

Lelystad, a research to improve livability for inhabitants of modernistic 'New Towns'





Municipality of Lelystad, from Lely statue
Photography by Disco, M.C. (2016)

Lelystad, a research on the solutions to improve livability for inhabitants of modernistic 'New Towns'

P2 Report

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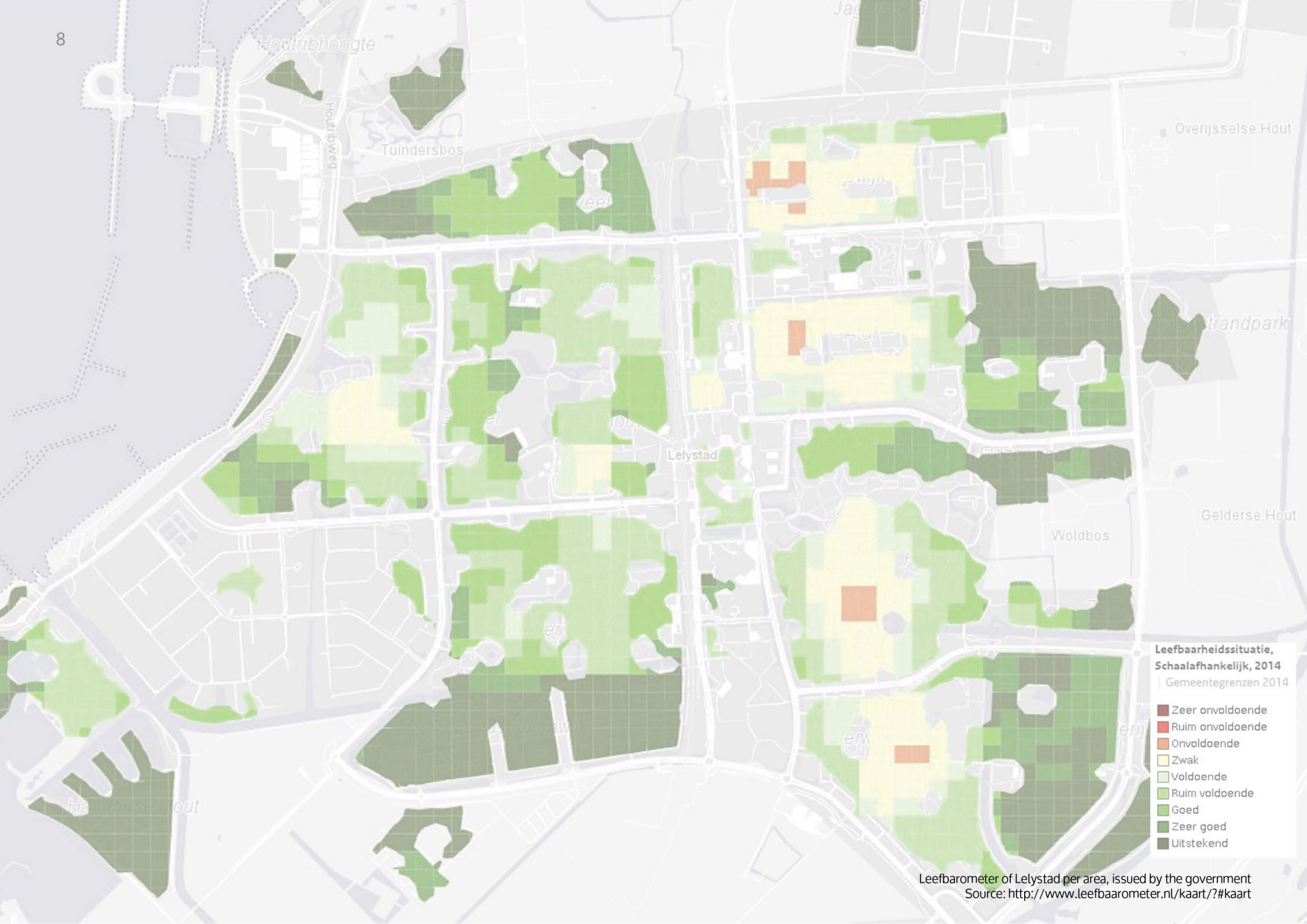
Theme
Socio-spatial revitalization of neighborhoods

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Introduction



Leefbaarheidssituatie, Schaalafhankelijk, 2014
Gemeentegrenzen 2014

- Zeer onvoldoende
- Ruim onvoldoende
- Onvoldoende
- Zwak
- Voldoende
- Ruim voldoende
- Goed
- Zeer goed
- Uitstekend

I.I Personal motivation

The motivation of Lelystad as a challenge for the graduation comes from a personal fascination for Flevoland as a whole and the reputation Lelystad has from my point of view. For me, a former resident of Dronten (10+ years) and Swifterbant (8 years) Lelystad felt like the big brother that never showed up. All the basic products and services were available in Dronten already, and the more luxurious products and services a capital city could provide were hardly of any significance. This is also due to the fact that the city is outmatched by Almere, Kampen and Zwolle. Therefore the capital city of Lelystad feels like a regular town without any special features like an interesting shopping zone (except for Batavia stad, which is still quite detached giving the impression it is not part of Lelystad) and finally the atmosphere of Lelystad never felt engaging. An unpleasant and pressing feeling of constant motion accompanied with a feeling non-belonging ruled my emotions as a visitor. From here-say it appeared that I am not alone in this feeling that is described. This feeling is not only shared by the people around me but also by some residents of Lelystad itself that I know.

But still the city is a capital city with a population of roughly 75.000+ inhabitants. And apart from the emotions I experience with the city, others also experience this. This is something which seems like an unwanted thing for the municipality itself. There is work to be done to improve this. Currently it looks like the municipality is working on two aspects. The first aspect is placing Lelystad on the map on a national scale by trying to attract tourism and businesses. And on the second aspect the city is rejuvenating neighborhoods. But after a few visits the initial emotions I described before were unchanged for me and also others I personally know.

This is where my personal fascination for the socio-spatial urbanism approach relates to Lelystad. In my opinion urban designers and strategists function a purpose for the society and not only direct stakeholders. Designing to improve the qualities of life is what I like to strive for in designing on the neighborhood and city scale. To understand the needs of the actors involved next to the stakeholders you should first understand all actors, understand their wishes and limitations.

This quality of life is strongly connected with livability. Wherein the perception of livability itself differs from person to person related to culture, background, ethnicity, age ect... Therefore the ways to improve the livability also has multiple solutions and will never be the same in every case. This is what makes it fascinating and challenging.

I am interested in the way individuals think and react on their environment. How they evaluate and feel in environments. With the guided theme of livability I want to find an answer on how these things work (be it in the context of Lelystad and their type of inhabitants). The knowledge gained from these two aspects, improving livability in this so called "new town" and understanding how livability actually works in essence, could be of great use for a future career in urban designing in this scale.

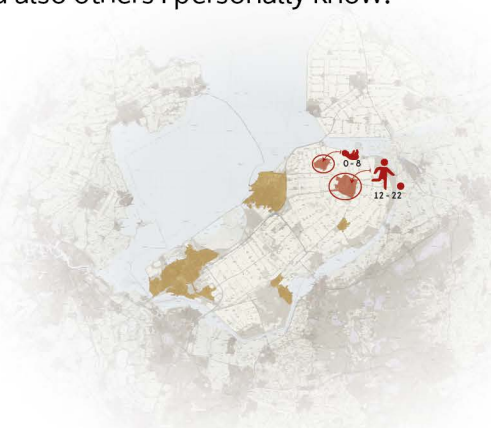


Fig. I.Ia: Personal life in Flevoland



Fig. I.Ib: Usage intensity surrounding cities



Fig. I.Ic: Identity, meaning and importance of cities

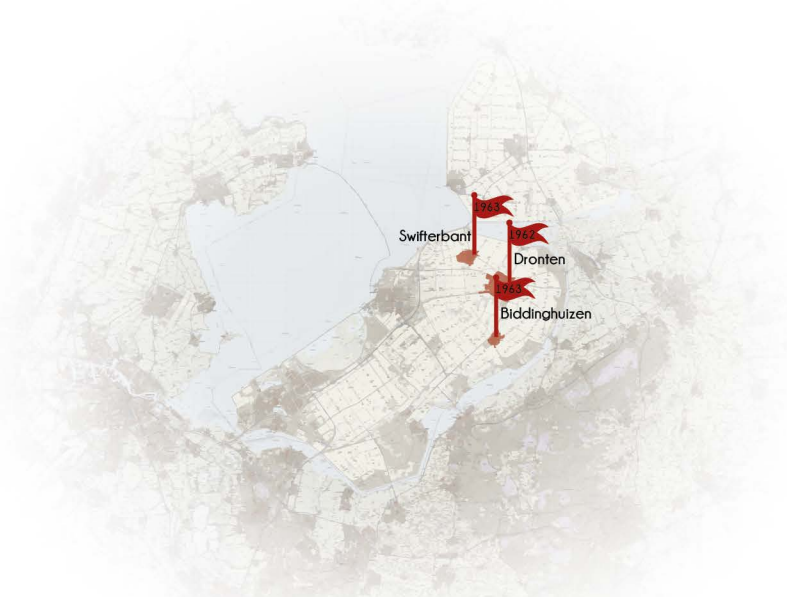


Fig. I.IIa: Settlements of Flevoland from 1960-1965



Fig. I.IIb: Settlements of Flevoland from 1965-1970



Fig. I.IIc: Settlements of Flevoland from 1970-1980

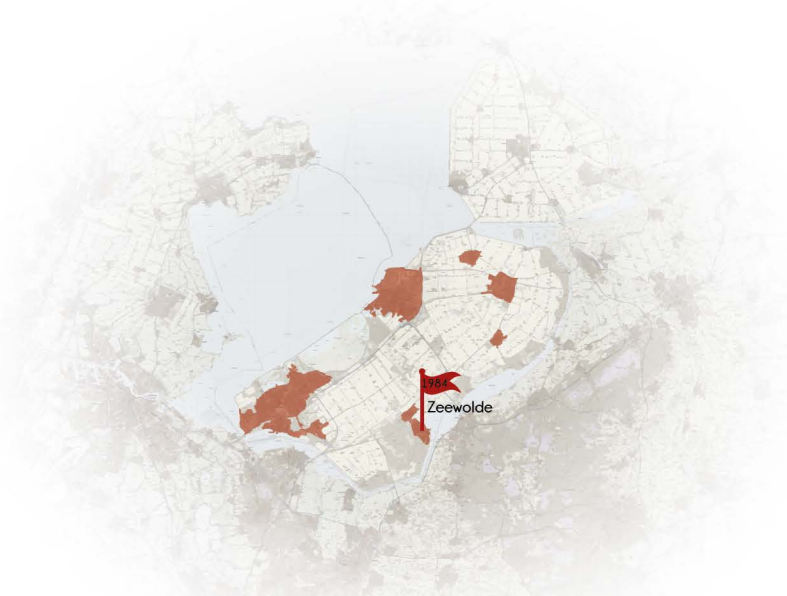


Fig. I.IId: Settlements of Flevoland from 1980-2000



I.II

Location of interest

Lelystad is a city which is around 50 years old. Initially Lelystad would be the most important city within Flevoland by a presumed strategic location so therefore it is also the capital town of the province. But through time Almere appeared to be better located near Amsterdam, so most attention and opportunities were focused on Almere. The lack of interest, caused by not only Almere but also economical factors, in Lelystad had the consequence that the migration to this town was very low resulting in vacancies in housing and a lack of employment.

To tackle this problem, which originated from the moment Almere started exploding in growth, Lelystad itself is in the process of re-shaping its identity and function in the bigger context of Flevoland. Elements like the 'Batavia-stad' a fashion outlet at edge of the city, improving the current airport and investing money in tourism are signs that Lelystad acknowledges its position and tries to improve itself on a national scale.

On a more local scale developments in the city like the restructuring of neighborhoods like the Zuiderzeewijk also indicate that the municipality acknowledges something amiss. But at first glimpse it appears that this restructuring only does something with the building themselves and a few child playgrounds.

The planning towards this city had its struggle and might also be one of the reasons why things ended up the way they did.

