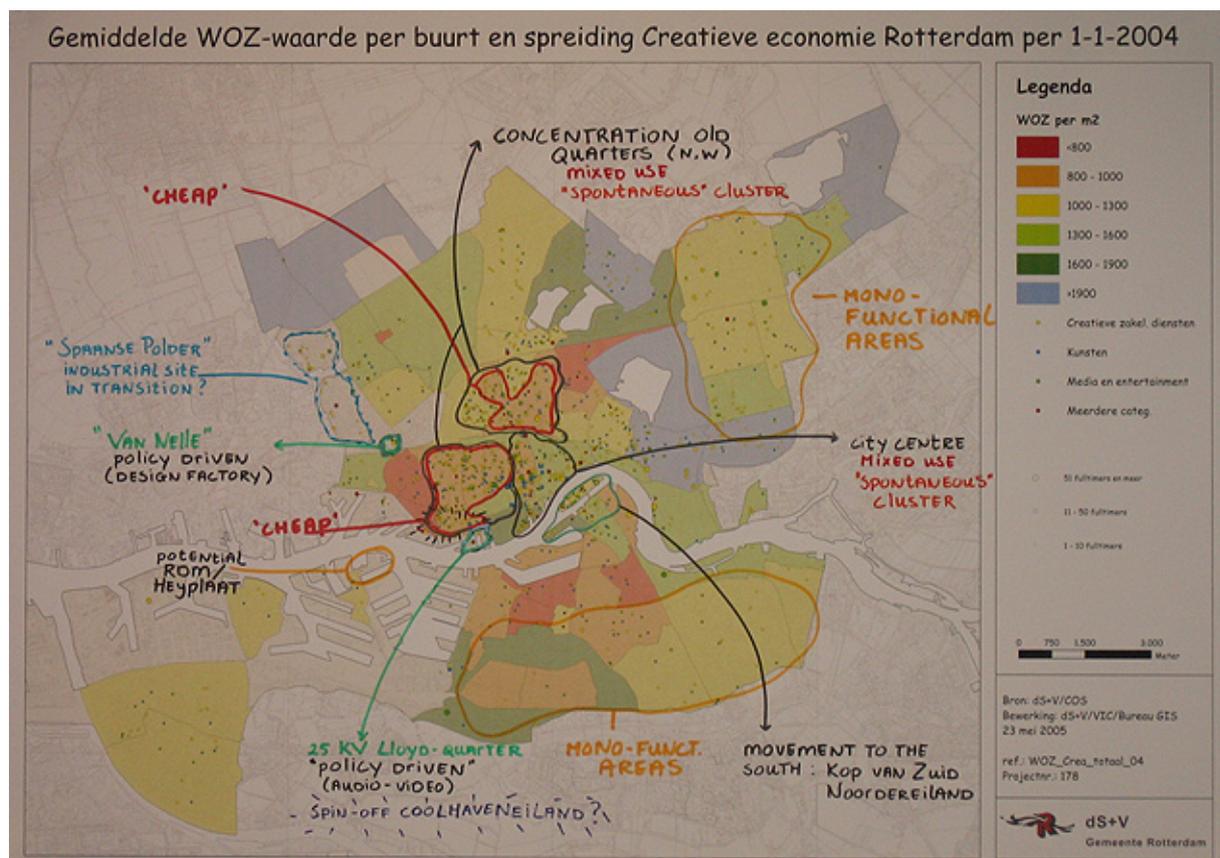
Value of real estate combined with the spatial spreading of creative industries in Rotterdam, research project creative industries 2005

The conclusions of this research project will be the basis for economic and spatial policy and an implementation program for creative industries in Rotterdam. This program is the continuation of the economic vision on Rotterdam in 2020, the "Economische Visie 2020". The economic vision has been drawn up by the Economic Development Board Rotterdam (EDBR) in which entrepreneurs, institutions, like colleges and universities, and Rotterdam-experts participate. The taskforce creative industries, which is part of the EDBR, will focus on the further extension of this branch in Rotterdam.

6   Policy development

The results of our research efforts have to be productive in a broader and more effective range of strategies for the city as a whole. This is one of the main tasks of our organisation, the Department of Urban Planning, Housing and Traffic. Now that the times of big public investments in infrastructure and projects (for cultural and economic reasons) are over, the city looks at other policies and strategies to stimulate and support the potential benefits of the creative industries for the city.

The development and formulation of this spectrum of strategies is part of the transformation of certain areas in the city which have, according to our research and opinions of experts, good potentials for creative industries (for example Coolhaveneiland and RDM/Heijplaat). The "Sense of Place"-method was implied on these challenges. We build up experience with some projects in the city which are developed for specific segments. Such as the "Van Nelle" design factory and the "25 KV" building for audio and video production. We sponsored a research project called Shadow City which showed us the free zone initiatives and places in Brussels as well as in Rotterdam. This project gave us a better feeling for the bottom up movements as breading spots outside scope of planning. In this way we are a learning city along different lines.

Strategies can be focused on the support of weak forces and programmes in the urban society which can't survive or flourish on their own (more old fashioned way of thinking) or on stimulation of new combinations of activities and interests of people and businesses (chains, alliances, crossovers etc.). This is a point of discussion.

Some first ideas for policy development are:
- Always provide enough space for niches in the market in city owned real estate, and areas in transition (old harbours);
- Look carefully how activities develop on a temporary basis and, if valued as potential new economies, give them a place in your plans and projects;
- Stimulate intermediates between individual- and city interests;
- Create or stimulate podia for exposure of fragile activities for a larger market;
- Pamper and challenge all your young urban potentials, students, subcultures, events with tolerant places to meet, affordable houses, room for enterprise, etc;
- Create buzz and rumour in the city;
- Stimulate pioneer scenes and experiments;
- Increase the sharing of knowledge and communication between all involved;
- Detect gaps and weak links in infrastructure of people, spaces, connections;
- Raise funds and develop alternative financial sources.

Effective policies and strategies for creative industries seem to be based on a mix of spatial, economic, financial, media and communication approach and skills.

7   Conclusions

- The role of the planner changes due to the rise of the creative industries. Planning requires exchange of knowledge with the city itself. The "Sense of Place"-method can help.

- A crucial skill to adapt is a new attitude of looking at the dynamics of the existing city. Less as a conceptual object for planning, but more as a differentiated network of places, routes and time systems which get their meaning by routines of people on a daily basis (urban tactics).

- "Space" (our old legend) gets an extra layer of "localised" places where general and global influences do their work and get embedded in a specific way.

- The challenge is thus to dig into your own city and to discover new cross relations, to detect networks of people and organisations and to understand spatial conditions for development. This requires the development of cultural economic city maps.

- Planners and urban designers should make such maps and analyses (or have them made in cooperation with other experts) before grasping their pencils and polystyrene in order to make a selective representation (or systemised observation) of existing reality before doing suggestions or making visions for a possible future.

- We must better understand how and why all kind of individuals, institutions, networks of interests (commercial and non commercial) behave in space and time. Where do they invest and how do their strategies and tactics shape the city?

- The research by Kloosterman on architecture tells us about the mechanisms of this specific cluster: the role of dedicated institutions, names and fames, availability of a labour pool of young architects and students and cheap office space.

- A more modest attitude towards planning and more emphasis on communication (maps instead of reports, mental atlases, films, city walks, dedicated commissioning by the city, rewards, etc.) are required to understand and stimulate the creative production in Rotterdam.

This is all an exciting voyage of discovery, which we have just started.

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