"to know the Path is to Rule the System" -- case study New Town Almere (NL)--

by Ir. P.G. de Bois & Ir. K.A. Buurmans, Delft University of Technology & www.atelieralmere.nl

The discrepancy between serial planning and vital city

abstract

The Dutch New Town of Almere does not exist in the capacity of "city". It is a collection of mono-functional, introverted elements with little interaction or coherence and few distinguishing qualities as to their internal organisation. Almere is the result of a singularly efficient house-construction engine. However, the existing structure, the urban "frame", lacks an integrating "intranet" of paths and places that facilitates an optimum implementation of both public and private investments. Throughout different levels of scale little exchange occurs, there is no overlap and flows of people and goods rarely coincide which prevents socio-economical spin-off from taking its natural and self-evident course.

Even though sometimes -- and in case of New Town Almere, literally been built on New Land, inevitably -- the situation underlying large scale urban developments appears "tabula rasa", there never truly is question of a contextual vacuum. Plans and designs are always, irrevocably, the result of (con)temporary social considerations, ideology, on the one hand and economical production motives on the other.

New Towns are as special category in the field of spatial planning and design. They are bound by a number of very specific characteristics that are determining for their genesis, design and functioning, both short and long term. Planners and designers naturally gravitate towards a spatial concept that aims at facilitating similarities, consensus and the social average instead of distinction and potential conflict. In the case of Almere, the notions of that time concerning green, space, social coherence and traffic safety were vital to the town's lay-out. Predominating motivation for choices made sprang from an enforced to extremes spatialprogrammatic compartmentalisation, a progressive division of territory into ever smaller units, from the highest to the lowest level of scale. Infill of these "bitesize chunks" consisted of primarily architectonical quirks.

The lack of really distinguishing factors causes both public and private investments to scatter incoherently if occur at all. For: where lie opportunities when every district, neighbourhood, street in essence is the same, clear and without conflict, but therefore also static, singular and confined within the original design parameters? Where can be found the exception, coincidence, encounter that distinguishes places, charges them with potential? In this respect, the town is not legible for its inhabitants, users and potential investors. The assignment that follows upon realisation of the original plans therefore concerns the following questions: how does the existing "Frame" of the city (the system of public spaces such as streets, squares, parks etc.) facilitate the necessary socio-economic dynamics of its use and users? And what interventions should be implemented in order to initiate corresponding the self-generating processes that are so specific to the notion of "urbanity", vital city?

Keywords: planning, transformation, intranet

Ir. Karen Buurmans, Urban Designer

Teacher/researcher, Delft University of Technology, MSc.Urbanism & Architecture

Visiting Critic involved in design projects: Enspel, Nancy, Krakow, Berlin Amsterdam, Beijing,

Teacher, Landscape Architecture WUR

Coordinator of Atelier Almere (graduation laboratory) www.atelieralmere.nl

Ir. Peter de Bois, Arch & Urban Designer

Associate Professor Delft University of Technology, MSc.Urbanism & Architecture Guest Professor, Stuttgart (2002) & Kemerovo, Siberia (as from 2004)

(as from 1990) Visiting Professor involved in design projects:

Barcelona, Enspel, Florence, Kemerovo, Koln, Konstanz, Metz, Nancy, Porto, Rabat, Reims, Strassbourg, Stuttgart, Thessaloniki, Krakow, Norwich, Koblenz, Beijing, Seoul,

Coordinator of Atelier Almere (graduation laboratory) www.atelieralmere.nl

"to know the Path is to Rule the System"

-- case study New Town Almere (NL)--

by Ir. P.G. de Bois & Ir. K.A. Buurmans, Delft University of Technology & www.atelieralmere.nl

The discrepancy between serial planning and vital city

Every person has an image in his head that helps him understand the organisation of the city and enables him to use the city in accordance to his momentary needs and means of transport. We call this image a cognitive map.