As for the consequences of the plan of the polder itself and the growth of the cities within the following could be quoted:

"With the initial plan of creating a polder that would be directed towards agriculture the south and east polder of Flevoland succeeded in its goal. The success of the agricultural land is however a different story than the success of the urbanized areas. This is mainly due to the fact that one of the polders that were initially part of the overall plan was not made, the Markerwaard. The consequences for the smaller cities in the polder like Dronten, Swifterbant and Biddinghuizen were quite minimal. This is because they are reliant on the agriculture itself, which was, is and will most likely stay one of the strongest elements of this polder. The capital city however is only partly reliant on this agriculture because it also had the task of taking care of the whole province in the social and cultural facilities. With the city not growing as fast as it should in the beginning and later being outmatched by Almere in growth there is an unbalance in Lelystad which is being repaired now. This is a slow process that still did not reach completion yet. Almere on the other hand, growing out of initially thought proportions, did not only become a vivid and interesting city. But also became part of the metropolitan region of the Randstad because of its importance in this region. The first few memorandums made by the government were still partly supportive on Lelystad and Almere but later memorandums were mainly in favour of Almere. Therefore we can conclude that the agricultural goals of the Flevopolder could be seen as accomplished and supported by the spatial planning memorandum, but for the urban areas themselves there was an unexpected twist favouring the city of Almere above the capital city of the province, Lelystad." (Disco, 2016)

For a more elaborate explanation of this progress, which is chronologically explained per "national policy act" (Ruimtelijke Nota's) I recommend reading the essay: 'Flevoland, new province during new policies. The consequences of the five spatial planning memorandums in the youngest province of the Netherlands' as attached in the appendix



Fig. I.IIe: Location of Lelystad within Flevoland



Fig. I.IIf: Lelystad



I.III Theoretical framework

I.III.I Notion of Livability

With the notion of livability this project is talking about livability in urbanism. Although broad as livability is, livability will always have a relation with the person and its environment. Or as Veenhoven writes "the actual livability is the degree of which an environment relates to the adaptive repertoire of a species" (Veenhoven, 2000). This livability in the domain of urbanism however is still interpretable in many ways with the consistent relation described before. Van Dorst describes seven ways of interpreting this livability varying from the perspectives of society and politics to the individuals (Van Dorst, 2005). So according to Van Dorst's writings the livability relates to how well the match is between the individual and its environment. This relation with urban space has also been researched by Matsuoka and Kaplan (2008) and further detailed out in the writings of N.A. Malek where he recognizes seven principle ways an individual bases his evaluation of its surroundings. These principles are the contact with human nature, the aesthetic preference or attractiveness of the environment, the places for recreational play, the privacy, possibility for citizen participation, and the sense of community and identity. (Malek et al., 2012) These findings overlap with Van Dorst's principles of environmental hygiene, the physical environmental aspects and the social aspects. The actual aspects within the categories can vary and are intertwined a lot but one of the more explicit examples can be safety. "The results of our study suggest that improving the quality of neighborhood environmental characteristics will increase residents' concerns with appearance of the neighborhood along with their concerns about the quality of people who live there, which in turn enhances higher perceived levels of neighborhood safety. Thus, this process is assumed to lead to a reduction in fear of crime" as quoted from Baba and Austin (1989). In which they say that improving the emotional wellbeing will eventually lead to a better statistical wellbeing. However this spiral can go two ways, it can go up/get positive like described above but it can also go down/worsen. The two dimensions of urbanity, the economical-social and the physical-morphological, are interconnected what can strengthen or weaken each other (De Jonge, 1986) This is on par with findings from Austin et al. (2002) "Deteriorated

neighborhood conditions increased concerns of safety, but they also decreased levels of satisfaction with the neighborhood physical environment, which raised concerns about safety issues. This follows logically from past research that had shown that both objective and subjective assessments of neighborhoods conditions were important (Marans and Rodgers, 1974). So overall livability is a comprehensive web of the more tangible physical environments and qualities and the less tangible emotional and social values/aspects. "The thoughts, feelings, and beliefs about the local community places, in what psychologists call "intra-psychic" phenomena show the impact of our behaviors towards such places, thus influencing whether and how we might participate in local planning efforts" (Manzo and Perkins, 2006).

Supposed livability

So to fully grasp the livability and work with livability the "supposed livability" as described in one of the seven ways to see livability by Van Dorst will we used in this project. In this view of livability there is attention to how much an environment satisfies the supposed demands for the actual livability (Veenhoven, 2000). The actual livability itself is hard to analyze but with a certain degree of interaction and even participation of the society/individuals themselves the supposed demands of this livability get more clarity. This participation is important as also explained in the works of Ismail and Said (2015) "In order to improve the social life within an urban area, without input from public, relying only on designers and urban planners as well as landscape architects are not enough to build a good public space"

For references see VI References

I.III Theoretical framework

I.III.II Notion of “New Towns”

The initial conceptual ideas of the so called “New Towns” are derived from the ideology of The Garden Cities of whom Ebenezer Howard is the conceptual father (Hall and Ward, 1998). The main advocate of the “New Towns” movement itself is Fredrich J Osborn. But to fully understand the New Towns concept a short summary of its predecessor, the garden city, is elaborated. The garden cities concept consist of well-balanced small towns (30.000-50.000 inhabitants) in suburbs around the large industrial cities (Howard and Osborn, 1965). It was a plan he defines as being “Designed for healthy living and industry, of a size that makes possible a full measure of social life but not larger, surrounded by a rural belt, and the whole of the land being in public ownership or held in trust for the community” (Osborn and Whittick, 1977) So with his concept of “concentrated decentralization” there was a balance between the highly compact and highly dispersed way of urban planning.

The New Towns movement, heavily influenced by the garden cities, could be seen as the next step in this modern approach of urbanizing the environment. The idea behind the New Towns was that they should be self-contained and they should develop the “Full measure of social life” (Zhou, 2012)

New Towns in The Netherlands

Most of the successful new town developments in The Netherlands were after the World War, when the population was growing and the cities needed to be rebuilt. This was also partly pressured by the government with its “groeikernenbeleid” core-of-growth policy from the second spatial act (Klerk, 2003). A part from policies the Dutch culture of preferring low-rise over high-rise also influenced the way we implemented the concept of New Towns. Lastly and most importantly even was the influence of modernism in new town planning (De Jonge, 1986). So a combination of the principles of modernism, the preference for mostly low-rise buildings and the governmentally stimulated city development led to the new towns that are visible today. There are 20 of these New Towns, derived from the core-of-growth policy in The Netherlands (VROM, 1983) of which the few that are located in Flevoland could be seen as the most absolute and un-restricted way of planning new towns. It was almost like designing on a ‘Tabula rasa’ meaning: a clean slate, an unwritten page

(Aristotle). This is due to the fact that the land has been reclaimed from the body of water called the IJsselmeer and therefore has no significant historical background or (sub)surface layers which form as restraints in planning. So with this clean slate the optimal form of a modernistic new town could be planned. Lelystad, which has been initially designed by Cornelis Van Eesteren is the perfect example of the ideologies and paradigms of the post-war times.

For references see VI References

I.III Theoretical framework

I.III.III Notion of “Modernism” in urbanism

Modernism in urbanism initially got public attention from the CIAM (congrès Internationax d'Architecture Moderne) movement. This movement which was influenced by the avant-garde style and created groundbreaking innovations in association with De Stijl, Bauhaus and a number of similar groups (Wagenaar, 2011). Initially started in 1928, after the first world war, the aim of CIAM was to formulate a contemporary program of architecture, advocate the idea of modern architecture, introduce this idea into technical, economical and social circles and see resolution to architectural problems as written to the town planner Cornelis van Eesteren (Mumford, 2002). From 1930 till 1947 Van Eesteren was the chairman of this CIAM congress and in the fourth congress the theme was “The functional city” with the aim of a better living environment, more efficiency in traffic flows and more attention on industry. After the second world war, under the influences of the Dutch culture and policies, this CIAM ideology was implemented in a post-war modernistic way of which the AUP for Amsterdam (Algemeen Uitbreidingsplan van Amsterdam) can be seen as an example which contain the main features of the ideology (Hellinga and Ruijter, 1985). The ideologies that were strived at in modernistic urban planning were based on the concepts of air, light and space (lucht, licht en ruimte), of the autonomy of neighborhoods, of the separation of functions, efficient fast and cheap building (moderne bouwen) and finally the demographic data was of strong influence (Rijksdienst voor het Cultureel Erfgoed, 2016) .

The physical appearance of modernism is strongly recognizable in Lelystad. This is mostly because the masterplan of Lelystad was initially planned by Van Eesteren. The actual planning and development was done by IJDA, the urban planning department of the IJsselmeerpolders. But IJDA's final plans, although adjusted by a board of advice and IJDA themselves, were still strongly inspired by the modernistic ideologies that Van Eesteren implemented on his initial design. (Van Der Wal, 1997)

For references see VI References

I.III Theoretical framework

I.III.IV Notion of life phases

For the notion of life phases in urbanism the following quote shows the importance of the people related to their surroundings.

“Those who feel their relationships to their community places are threatened by redevelopment may consequently resist a proposal regardless of its potential value. To adequately understand and respond to such reactions, it is critical to uncover and address these covert place attachments. Conversely, if such feelings and experiences are not well addressed, disruptions could divide a community” - By Ismail and Said (2015).

So by saying this the inhabitants of an environment can make or break the community in this environment. This community is the sum of all people in that specific geographical environment. This sum of people will consist of people with different cultures, points of view, ethnicities, position in life and phase in their life. Most of these variables can be different for each specific context. The most consistent factor appears to be the phase of life. So a division within certain age categorizations of ages would make this research applicable for not only one specific context but also other contexts. These different groups will also use their environment different. At a time of high geographical mobility, the subjective evaluation of features of the physical and social environment, such as the presence of open space (parks and playgrounds), the lack of air pollution and noise, and the kind of people who reside in the immediate area, are characteristics that bind people to place. (Mesch and Manor, 1998) So for the people that are able to move around, the people that have a high mobility, the territorial bonds are of lesser importance. (De Jonge, 1986) The people that have a higher change of good mobility are the people most likely within the 18-65. As individuals grow older, their geographical mobility decreases and they become more interested in the neighborhood. (Schwirian and Schwirian, 1993) Young children are limited in their early stages of socialization to the immediate geographical environment. (De Jong, 2010, Mesch and Manor, 1998). But still children have importance in this communal feeling. Because “When the local neighborhood fails to meet at individual’s needs, the individual will withdraw, if not physically, then socially and emotionally. (Hunter, 1978, Kasarda and Janowitz, 1974). Of which the younger will most likely withdraw more socially

and emotionally. But taking into consideration the community also benefits this not only in the social environment but also in the physical environment. Mesch and Manor (1998) write that the cognitive and emotional links that individuals have show to affect the involvement for keeping up the neighborhood, the individuals willingness to organize in collective and even exercise social control.

For references see VI References

I.IV

Relevance

With the actuality of the problem in Lelystad itself the graduation project proposes a suggestion of a better future for the city of Lelystad. Also it offers an approach, learnings and conclusions which could be applied on different modernistic oriented New Towns.

Social and ethical relevance

Due to my personal motivation there is an overlap in the social and ethical relevance. This relevance could be described on different scale level: local and regional. The local relevance is more oriented to the municipality of Lelystad and all direct or indirect stakeholders involved. These direct and indirect stakeholders include local residents, users and the caretaking people involved. Of which, based on my motivation, it tries giving the people that are less represented a voice as well and therefore trying to balance out everyone's interests and not only the interests of the most powerful organization and stakeholders.

The problematics of Lelystad are not a problematics that are unique to The Netherlands. Therefore the approach that this project is proposing on this specific location could be re-done in other locations as well as long as they fit in the previously described aspects of the theoretical framework (like 'new town' / 'modernism' / 'livability' / 'life phases'). This gives the project relevance on the regional scale of which not only one city benefits but the whole society could benefit.

Scientific relevance

The scientific relevance is where the project also expands the body of knowledge. This is with the catalogue aspects of livability and the effects of their spatial implementation in the context of these 'New Towns'. This catalogue will try to be the 'bridge' between the research (e.g. literature) and the design (e.g. the spatial elements) and make these steps explicit and re-traceable. The actual expansion on the body of knowledge lies mostly in the differentiation between life phase, their problems and desires with the physical environment.



Problem exploration

II.I Lelystad from a historical perspective

II.I.I The process towards a capital city

Lelystad, the making of a poldercity

The regional strategy of Flevoland

The idea of the cities in Flevoland was that all the central amenities and functions that not part of the autonomy of a township should be in either Lelystad or Almere. This to support the Flevopolder and the direct surroundings. The idea of the townships in Flevoland was according to the 'Functional city' (Dutch= de functionele stad). This was part of the modernistic movement that was ongoing during this time.

Van Eesteren proposed a location to be alongside the open water. But since Van Eesteren was only a consultant in the case of the townships, Van Der Ban and the rest of the ZPD opted for two additional locations.

Initially there were two parties that were in charge of realizing the Southern Flevopolder. The Directorate, under leadership of Aldo Van Eck. Who had a more functional and rational approach. and the ZPD, Zuiderzee Planning Dienst, under leadership of Van Der Ban. The domains of both parties were quite clear. The Directorate was appointed to the regional (agricultural) land and overall strategy and the ZPD was in charge of realizing the townships proposed by the reclamation strategy and the Directorate. The ZPD however had no planners involved in its organization, so to bridge this gap in designing experience they created an advisory board. This advisory board consisted of Van Eesteren, Verhagen, Scheffer and Hokstee. Of which Van Eesteren opted for not only the functional city but also beautification in planning. Each individual town got a city architect appointed and the ZPD would oversee the progress.

Lelystad came after the three townships of Dronten, Biddinghuizen and Swifterbant.

The township of Lelystad

Van Der Ban and also Van Eesteren envisioned Lelystad not as a sleepy provincial town, but as an important city with a population of up to 100.000 inhabitants as the crown of all accomplishments of the Southern-sea Project. Van Eesteren suggested a park area between the city and the IJsselmeer, on which the park is in the middle of the water and central business district. The back of this central business district would be facing the park and IJsselmeer. Van Der Ban sketched out something different, the city would be fronting on a widened portion of the IJsselmeer. Both parties were still under the impression that the Markerwaard would be poldered. But the reaction on Van Der Ban's ideas were that the plans of the ZPD lost touch of the agricultural world, they say this agricultural world not realistically but romanticized about its green environment that should be treasured as recreational space. This critique came from the Directorate, although mainly advocated by its chairman Van Eck. Van Eck proposed something different on which the ZPD reacted that it was too technical, too rational and it missed the beautification.

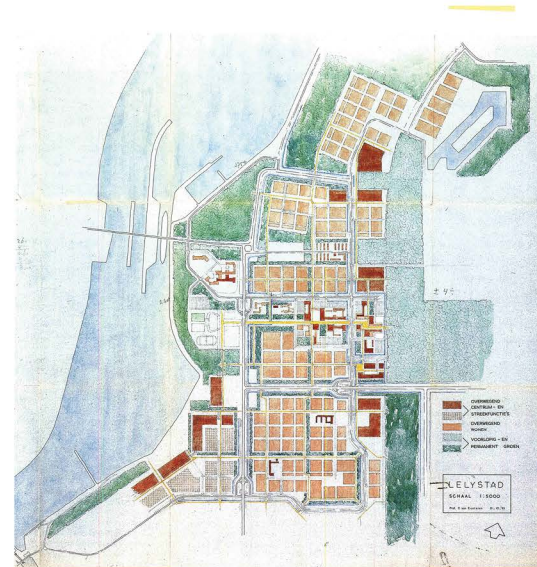


Fig. II.I.I.a: C. Van Eesteren. Design of Lelystad centrum. (Van Der Wal, 1997)

II.I.I The process towards a capital city

The necessity of a Solomon's Judgement

Overall this back-and-forth critique on plans cost a lot of time and did not end in actual results. The Dutch government had to step in and give it's Solomon's Judgement. On 1959 they commissioned Van Eesteren as planner of Lelystad. Making him withdraw from any other boards or organizations regarding Lelystad in case of a possible conflict of interest. However during this whole process policies and strategies were still not finished nor concrete in any way, they were open for interpretation which did not speed the process whatsoever. Van Eesteren still envisioned a town for 100.000 inhabitants while some documentations also mentioned that the possible reach of Lelystad would be 50.000. Van Eesteren kept optimisticly believing Lelystad. This optimisticness what initially shared by most, excluding Van Eck, but as time passed more and more people became pessimistic regarding 100.000 inhabitants. This optimisticness shaped Lelystad because the ideas that Van Eesteren had lived on throughout all the processes. So the plans of Van Eesteren were laid out in the functional (CIAM) way. This meant a separation of the central functions, industry, residential areas and green areas. There was no mixture of these functions at all. This is still clearly visible by the dominating hierarchy of the main infrastructure and separation of the cyclist network.

As time went on and Van Eesteren lost supporters the Directorate also became less and less confident. Van Eesteren proposed to start the formation city by building a neighborhood in the South Western area of where Lelystad was supposed to be emerged. The Directorate was against that, they wanted to start from the center because in their, and public, opinion no one wanted to live in an 'under construction' town. In 1962 they strongly advised Van Eesteren to change things in his plan. Elements like the state highway, the elevated train tracks. But Van Eesteren kept strong 'A center for a city of 25.000 is not usable for inhabited by 100.000 and cannot be reconstructed for that propose.'

The IJsselmeerpolders Development Authority

In 1963 the Directorate changed its name to IJsselmeerpolders Development Authority (IJDA) with a new chairman and a 'refreshed' state of mind. They ordered Van Eesteren to change plans for this first neighborhood to 17.000 dwellings and part of the center. Van Eesteren used his original sketches so it hardly changed anything, The IJDA rejected this again and Van Eesterens plans were not executed again. After which IJDA started taking over planning. But IJDA also had no planners in their organization so they formed an advisory board as well with De Bruijn, Kuiper, Van Embden and Hofstee. This advisory board proposed a few schematic drawings on which they passed the planning procedured. Around 1971 the IJDA gave his own twist to what their advisory advised them and consequence of that is that the board did not felt taken seriously. The board dissolved and IJDA began developing Lelystad. So although the process towards the city was chaotic, a new city was emerging. A city which underwent the hands of different designers but mainly based on the ideologies of Van Eesteren.

Inspired by Van Der WAL, C. 1997. In praise of common sense: planning the ordinary: a physical planning history of the new towns in the IJsselmeerpolders, 010 Publishers Rotterdam.

For references see VI References

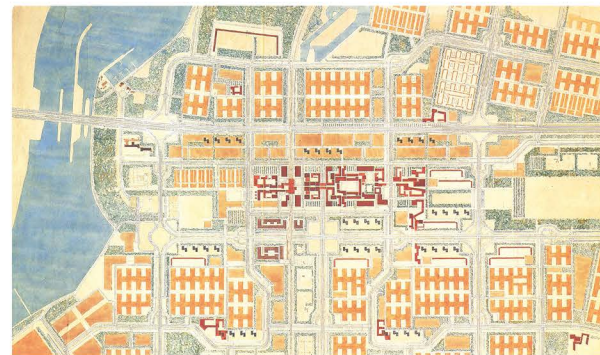


Fig. II.I.Ib: C. Van Eesteren. Design of Lelystad centrum. (Van Der Wal, 1997)

II.1.II

Lelystad's history analysed

The concept of Lelystad

Van Eesteren envisioned a Lelystad of 100.000 inhabitants with a North-South orientation for a railway network and a East-West orientation for the state highway which would lead to the Markerpolder.

Both these orientations would meet in the Central Business District (CBD) where the main center of town was.

If Lelystad would need to extend beyond the plans that Van Eesteren envisioned he suggested to bridge the extension over the canal and place this in the Markerpolder. This would create an even better connection with the water.

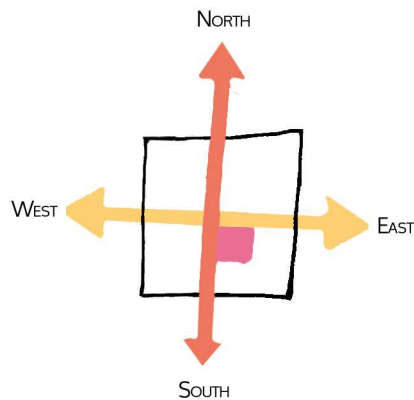


Fig. II.1.IIa: Concept scheme of Lelystad

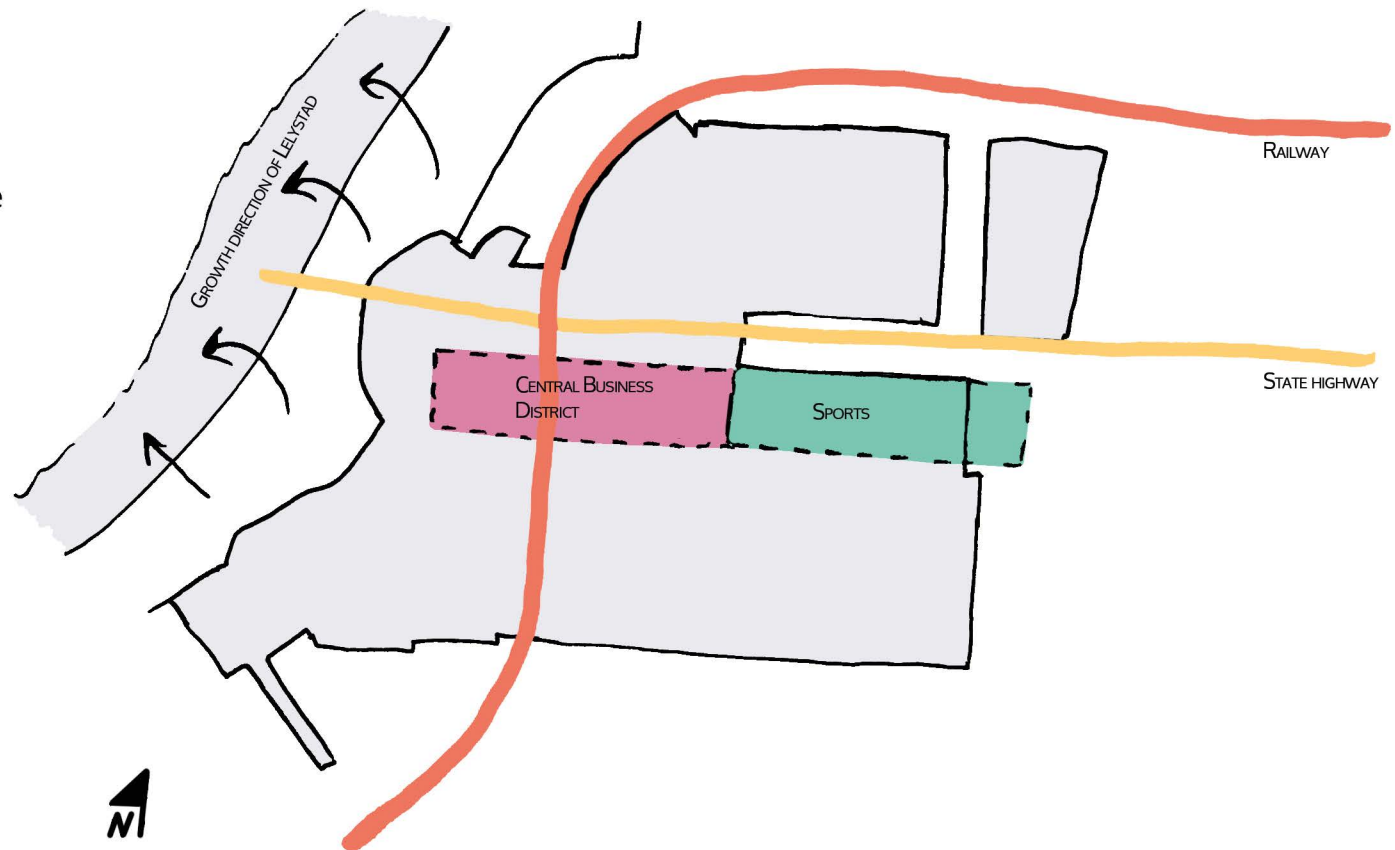


Fig. II.1.IIb: Concept of Lelystad

II.1.11

Lelystad's history analysed

Development phasing ideas of Van Eesteren and IJDA

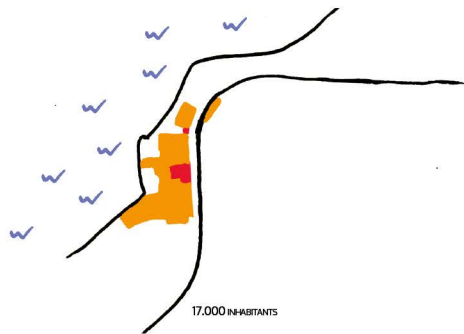


Fig. II.1.11c: Van Eesteren's Lelystad phase 1 (17.000 inhabitants)

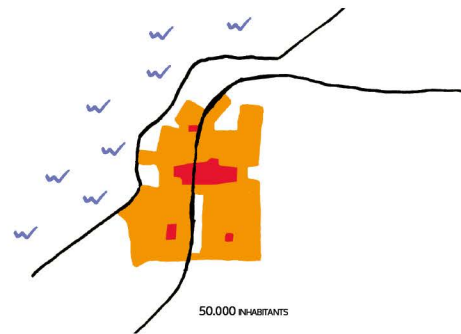


Fig. II.1.11d: Van Eesteren's Lelystad phase 2 (50.000 inhabitants)

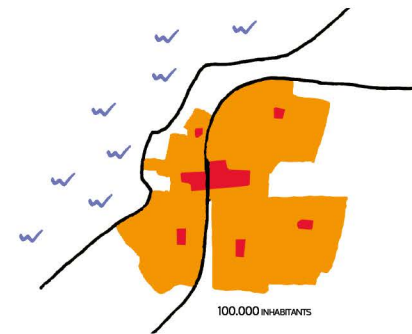


Fig. II.1.11e: Van Eesteren's Lelystad phase 3 (100.000 inhabitants)

Van Eesteren's phasing plan

Van Eesteren's idea about the growth towards a city of 100.000 inhabitants.