The Cognitive Map and the spatial ritual

On behalf of an exposition themed "Cartography in Amsterdam between 1866 and 2000" (commissioned by the Amsterdam Municipal Archives) Waag Society in collaboration with Esther Polak and Jeroen Kee initiated the project "Amsterdam RealTime".

The project encompassed equipping a number of inhabitants of the city of Amsterdam with a GPS device that via "satellite tracking" plotted the participants' daily routine with regard to their movements and pauses, correlated to the topography of the city. The resulting map is not the traditional product of a cartographer, but the combined result of the inhabitants of the city themselves. It is a map that does not consist of houses, streets, squares and parks, but of the actual motions and routes of the participants. [figure 1]

The summation of those individual movements results in a surprisingly coherent overview of the city of Amsterdam and gives clear clues as to the actual use of the town's public space.

And this is exactly the value of this type of research: it shows the actual use of public space, where people meet, when people meet, it shows their spatial rituals and how overlap in individual routines charges areas with collective significance. It shows how the "Urban Frame" of the city facilitates those myriad individual circuits, and hence how it effectuates the relations between use and users, between destinations, programme, and visitors. [figure 2.1 to 2.4]



Fig.1. Amsterdam Real Time, diary in traces, Waag Society 2002.¹

Fig. 2.1. t/m 2.4. Individual tracks Adinka, Irene, Jouke & Sanne, Waag 2002.²



It is of the utmost importance to understand in what way the Urban Frame -- the system of streets, squares and parks that serves the needs of the town's inhabitants and visitors -- feeds and facilitates the development and extent of the individual "cognitive map". That insight will help urban designers, planners and politicians grasp the town's socio-economic functioning. It adds inevitably to the knowledge gained through other, more traditional research and analysis methods and provides a clear and more effective image of a vital aspect of urban life. Cities are not all the same, not all cities have come into existence along the same paths. Furthermore, a great variety of New Towns has been developed primarily based on singularly temporal notions and social concepts. Understanding the manner in which public domain functions in respective contexts is vital in the light of the rapid contemporary developments with regard to urban expansion, regeneration and, again, new towns.

 Polak, Esther and Kee, Jeroen, Amsterdam Real Time, diary in traces: 2002 Waag Society Amsterdam
Polak, Esther and Kee, Jeroen, Amsterdam Real Time, diary in traces: 2002 Waag Society Amsterdam

The Cognitive Map and Urban Frame

Every movement through the Frame of the city is registered in the brain en becomes part of the general lot of insights and knowledge with regard to public space and its functional targets. That information is incorporated in one's Cognitive Map. But there is a limit to the sort and amount of data that can be stored, for example the number of directional changes one encounters along one's path. Everyone who has ever asked someone directions knows this first hand. It becomes difficult to remember more than three turns away from the starting point: "here straight on, the second street to the left and than at the local grocery store to the right." At that point one is usually advised to ask again.

The by us developed "1st, 2nd & 3rd order" or "Three-Step" analysis method visualises for every urban element under investigation the connected Frame in three steps from the point of origin. Hence it gives insight into the depth and reach of this specific element in its urban context as well as the "connectivity" and typology of the urban fabric as a whole.

An example. The functional-cognitive map of a 10 to 15 year old boy living in Amsterdam shows his more or less regular destinations: the Sloterplas, the Vondelpark, the Central Station, Artis Zoo, and various spots in the immediate surroundings of his home such as the Sarphatipark and the swimming pool. The underlying Frame of the city enables him to find his way and recognise his whereabouts. [figure 3]



When the Three-Step analysis method is applied to the living area of the 10 to 15 year old boy it becomes clear that the depth map virtually seamlessly coincides with his functional-cognitive map. Thus it becomes clear why those elements were incorporated in his routing reference in the first place as there is a clear correlation between his use of space and the available Urban Frame. [figure 3.1 to 3.5]

Apart from a great many personally significant destinations this boy encounters several crucial urban anchor points too, such as the historical ring of canals and the 19th century areas surrounding the city centre. Knowledge of these iconic elements of the town's historical development is bound to broaden his general scope and frame of reference.