Van Eesteren was strongly convinced that reaching the amount of inhabitants was just a matter of time. So in his phasing he wanted to speed through these phases fast.

Critique on this from IJDA was that no one wanted to live in an unfinished neighborhood (mostly in phase 1)

IJDA's phasing plan

IJDA was convinced they should start on the Eastern side of the railway, away from the canal. With a neighborhood North and South which could rely on a shopping zone in the middle.

In IJDA's phasing plans, when Lelystad was halfway finished, they would jump Westwards of the railway tracks.

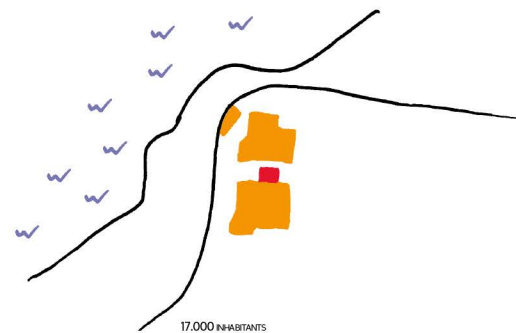


Fig. II.1.11f: IJDA's Lelystad phase 1 (17.000 inhabitants)

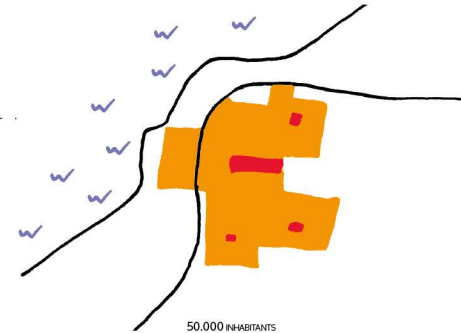


Fig. II.1.11g: IJDA's Lelystad phase 2 (50.000 inhabitants)

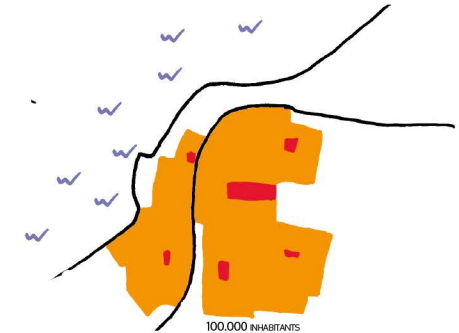


Fig. II.1.11h: IJDA's Lelystad phase 3 (100.000 inhabitants)

II.I.II

Lelystad's history analysed

Execution schemes of IJDA's advisory board

IJDA's scheme of Lelystad

The scheme that the advisory board of IJDA proposed differed on a few points with the plans of Van Eesteren. This city was more dense and had more opportunities to grow if that was needed.

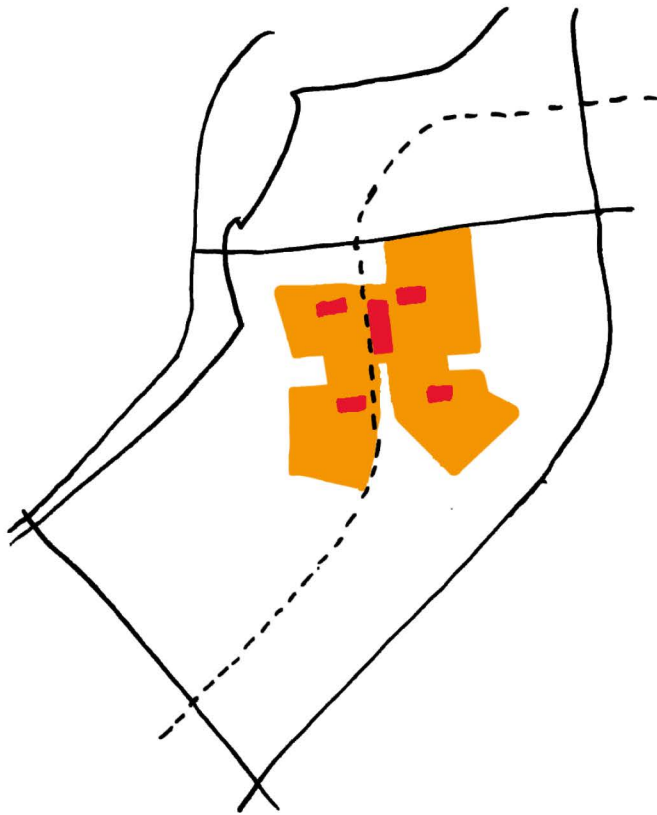


Fig. II.I.IIi: IJDA's scheme

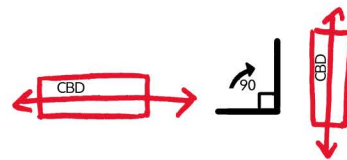


Fig. II.I.IIj: CBD Orientation

Main Center in Central Business District orientation

The Central Business District was oriented North-Western in stead of East-Southern. Also they made the district itself thinner and therefore more compact.



Fig. II.I.IIk: Extensions

Extensions

The center was the heart of this urban development with extensions going outwards in the shape of a butterfly.



Fig. II.I.IIl: Relation with water

No direct connection with the water

One of the mayor changes in this plan was that the urban development was not alongside the water.

II.I.II

Lelystad's history analysed

Similarities between Van Eesteren's original Lelystad and IJDA's Lelystad

Similarities of the two schemes

The similarities of Van Eesteren and IJDA (and its advisory board) are the following:

- Both have a North-Western railway through the center of the city
- Part of the Central Business District's orientation (Read Central Business District)
- In the end all districts should be able to work autonomically (In which Van Eesteren's scheme the neighborhoods autonomically comes in the end)

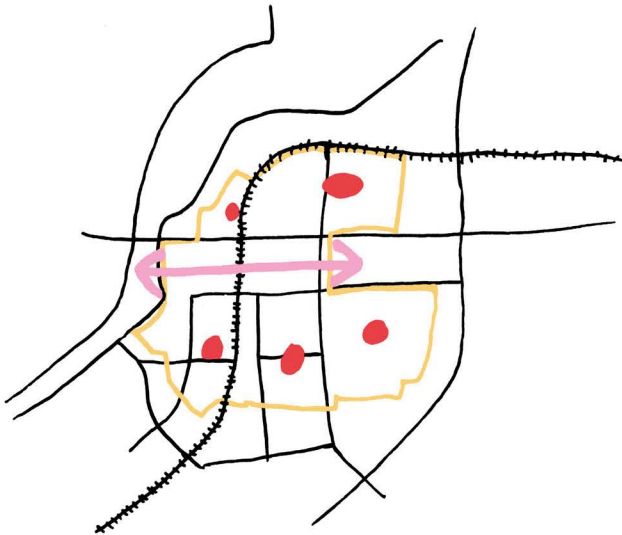


Fig. II.I.IIm: Van Eesteren and IJDA similarities

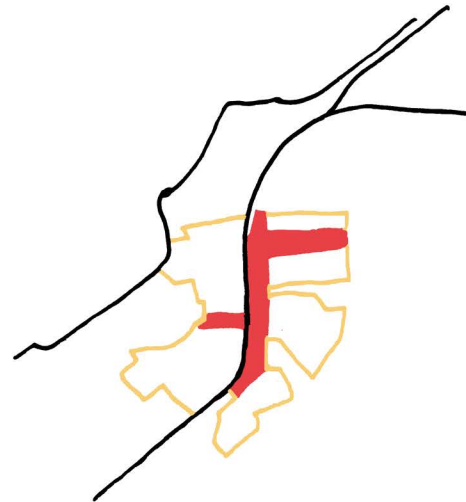


Fig. II.I.IIo: IJDA's Central Business District

Onorthodox Central Business District shape

The main orientation of the Central Business District should be North-Southern.

The first district to be developed should be a district that is livable on itself so this included a shoppingzone. Therefore in this CBD they added a East-Western axis. This axis is right in the middle of District 1.

- The main center of the CBD would be in the N-S axis. (currently the main shopping center)
- A bigger sub-center should be in the E-W axis. (currently the center called "Lelycenter")

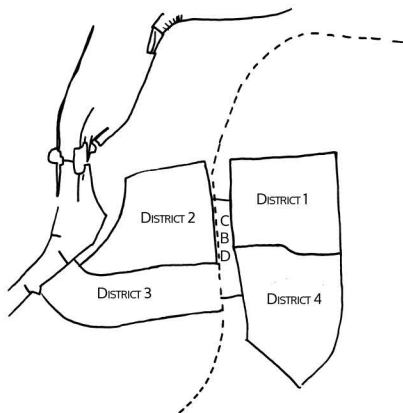


Fig. II.I.IIn: Initial scheme of districts

II.I.II

Lelystad's history analysed

The growth of Lelystad

The emerging of Lelystad started in District 1 in 1965, after which district 2 got the attention. The next area to be developed after district 2 was the central business district in 1980-1985 accompanied with a start of district 4. From 1990 and later the rest of the city got its shape.

Overall, in developments, Lelystad was quite in line with the scheme IJDA had within 30 years already.

But within 15 years they were already working towards the waterside unlike this scheme suggested.