Fig. 3. Cognitive map 10 year old boy, Berlage quarter, Amsterdam-South.³



Fig. 3.1 t/m 3.5. 1-2-3 order analyses, Cognitive Map and available Frame.⁴



3 Bois, Peter de, STOA-Method for Urban Design and Analysis Delft University of Technology, 1995 4 Buurmans, Karen. The Labyrinth -- a design / theoretical research into perception and use of urban structure. Delft University of Technology, 2006

It can be expected that in areas where the Urban Frame does not facilitate use and routing to a similar extent, the development of a person's individual Cognitive Map and his insight in the construction of the city in its broadest sense will be hampered. The actual functioning of the public domain in terms of socioeconomic spin-off will be compromised possibly to the point of segregation and the (in)advertant rise of so-called "gated communities".

Urban Frame and Public Space

The manner in which the urban frame comes into being, transforms and is laid out, designed, in new towns or large expansion areas greatly determines the development and functioning of public domain.

The frame basically serves three purposes:

(1) to provide in the structural cohesion between the whole of the urban system and it's separate parts, i.e. the streets, squares, parks and individual destinations that make up public domain;

(2) to facilitate its users in terms of time and efficiency of movement and action; (3) to ensure freedom of choice with regard to accessibility and use of public space apart from social class or status.

For the urban frame facilitates the connection between its parts, between the physical-spatial and socio-economical construction of the city in casu. It represents the urban dynamics of that city and it creates the opportunities for the genesis of relationships and (social) interaction between the users of the public domain, between both individuals and groups of people. The urban frame exemplifies different ways of life, use and viewing and enables interaction.

In this complex whole of individual spatial rituals two basic notions play a critical part: (1) the need for insight in the construction of the whole of the city, in other words the "context" of the space we roam; and (2) the need for insight in the parts of that city, the position of destinations, different functions and "details". With these two notions the individual meets collective consciousness: without context no idea where we are, without detail no reason as to why we are there. Here essentially lies the basis for our desire to be mobile and the allied need for orientation, navigation, "wayfinding". Our need for safety and efficiency urges us to anticipate whatever it is we want to achieve or avoid.

The cognitive map provides essential clues as to how this process of orientation and anticipation on behalf of our socio-economical behaviour is facilitated by the public frame and, hence, manifests itself in the public domain.

Public domain and collective interest

The genesis, development and design of the pubic domain are part to a frail and uncertain relationship between private and public demands. Various collectively used spaces (e.g. shopping centres, station areas, etc.) are only partly or not at all embedded in the public domain, but instead belong to a private domain. Even though they do register on the cognitive map they in fact represent a publicly accessible realm that belongs to a private interior as already drawn up by Giambattista Nolli in his famous map of Rome (1748). Likewise it shows that this phenomenon is of all times. What binds these private and public areas, places, and even streets is a common need for a relevant and recognisable position within the urban context, the Frame of the city. The significance of a place, its "genius loci", comes with the fit between its function and content and to what extent its users are accordingly provided. A market square for example is an excellent case of a place that enables a considerable differentiation in use, attracts a large variety of users and usually occupies a very central and recognisable position in the urban fabric. [figure 4.1 to 4.6]

Comparative research into the way old and new market squares are positioned in their respective urban context shows that since the mid 20th century a discrepancy has emerged in the way the urban Frame actually connects these crucial areas to the city as a whole and therewith positions them within the urban context. In older, "organically" grown towns the relationship between the collective nature of the market square is reflected by its central position and wide reach within the urban fabric. Unfortunately, the present-day pretty much autonomous traffic machine implements cuts and measures that disturb the



Fig 4.1 t/m 4.6. 1-2-3 order analyses of squares in various Dutch cities.⁵



⁵ Wolveren, Loes van, Geconcentreerde collectieve ruimten in Almere, Delft University of Technology 2005

natural flows and relationship to the point that the city in casu fragments both spatially and functionally.