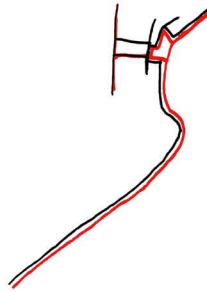


Fig. II.I.IIp: Lelystad in 1960

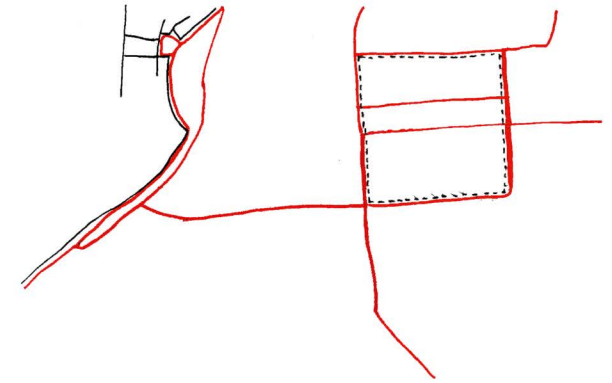


Fig. II.I.IIq: Lelystad in 1965

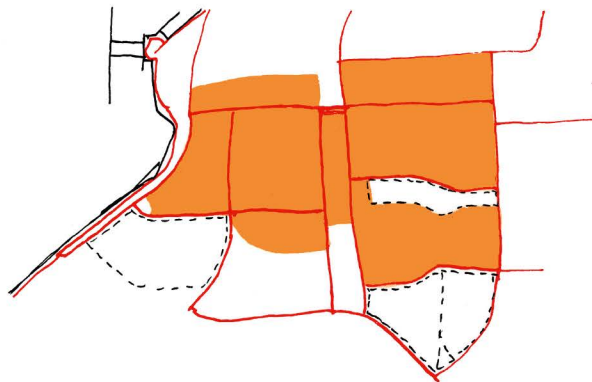


Fig. II.I.IIu: Lelystad in 1985

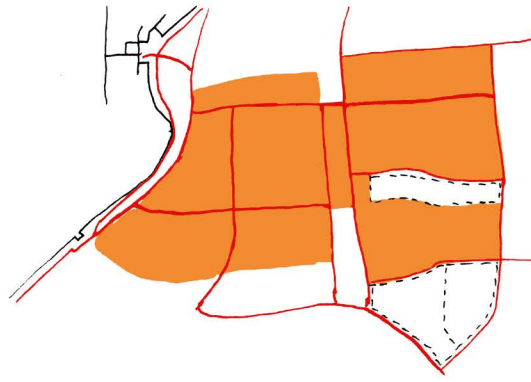


Fig. II.I.IIv: Lelystad in 1990

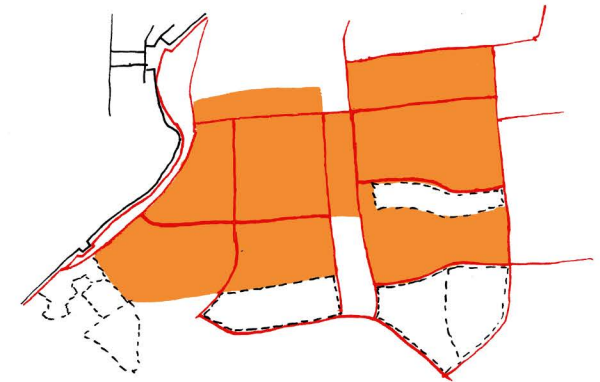


Fig. II.I.IIw: Lelystad in 1995

II.I.II

Lelystad's history analysed

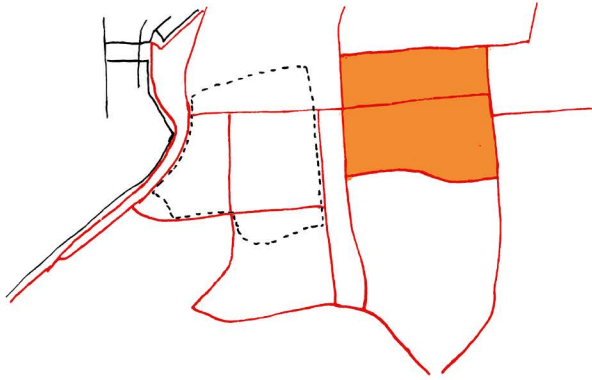


Fig. II.I.II.r : Lelystad in 1970

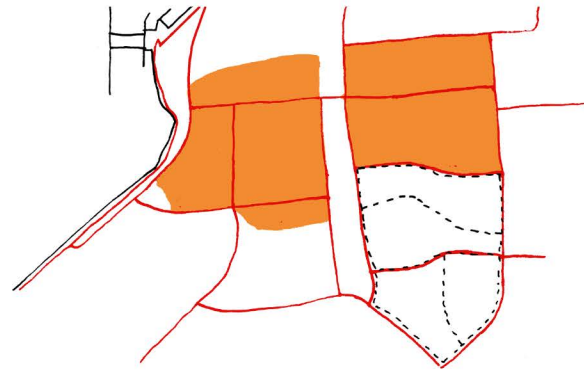


Fig. II.I.II.s: Lelystad in 1975

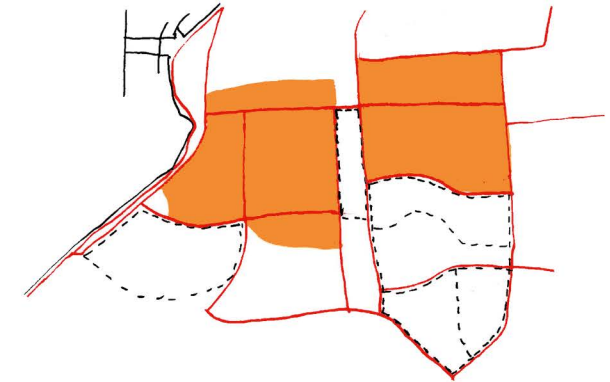


Fig. II.I.II.t: Lelystad in 1980

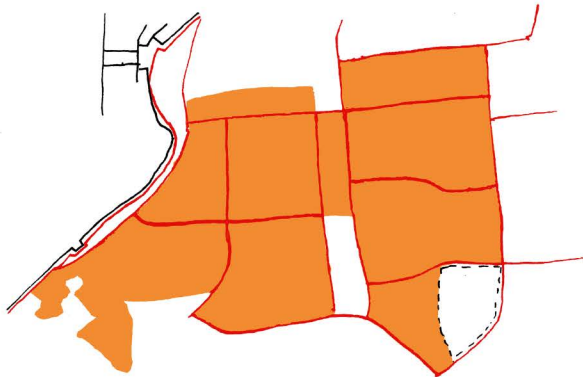


Fig. II.I.II.x: Lelystad in 2000

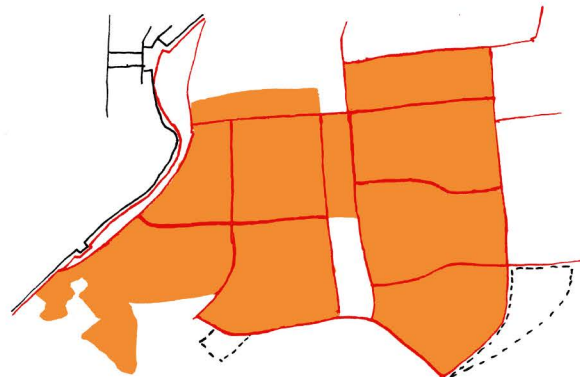


Fig. II.I.II.y: Lelystad in 2005

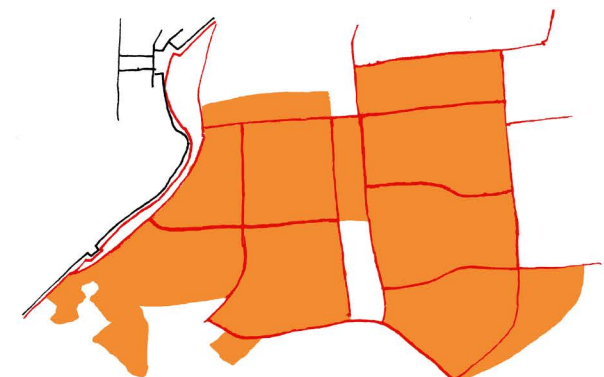


Fig. X: Lelystad in 2010

II.II.I Municipal enforced policies

II.II.I Municipal enforced policies

Future development areas

The information about future development areas for 2015 till 2025 is provided in the 'Welstandsnota 2015' of the municipality of Lelystad.

In this document groundrules for development of any type are addressed. Furthermore possible positive and negative expected results are also mentioned.

Normally the government works with "Beeldkwaliteitsplannen" in these plans the physical conditions and architectural, cultural and urban values are described.

The areas shown in this map do not require these plans but work more freely with "Beeldregieplan" in which images and photos are used to try and inspire developers and/or designers.

Ontwikkelingsgebieden (2015-2025)

- opstellen beeldregieplan, conform raadsbesluit 15 oktober 2013
- opstellen beeldregieplan
- omzetten beeldkwaliteitsplan in beeldregieplan conform raadsbesluit 15 oktober 2013
- gemeentegrens

Gebieden

- (1) Flevokust fase 2
- (2) Bio Science Park
- (3) Campus-Noord
- (4) Houtribhoogte
- (5) Noordzoom-Midden en Noordzoom-Oost
- (6) Kop de Veste
- (7) Lelycentre en omgeving
- (8) IJsbaan
- (9) Meerdijkhaven
- (10) Warande Waterkop
- (11) Schoener-West
- (12) Campus-Midden
- (13) Campus-Zuid
- (14) Warande Deelgebied 10
- (15) Flevopoort Cluster 3
- (16) Larserplein
- (17) Buitenhof



Fig. II.II.Ia: areas of development in 2015-2025 by Municipality of Lelystad (2015)

II.II.I

Municipal enforced policies

Areas with architectural, cultural or urban value

The municipality of Lelystad issued a policy to preserve the architectural, cultural, urban and general values and qualities that the city has.

This policy document enforces regulations but also shows possibilities on which the city could be strengthened even more.

The current policy enforced by the municipality dates from 2015.

Areas under the category "vrijwillige welstand / welstandsvrij" are less strict in their restrictions enforced by the municipality

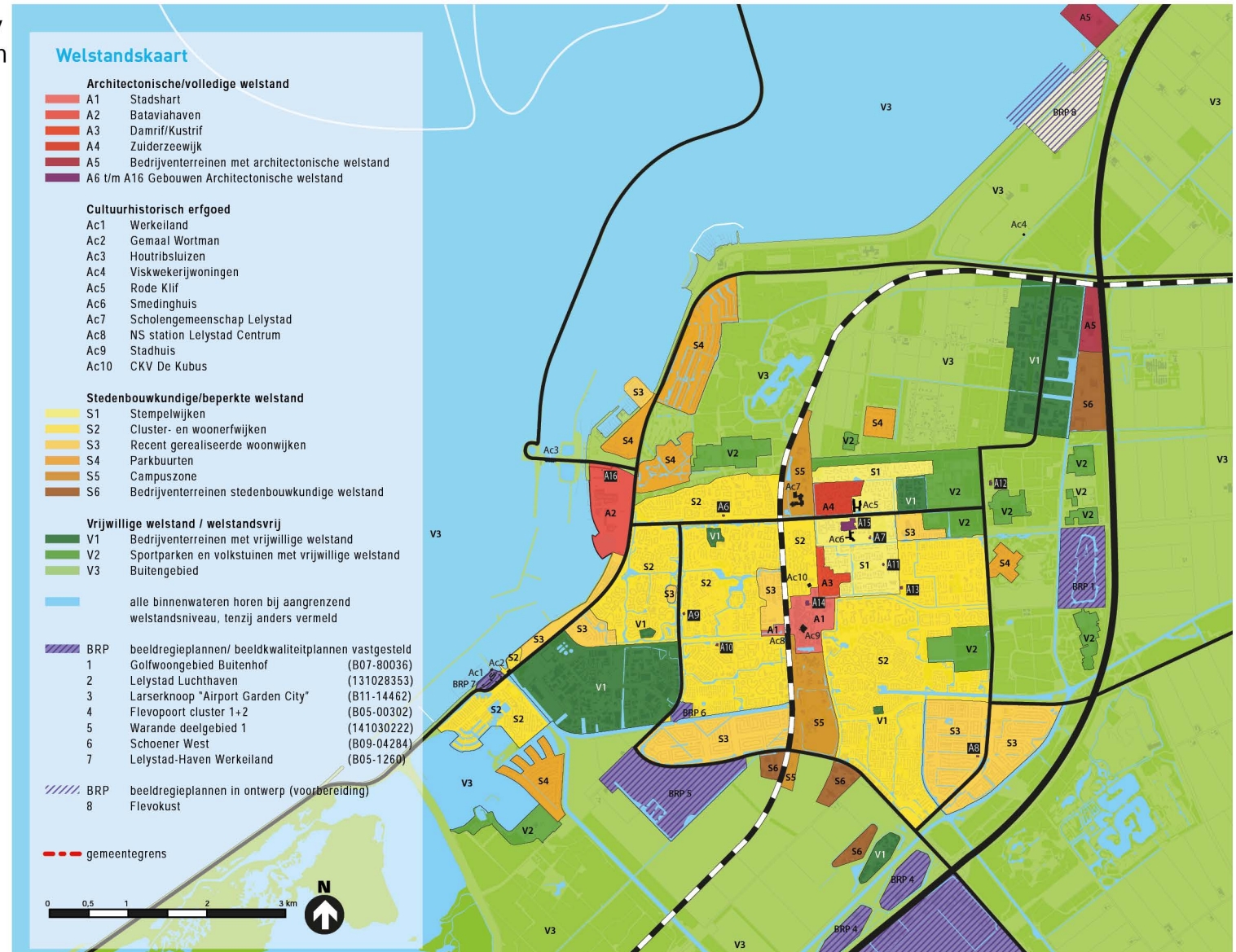


Fig. II.II.Ib: overall areas of significant value by Municipality of Lelystad (2015)

II.II.I Municipal enforced policies

Areas with architectural value

3.2 Gebieden met Architectonische welstand

Binnen Lelystad zijn een aantal gebieden aangewezen waar architectonische welstand geldt. In deze gebieden gaat het over de stedenbouwkundige samenhang in combinatie met de architectuur van het gebouw in zijn omgeving. Op dit niveau zijn criteria opgesteld voor de directe omgeving, zoals voorkanten, zijkanten en achterkanten van bebouwing in relatie tot de positie op de kavel. Het beleid wordt tot in de details vastgelegd. Het gaat hier om zeer beeldbepalende gebouwen en groepen van gebouwen, welke ruimtelijk en architectonisch een eenheid vormen. Binnen dit welstandsniveau zijn de volgende gebieden te onderscheiden:

- Stadshart (A1)
- Bataviagebied (A2)
- Damrif/Kustrif (A3)
- Zuiderzeewijk (A4)
- Bedrijventerreinen met architectonische welstand (A5)

Daarnaast zijn er nog een aantal gebouwen/complexen ingedeeld onder de architectonische welstand. Deze gebouwen hebben vaak een culturele, religieuze, en/of maatschappelijke functie en zijn belangrijke herkenningspunten in de stad.

- Het Anker (A6)
- Bethelkerk (A7)
- De lichtbron (A8)
- Het lichtschip (A9)
- De Petruskerk (A10)
- De krakeling (A11)
- Ölandhorst (A12)
- De ontmoetingskerk (A13)
- Theater Agora (A14)
- Lelycentre (A15)
- Straalverbindingstoren (A16)

Beoordelingsaspecten

Per gebied of gebouw zijn telkens stedenbouwkundige- en architectonische kenmerken weergegeven die als basis meegenomen kunnen worden bij de planbeoordeling.

Bijgaand volgen de toetsingscriteria voor alle gebieden en gebouwen binnen de architectonische welstand. Deze criteria zijn tevens van toepassing op het cultuurhistorisch erfgoed (paragraaf 3.3).

De algemene welstandscriteria vormen tevens onderdeel van de toetsingscriteria.

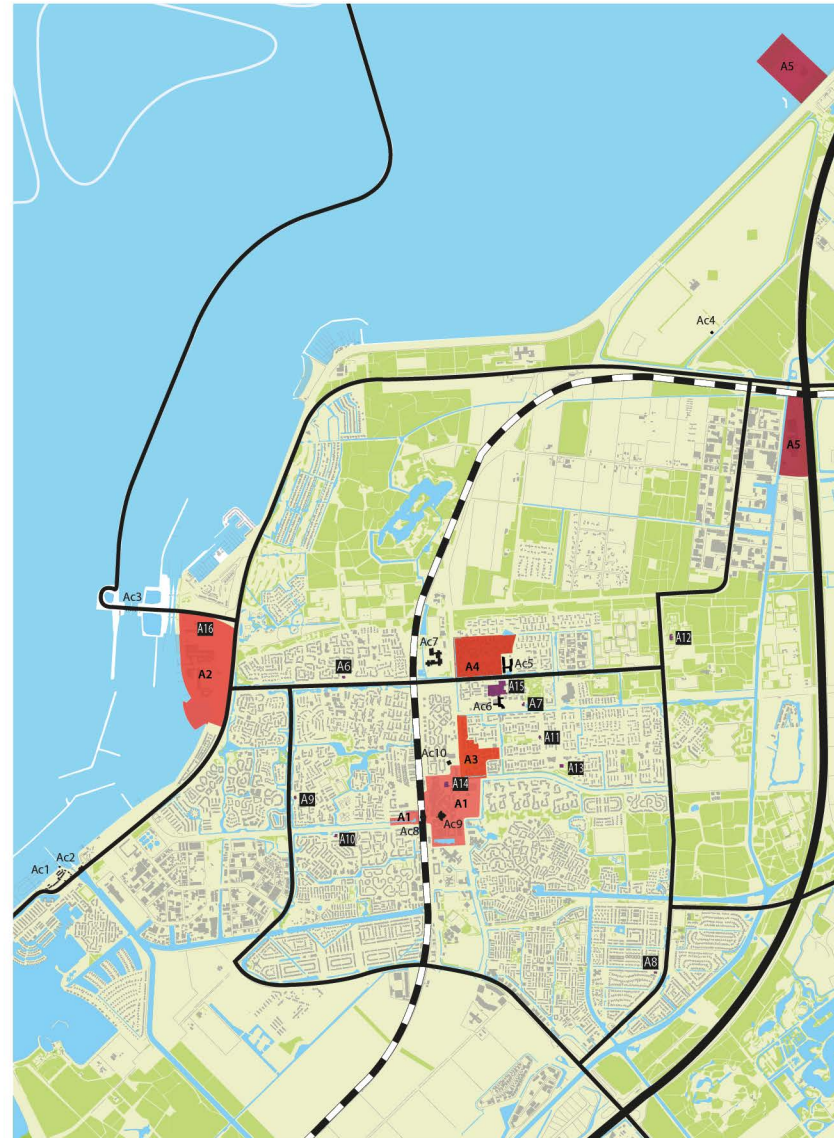


Fig. II.II.Ic: Areas of architectural value by Municipality of Lelystad (2015)

II.II.I Municipal enforced policies

Areas with urban value

3.4 Gebieden met Stedenbouwkundige welstand

Het grootste deel van het bebouwd gebied in Lelystad valt onder de stedenbouwkundige welstand.

Bij de stedenbouwkundige welstand zijn de criteria erop gericht om de hoofdvorm van een gebouw of blok (straat) intact te laten. Ingrepen in een blok of een samenhang van blokken worden beoordeeld in verhouding tot de aanpalende blokken en de stedenbouwkundige impact van de verandering in haar omgeving. Het beleid is alleen op hoofdzaken vastgelegd.

Binnen dit welstandsniveau zijn een zestal gebieden te onderscheiden.

- Stempelwijken (S1)
- Cluster- en woonerf wijken (S2)
- Recent gerealiseerde woonwijken (S3)
- Parkbuurten (S4)
- Campuszone (S5)
- Bedrijventerreinen met stedenbouwkundige welstand (S6)

Beoordelingsaspecten

Per gebieden zijn de kenmerken beschreven, gevolgd door een waardering en beleidskeuzen. Vervolgens zijn per gebied de relevante criteria geselecteerd en toegesneden op de gemaakte beleidskeuzen. Daar waar de criteria voor stedenbouwkundige welstand geen uitsluitel kunnen geven, zijn de algemene welstandscriteria van toepassing. Voor het beoordelen van bouwwerken zijn een aantal gangbare beoordelingsaspecten beschikbaar. Bijgaand zijn deze aspecten nader toegelicht.

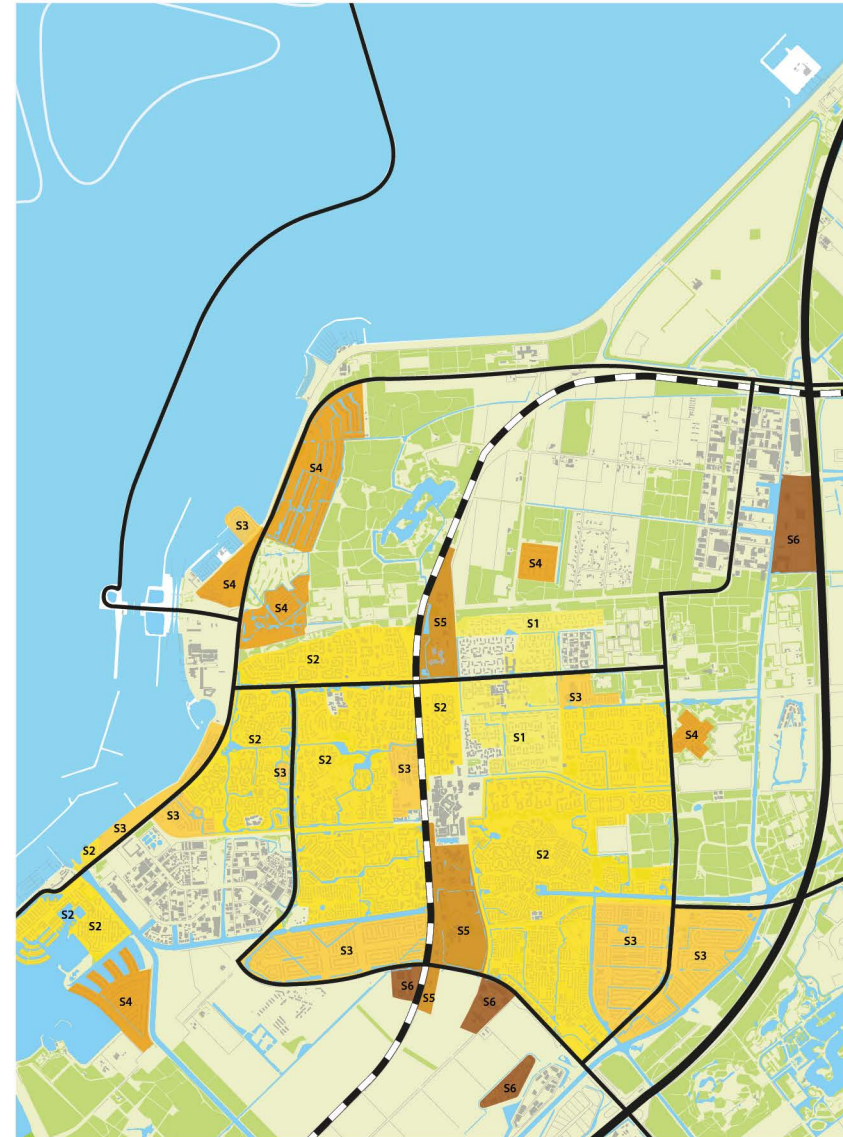


Fig. II.II.Id: Areas of urban value by Municipality of Lelystad (2015)

II.II.II

Lelystad examined

II.II.II Lelystad examined

Districts in Lelystad

Lelystad consists of 10 districts on the bigger scale. Each of these districts consist of multiple neighborhoods themselves.

Initially planned as 4 districts, these districts were too big and sub-divided in more districts.

The total ammount of neighborhoods in Lelystad is around 40.

A neighborhood is a place with the scale where inhabitants still feel part of the community.

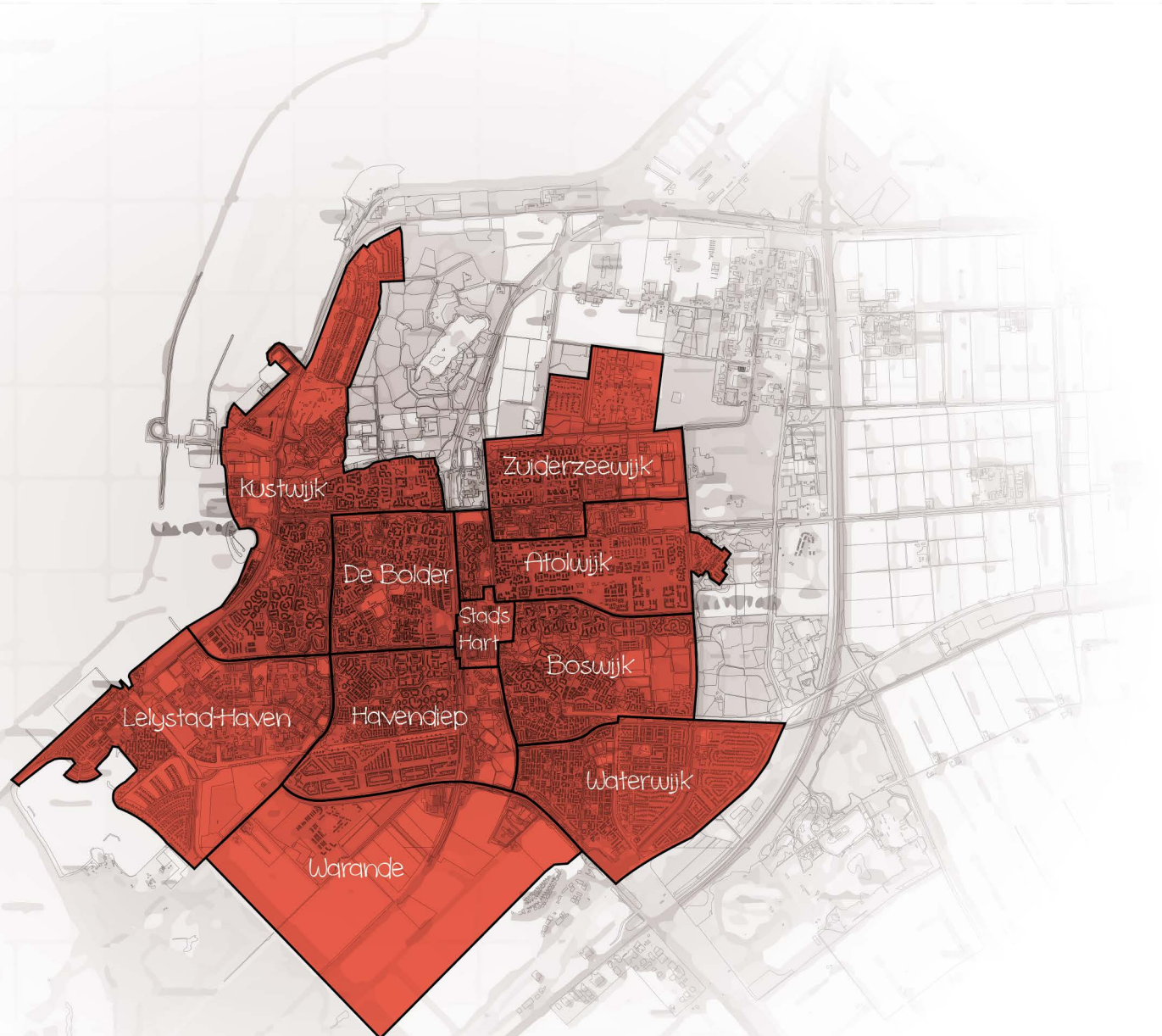


Fig. II.II.IIa: Districts in Lelystad

II.II.II

Lelystad examined

Waterbodies and canals/ditches

Nearly every district is surrounded by a canal/ditch. This watersystem is not only limited to the edges of the districts but also goes in most neighborhoods.