The necessary interaction between function and content of space on the one hand and its users on the other can only develop effectively when both entries provide an adequate motive for establishing that interaction. There should be some sort of consensus between the providers of a place in casu, both the municipality and the private stakeholders that determine functional content and quality, and the user that can choose to either visit or discard that place. Essential is are problems of making a place known, what need is fulfils and how it can be reached. In other words: context and detail. Without context there is no clue as to where, without detail no reason why. A place should be incorporated in a user's cognitive map.

For the planners and designers responsible for the public this means that they should be very aware of the matter of context, the prerequisite of their task. The assignment comprises in the first place the question as to "why". Only in second place it is about the "how", the solution. Under no circumstances it is about proclaiming designer's personal paradigm. Design is not an end in itself, it is the means to an end that surpasses the designer's pride whereas the significance of the public domain is a matter of long-term and collective nature. No cosmetic surgery, no botox for public space.

Shift in social paradigm

The relationship between private and public parties as stakeholders in the public domain is subject to major changes. Mid 20th century (society could be described in terms of collective values and ideological characteristics (collective care, social coherence, equality). Government played a major part in directing and facilitating individual security and general socio-economic development on behalf of its citizens.

The mechanism of globalisation, dissolution of borders and increasing prosperity affected society significantly. Present-day society cannot be captured any more in simple terms of collectiveness. Government gave up on its dominant position with regard to socio-economic control and devolved large parts of its powers to the private sector. The collective plays second fiddle to the individual. The world has become a motley collection of so-called life-styles. But the influence of life-styles on the functioning and use of the public domain is greatly overrated. Income, education and ethnical background are still much more determining for what's sought in public space. Users still gather from diverse backgrounds in the same old streets and places that have always been functional-spatial anchor points and only from there on go their separate ways. Based on life-style they then decide for example to visit a common alehouse or a fancy grand café.

Partly due to the withdrawal of governmental control, planning and design of town and landscape have become more fragmented and less obvious as unambiguous context. The Dutch consultative model of reaching compromise, consensus ("polder model") on each and every decision underlies this fragmentation further. But paradoxically the demand for centralised action has never been greater: the prevailing influence of urban development on landscape and ecology is being questioned; the seeming infallibility of technocratic control over our environment is being affected; climate change and the accompanying inevitability to reassess use and management of territory, all demand a more integral and at the same time more flexible approach to spatial planning.

All these developments together greatly impact the role and position of public domain in the contemporary city. The part it should play is providing the necessary and desired spatial development and functional coherence in order to facilitate an effective and self-sufficient socio-economical process. Present-day society is a labyrinth and a jungle. The need for a clear, legible and effective spatial context is urgent. The poignant deficiency with regard to these aspects is being compensated on the individual level by all sorts of commercial enterprises jumping on the opportunity to market their exclusive products, from navigation equipment to entire specialised dwelling areas.

The (lack of) quality of the socio-economical context on the one hand and the spatial context on the other exemplifies the balance between private and public demands and gives a clue as to the characteristics of society.

The city developed a Frame that is capable of comprising simultaneously intentions and functions of overlapping, contrasting, competing and/or complementary nature. The Frame can be regarded a "parallel" system wherein socio-economical processes and physical-spatial transformation can follow their own courses without primary depending on public budget. The practical flexibility and the intrinsic capacity for transformation a Frame like this provides is directly related to the way the streets of the system are mutually interconnected. A certain variation in typology and length of streets is also important.