On one hand this separates the districts a lot but its also a strong quality. Accompanied by the vast ammount of greenery, this water brings a good balance to the urbanized and natural environment.

This was one of the pillars of the initial design, based on the 'lucht, licht en ruimte' concept (air, light and space) in combination with creating a healthy living environment.



Fig. II.II.IIb: Waterbodies and canals in Lelystad

II.II.II

Lelystad examined

Main infrastructure network

The network of rough-grain roads follows the edges of every district. There is not a single road that divides a district into two. (with the exception of the "Kustwijk" but its debatable if the road divides the district since neighborhoods themselves are distant from each other already)



Fig. II.II.IIc: Main infrastructure in Lelystad

II.II.II

Lelystad examined

Main infrastructure concept

The initial design was based on the idea of the Markerpolder, and therefore had a state highway right through the city. This state highway, called A6, runs alongside the Eastern edge of the city.

Provincial roads on the North, East and South-East side provide additional connectivity. Mainly for Dronten, Biddinghuizen and Swifterbant.

Within the city there is still a faster-roads network where cars can go till 70km/h. This road network provides a fast in- and out for inhabitants from their neighborhood/district to other places within or outside the city.



Fig. II.II.IId: Concept of infrastructure of Lelystad

II.II.II

Lelystad examined

Main centers and district shopping centers

Nearly every district has its own sub-center. These sub-centers are fairly small in size and only facilitate the basic needs. For the more extensive shopping facilities 3 areas could be appointed. Each of these 'bigger' centers has their own type of shops.

The sub-center South of the main center could be seen as a more middle-class shopping zone.

Lely-centre on the North of the main center could be seen as a bit more all-round center with a lot of restaurants and services. This could be explained because this was initially the first center made according to the developments described in II.I.I Lelystad's history analyzed.

The main center provides for all classes within the city. With an extensive amount of shops varying from the basic to luxury products and services. The train station of Lelystad is also on the edge of this zone and in the middle point of this center is the municipal building of Lelystad.



Fig. II.II.IIe: Shopping facilities

II.II.II

Lelystad examined

Reliance of main and district shoppingcenters

According to the initial ideas of the city, built under the influences of the modernism, the districts should be able to work autonomically. Nearly every district has its own shopping center and therefore this idea of modernis is very visible, and also working fairly well.

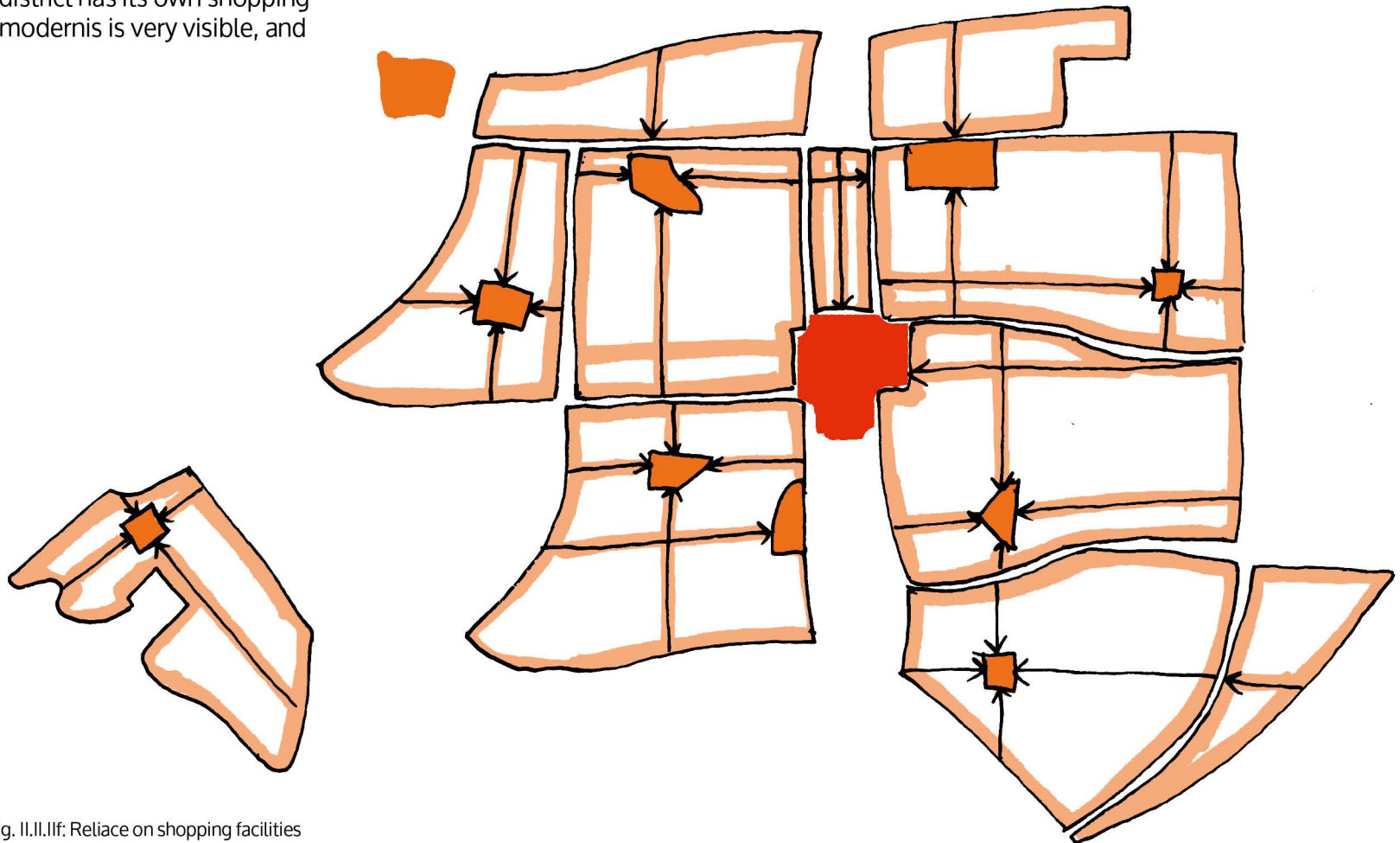


Fig. II.II.IIf: Reliance on shopping facilities

II.III.I

Livability of Lelystad

Growth and decline of population

According to figure II.III.Ia lelystad is getting an aging society. For outer randstad areas this is not something unrealistic and the city should adapt to this aspect

Growth and decline

Age	Year	Year	Growth/decline	Year	Growth/decline	Year	Growth/decline	Year	Growth/decline				
	1981	1990	81 to '90	2000	90' to '00	2010	00 to '10	2014	10 to '14				
0 - 4	4644	4151	-493	-11	3871	-280	-7	5090	1219	31	4725	-365	-7
5 - 9	4787	4848	61	1	4150	-698	-14	5051	901	22	5025	-26	-1
10 - 14	4094	5088	994	24	4343	-745	-15	4536	193	4	4961	425	9
15 - 19	2890	4926	2036	70	4623	-303	-6	4555	-68	-1	4467	-88	-2
20 - 24	3037	3957	920	30	4485	528	13	4396	-89	-2	4298	-98	-2
25 - 29	4882	3925	-957	-20	5012	1087	28	4806	-206	-4	4632	-174	-4
30 - 34	5673	4758	-915	-16	4909	151	3	5164	255	5	4954	-210	-4
35 - 39	3482	5512	2030	58	4516	-996	-18	5804	1288	29	5177	-627	-11
40 - 44	2177	5775	3598	165	5008	-767	-13	5816	808	16	6048	232	4
45 - 49	1586	3381	1795	113	5365	1984	59	5281	-84	-2	5571	290	5
50 - 54	1386	2192	806	58	5422	3230	147	5199	-223	-4	5094	-105	-2
55 - 59	1494	2980	1486	99	3274	294	10	5455	2181	67	5217	-238	-4
60 - 64	1318	1972	654	50	2119	147	7	5282	3163	149	5270	-12	0
65 - 69	1005	2169	1164	116	1808	-361	-17	3105	1297	72	4769	1664	54
70 - 74	475	1529	1054	222	1546	17	1	1852	306	20	2583	731	39
75 - 79	290	1475	1185	409	1414	-61	-4	1342	-72	-5	1485	143	11
80 - 84	0	0	0	0	816	816	0	892	76	9	976	84	9
85 - 89	0	0	0	0	323	323	0	627	304	94	595	-32	-5
90 +	0	0	0	0	116	116	0	249	133	115	338	89	36
Total	43220	58638	15418		63120	4482		74502	11382		76185	1683	

Fig. II.III.Ia: Lelystad's growth and decline



Fig. II.III.Ic: Lelystad in the context of the province

If we look at the different age groups Kids (0-24) Adults (25-64) and seniors(65+) we see that there is a continuous growth in seniors which is higher then the growth of other categories

	Kids		Working class		Seniors	
1981	19452		21998		1770	
1990	22970	18 %	30495	39 %	5173	192 %
2000	21472	-7 %	35625	17 %	6023	16 %
2010	23628	10 %	42807	20 %	8067	34 %
2014	23476	-1 %	41963	-2 %	10746	33 %

Fig. II.III.Ib: Lelystad's growth and decline in life phases






II.III.1

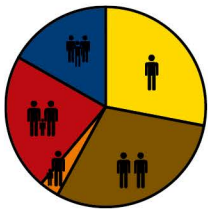
Lelystad examined

Household compositions

The compositions of the households in the districts.

Differentiation between:

-  Singles household
-  Couples household
-  Single parents household
-  Couple- parents household
-  Other



Lelystad is quite dominated by single and couples households without children.

Apart from the city heart (stadshart) and coastal district (kustwijk) all districts are quite similar to each other.