Likewise, this exemplifies why a completely regular "grid" system in itself doesn't necessarily function well either. It requires a number of structural exceptions and deviations such as the Diagonal and the pre-existing settlements embedded in the Cerda plan in Barcelona to provide the necessary distinguishing cognitive anchor points and therewith sufficient socio-economical signification. [figure 7.4]

The historical city and parallel Frame

A grid in itself is no prerequisite, but a more or less orthogonal system of interconnected lines and axis of varying length and nature is a general product of gradual development. The case-study of Rotterdam exemplifies this principle like no other. [figure 8.1 to 8.10]



The illustrations show the development of the city from its earliest days around 800 AD till the present day. Each phase indicates a dominant orientation within the urban Frame along which the city grows before it reaches a pivoting point after which the direction of expansion changes roughly by 90°. The lines that performed a dominant position in the preceding phase have to adapt to the new situation and will undergo a functional- spatial transformation in correspondence to their role and position within the Frame of the city.

Major "Pattern" elements will also shift accordingly and claim a position along the new dominant lines. This is something that can easily be seen today. Example is the AMRO Bank in Amsterdam: before settling on the South Axis this commercial institution occupied various significant locations in the city, locations that can be considered both "anchor points" and main icons of urban identity. In the case of Rotterdam it becomes clear that function and significance of the existing A13 highway, after the mending of two "missing links", shifts towards a position as inter-urban connection area, whereas this line already binds all main and iconic destinations of both The Hague, Delft and Rotterdam. [figure 8.11]



Fig 7.4. Cerda Grid Barcelona.

Fig 8.1 t/m 8.10. "STOA" analyse Rotterdam.6



6 Bois, Peter de, STOA-Method for Urban Design and Analysis, Delft University of Technology, 1995 6



In The Hague these destinations comprise:

(1) the coastal area; (2) the beach and the pier of scheveningen; and (3) the city centre with the Parliament buildings, the city squares and shopping area, the tram tunnel, the City Hall and the theatre area. In Delft these are: (3) the connection across the highway to IKEA, the recreation area of the "Delftse Hout" and the connection to the dwelling areas of Pijnacker. Further along the line lies the landscape area of "Midden Delfand" (Central Delfland) and eventually in Rotterdam there can be found: (4) "Blijdorp" Zoo; (5) the City Hall with a number of squares including the cultural area around the "Doelen"; (6) the new "Koopgoot" shopping area; (7) the river fronts, the "Maasbrug" (Meuse Bridge) and "Maasboulevard" Meuse Boulevard) and the recent developments on the "Kop van Zuid" pensinsula; (8) the "Zuidplein" (South Square) as centre of Rotterdam South; and eventually (9) the landscape area south of Rotterdam.

The local transformation processes of The Hague, Delft and Rotterdam have reached a level that surpasses their local contexts. The extended A4 highway directly connects the Randstad with Antwerp which provides the opportunity to "downgrade" the existing A13 and give it function more appropriate to the level of the Randstad South Wing.

The New Town and serial Frame

Even though the brain processes information in a parallel manner, translating that into conscious thought and effective action inevitably results in a serial flow. After all, we do things in a sequential manner, conscious thought,,communication and action require consecutive steps. In contrast to

Fig 8.11. "STOA" analyse Rotterdam.7

7 Bois, Peter de, STOA-Method for Urban Design and Analysis, Delft University of Technology, 1995 7





Examples of serial urban contexts in Holland are the large scale post-war expansion areas (1960s, 1970s), most "Vinex" locations (1990s) and many New Towns. The New Town of Almere (1969) is a particularly elaborate case of a serially developed urban Frame. From its conception it has been allowed to develop according to the original plans with the staggering speed of 3.000 dwellings per year. At this moment the town houses about 180.000 inhabitants, spread over a threesome nuclei. A further growth to 350.000 inhabitants has recently been agreed upon. This additional programme as compared to the original planes raises the question as to the spatial consequences for the operative model and the quality of the existing fabric. [figure 10.1 to 10.6]

Fig 09. Serial and parallel city frame.

Fig 10.1 t/m 10.6 Urban model 1971, 1981,



1991, 2001, 2011, 2031.



It is an idée fixe to expect it is possible to create a complete city from scratch in thirty years time. No urban concept or model can capture all aspects of urban life. New Towns are imperfect and incomplete by default. The fact that the notion "urban" has proven almost impossible to define is in itself testimony to this. New Towns inevitably must undergo several phases of transformation in order to attain the stratification that comes with the spatial and functional complexity according to an integral urban system.

The city of Almere falls in line with the Dutch tradition of empoldering and creating new land. As is the case with most New Towns Almere too is situated a stone's throw from a larger, older city on which it is to a certain extent functionally and socio-economically dependent. [figure 12]



In this particular case the city was to provide a green and spacious living environment to the "overflow" population of Amsterdam. [figure 13.1] In the case of Almere the overflow motive combined with the new land led to an urban model based on:



Fig 11.1. Pioneers & 11.2. New land, New city Almere Haven.



overnov

French "sate

German "Siedlungen"

comparable settlement Denmark and Swede

recreating

"Garden Cities of Tomurrow"

ite towns

and

environment

nd

Fig 12. Amsterdam Almere.

aspect outpost colony Richelieu, Rennes etc. in France all American cities like New York v Delhi, India time and Washington DC New Towns in England and Sc Roman military "castra" the "Spanish Law" towns from the time of technology Spanish and Portugese suppremation volde, Almere, New Lanark and other settlements Ancient Greek "NEa Πολεις" elystad and directly connected to some kind of ideology industrial production process the No doostpolder villages

frontiers

productive environment

border conditions

situation

- (1) a top-down instigated physical-spatial organisation of the urban Frame
- (2) a deliberately conflict avoiding singular spatial stratification
- (3) an equality oriented social concept

New Town categorisation:

- (4) an alleged tabula rasa setting
- (5) lack of historical context

The accompanying planning process was marked by efficiency and technological feasibility. Good ideas and intentions of the planners and designers in spite, the town that emerged bears the undeniable limitations of a singularly pragmatic and dated spatial strategy with as its most pregnant trademark stringent functional separations on all levels of scale. Almere features an amalgam of sometimes only partially adopted ideologies, in principle each with their own merit yet with problematic consequences as well: (1) a "Garden City" without the required autonomy; (2) a system of "Green Belts" that due to the combination with main infrastructure function a very literal separators but hardly with any recreational value; (3) a partial implementation of "Polycentrism" that indeed focuses on creating separate spatial entities yet largely omits the intrinsic interconnections; (4) an execution of the "Neighbourhood Unit" concept that appears more commercial than social; and (5) a "Segmented City" in the most extreme sense.[figure 13.1 to 13.4]

Fig 13.1 New Town categorisation.⁸

health

environment

8 Buurmans, Karen. The Labyrinth -- a design / theoretical research into perception and use of urban structure. Delft 9 University of Technology, 2006



and therewith hampers orientation. It reinforces the tendency of typological repetition on the level of district and neighbourhood. The natural need for variation and distinction is not remotely met which means that orientation, identification and hierarchy are insufficiently facilitated. [figure 16.1 to 16.4]

Fig 13.2. Garden City of To-Morrow.⁹ Fig 13.3. The segmented city.¹⁰ Fig 13.4 Almere, a compilation of different models.¹¹



To cut a long story short, there is a severe imbalance in the way different elements in the city are used by its inhabitants. The highway and the ring road figure over-largely in intra-urban movements whilst significant programmatic anchor points such as shopping centres and unique recreational destinations like parks and water areas barely register and are in fact under-used. They are illconnected to the level of districts and neighbourhoods and it can even be argued that it from several districts it is faster to go all the way to Amsterdam than try and reach the local city centre. [figure 17.1 to 17.4]

The socio-economical spin-off the city needs to develop and maintain itself is not facilitated and loses momentum immediately. The excess of public domain, both in terms of parks, squares and infrastructure, is a heavy burden on the Municipal budget without yielding obvious qualitative results and it already takes social and physical wear its toll on the older districts and neighbourhoods. The volatile settling habits of the inhabitants bring forth socio-economical segregation. Bonding with the dwelling location is limited, people tend to move to another dwelling as soon as the opportunity presents itself. Since every place is equal with regard to (lack of) facilitation within the neighbourhood, district and city as a whole the context argument all but loses validity. The consequences go without saying: social relations and the accompanying spatial rituals are seldom fully initiated and are often only temporal; investments in the existing dwelling for reasons of wear, renewal and updating, stage of life, etc. are put off because moving is the more feasible option. The public domain is left void and uninspired due to the lack of involvement and commitment.

"To Know the Path is to Rule the System"

Defragmentation and coherent Pattern

In a complete and healthy urban Frame users and potentials investors are allowed to stay on their own level of scale, literally within their own "frame of reference", when moving from one action to the next. They will gain more insight in potential for programme, destinations and specific qualities of areas and places, "Pattern". An effective relationship between Frame, Pattern and Circuit and the consequent positive effects regarding the built-up of the individual's cognitive map will eventually result in a more fruitfully functioning public domain, as the facilitating role of the transformed urban Frame with regard to mobility, movement,

16.1 t/m 16.4. Dominant infrastructural compartimentations.

⁹ Howard, Ebenezer. Garden Cities of To-Morrow. Londen, 1902

¹⁰ Geyl, W.F. De Gelede Stad. 1947

¹¹ Buurmans, Karen. The Labyrinth -- a design / theoretical research into perception and use of urban structure. Delft University of Technology, 2006 10

accessibility and destination ensures vital collective "coincidence". Areas can be set up more effectively with regard to use and quality and excess of public domain can be avoided which leaves more means to invest in existing urban areas. Eventually, and especially in the case of Almere, it is important to achieve some sort of coherent notion encompassing the Pattern of destinations, anchor points and landmarks of the town. As this New Town has a short history it will have to take every opportunity to write its own. Tapping into the existing potential qualities, the unique "green" and "blue" facilities provided by the surrounding landscape for example, is a fruitful way to go at it. The city of Almere can rejoice about a fantastic environment where several significant natural and recreational reserves meet. To fully benefit from these qualitative Pattern elements and to incorporate them effectively in the Frame focused planning strategy we have devised a concept and design tool that provides in that need: the Strategic RGBG Model (RGBG = Red, Green, Bue & Grey).

The method uses the technique of literally layering multiple spatial concepts one on top of another. The layers are produced by asking disciplinary professionals (Urban Designers, Landscape Architects etc.), students and various stakeholders in the process to record their specific visions with regard to the programmatic development potential of the area schematically on a topographical map. The resulting topological schemes are then adapted and reduced according to four layers: (1) RED for built programme; (2) GREEN for parks, recreation, ecological and landscape features; (3) BLUE for water and water related functions; and (4) GREY for everything concerning infrastructure. Within these four layers a legenda is used that discerns between linear features, spots or places and areas. The eventual drawing is built up with transparencies so saturation and coincidence give a clue as to the general significance of a certain element and specific correlations between each of the colours. The more frequent an element is "hit" the more saturated it shows up in the map. [figure 22.1 to 22.4]



The method offers excellent opportunities for continuous enrichment and updating and is therefore uniquely fit for conceiving future developments and communicating both discords and agreements in the demands of competing parties and stakeholders. In contrast to "traditional" master planning it is a more flexible, conceptual, communicative and open-ended, i.e. not focused on a fixed planning horizon, tool. Its primary goal is defining collaborative aspects and spin-off potential within an area instead of harping on conflicts and divisions through an integrated visualisation of superpositioned programmatic layers. The result is a clear overview of the strategic role and position of specific areas and programmatic elements. In a number of case-studies undertaken by the Atelier Almere (www.atelieralmere.nl) has the method been developed and tested.

The Strategic RGBG Model has, from the moment of its conception, been an asset to the conceptual discussion within the urban planning and design department of the city of Almere. In addition it has been an important point of departure as regards content and subject matter of graduation projects on behalf of students Landscape Architecture (Wageningen University) and Urbanism (Delft University of Technology). [figure 23.1 to 23.5]





12 Bois, Peter de, & Buurmans, Karen, Delft University of Technology, 2003, 2004 11

Fig 23.1 t/m 23.2. Design for the "Hoge Vaart" Landscape-Urban Axis Almere.¹³



Fig 23.3 Design for the transformation of the A6 zone. $^{\rm 14}$



Fig 23.4 & 23.5 Design for the transformation of the "Weerwater" in Almere.¹⁵



14 Wubben, Bart, Designing the A6 Urban Void. Wageninaen University 2004.

15 Hartman, Jos & Boheemen Yoran van, Central Park Almere- ontwerp voor het Weerwater als Stadspark Almere Wageningen Universiteit 2006.



Following the application of this analysis and design method in the case-study of Almere a concept has been derived for the water areas of the Province of Flevoland. Immediate cause for the request was the decision of the Dutch Lower House to reconsider existing plans for the region on the basis of accentuated European legislation with regard to ecological and habitat guidelines. The corresponding rules and regulation are of major impact to the IJmeer area between Amsterdam and Almere, the Markermeer area that was originally destined to be empoldered as well, the IJsselmeer and the Randmeren, the lake area between the former Zuiderzee coast and the Flevo Polder. A second major cause for reconsidering existing plans is the increasingly complicated task of water management. The growing flow of water from Germany and the greater extremes in terms of peak load, sea-level rise, climate change, etc. combined with the necessity of developing an integral vision on both land and water related ecology place unique demands on the region. And finally, the expansion of the city of Almere from 180.000 to about 350.000 inhabitants will also considerably up the pressure on the area. Finding a way for urbanisation, nature and water related ecology to go together in harmony is central to the assignment.

Several parties have partaken in the assignment, amongst others colleagues from the Urbanism Department of Stuttgart University, professionals of the Spatial Planning department of the Municipality of Almere and of course the Atelier students and staff from Wageningen University and Delft University of Technology. [figure 24.1 & 24.2]



Our concept for the "Large Waters" of the province of Flevoland shows the broad scope of viewpoints regarding the potential developments in the area. The model has become central to the debate between the diversity of parties, stakeholders and institutions. Following the RGBG scenario for the existing city of Almere this one too has inspired a multitude of plans and designs that try and enhance the various specific aspects of the region. The recent "EO Wijers" competition for example has delivered a number of designs for the IJ lake area and the relation between Amsterdam and Almere that fit seamlessly within the concept already recorded previously in our mentioned "Large Waters" concept. [figure 25]

As we speak GPS research is being conducted into the movements and functional-spatial behaviour of inhabitants of the city of Almere. This research is basically the final link in a chain of studies that have been implemented by the AtelierAlmere: (1) with regard to Frame, Space Syntax and Three-Step analysis; (2) with regard to Pattern, the Strategic RGBG model; and (3) with regard to Circuit, cognitive mapping and GPS tracking.

Central to all these studies is the concept of defining urban structure in terms of Frame, Pattern and Circuit. This concept primarily aims at combining, integrating and interpreting all those different research methods in order to gain a coherent insight into the physical-spatial and the socio-economical characteristics of both serial and parallel (urban) systems. In our opinion it is vital to the actual urban task in general and the development of New Towns and large expansion plans in particular. Almere is on the threshold of a new period in its development but in its current situation Almere is a town that possesses great and unique spatial qualities, yet fails to consummate their potential as of yet. An incomplete urban system is a primary cause.

Delft, 12th of March 2007

Fig 24.1 Strategic RGBG model "Grote Wateren" Flevoland. $^{\rm 16}$

Fig 24.2 Strategic RGBG model "Grote Wateren" Flevoland, separate layers.



Fig 25 Winning design EO Wijers competitions 2007 IJ-werken, West8.¹⁷