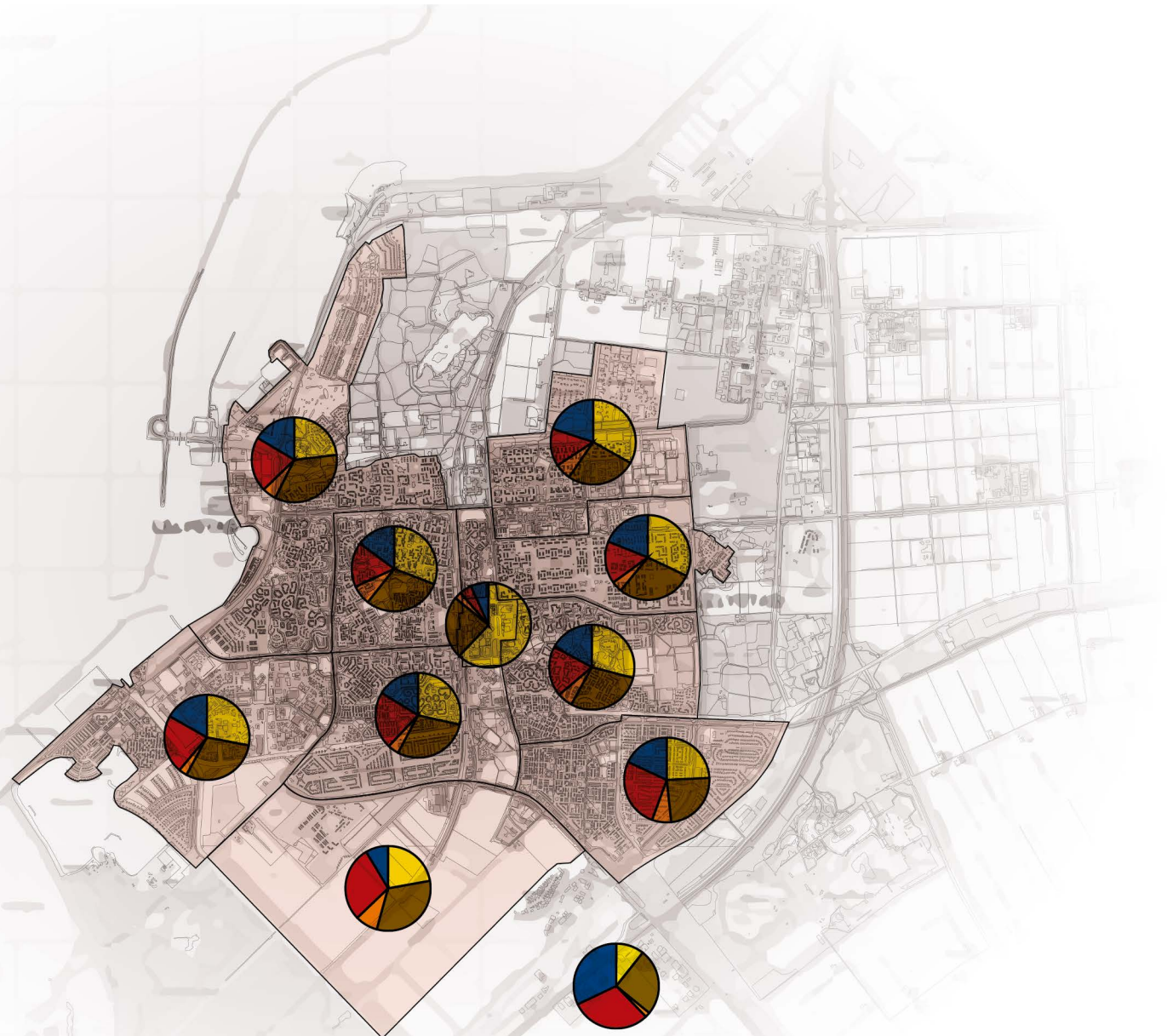


Fig. II.III.1d: Household compositions per neighborhood

II.III.1

Livability of Lelystad

Lelystad according to the Leefbarometer

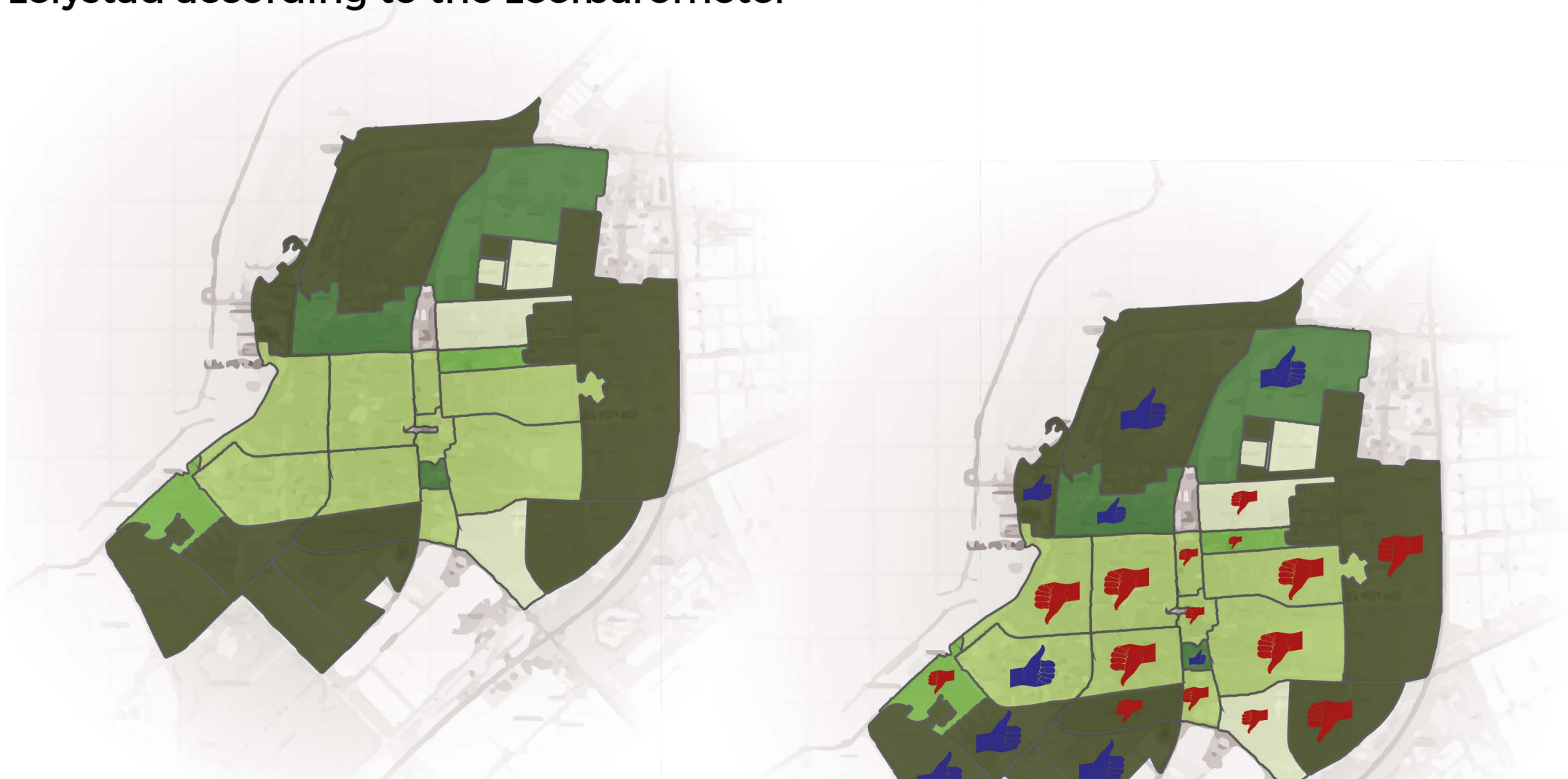


Fig. II.IIII.Ie: Evaluation according to the Leefbarometer

Fig. II.IIII.If: Detailed evaluation according to the Leefbarometer

II.III.I

Livability of Lelystad

Municipal livability questionnaires overlapped

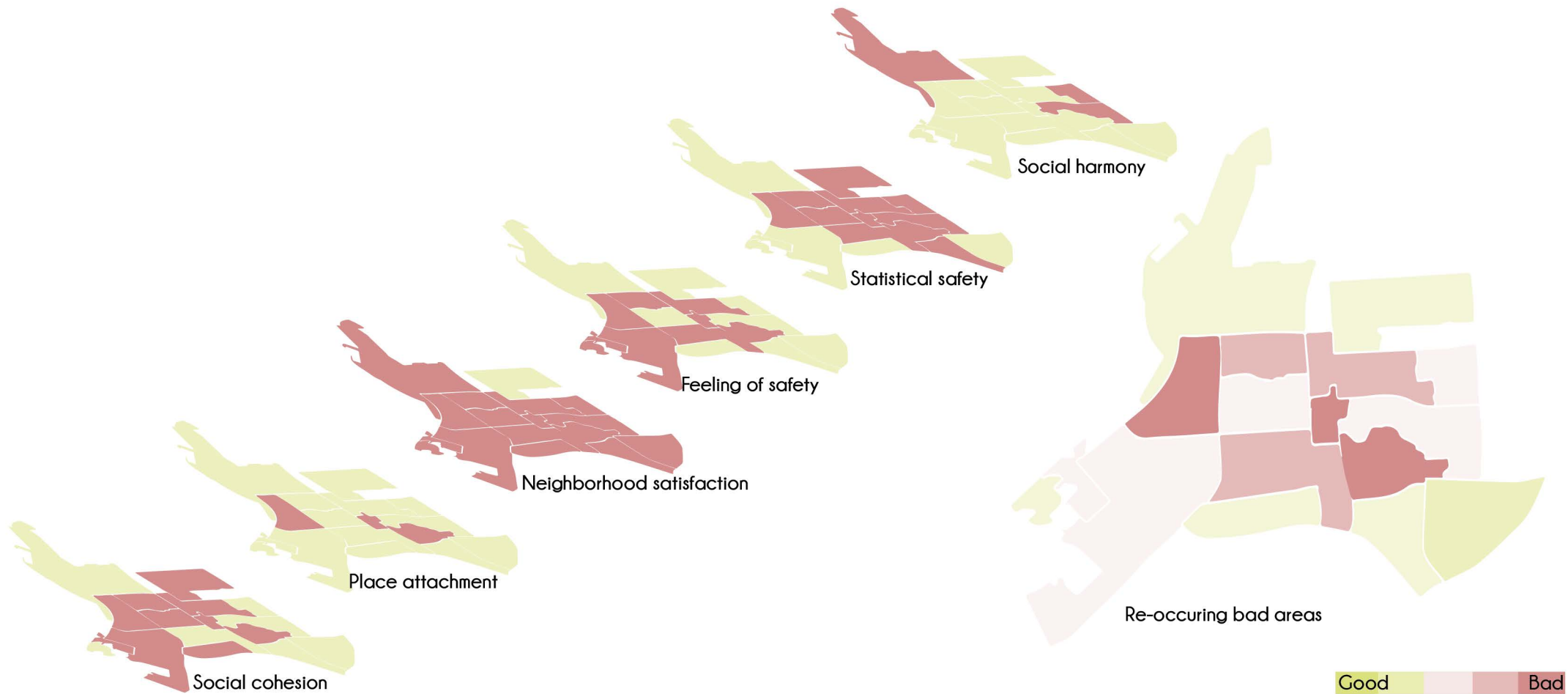


Fig. II.III.Ig: Summary of research done by O&S of the municipality of Lelystad

II.III.I

Livability of Lelystad

Ethnicities of districts

The map shows in green the neighborhoods which are quite similar to the Dutch average of ethnical background.

The other colors shows in what there is an imbalance in parts of the neighborhood.

- Mostly Dutch
- Mostly other ethnicities
- Equal to average

Zuiderzeewijk has more people from Surina meese and Marrocan decent

Atolwijk has more people from Marrocan and Turkish decent

Boswijk has more people from Turkish decent

Waterwijk has more people from Surina meese decent

Overall there are some peaks in ethnicity but the whole neighborhood makes this peak less high (which is not showed in the statistics)



Fig. II.III.Ih: Main ethnicities in neighborhoods

II.III.I

Livability of Lelystad

Privately owned and rent

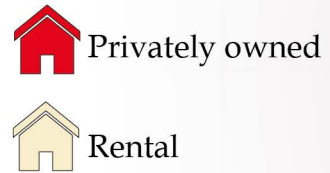


Fig. II.III.li: Balance privately owned and rent per neighborhood



Research framework

III.I

Problem statement

Results of the problem exploration

According to the research done in the problem exploration there are a few things that catch the interest. Accompanied by a personal fascination for livability, there are certain areas that appear to be lacking in livability, or livelihood for that matter.

The area that catches the most interest is the first area developed by the IJDA. District 1, as called by IJDA, is the district that consist of the Zuiderzeewijk, the Lelycenter and the Atolwijk. Of which the buildings of the Zuiderzeewijk have recently been revitalized, improving the results slightly. For all of these neighborhoods however they are still dominated by car parkings and the public spaces only oriented towards children. The difficult thing about the (lack) of livability is that it is not always as clear to see the problems. Livability is something that relates not only to the physical but also to the social environment and therefore problems might be embedded deeper in the urban fabric than initially expected. The reason that these areas catch the attention is that location visits, research done by the municipality, statistical/demographical data and the overall planning strategy point out that this could be a breeding ground for problems regarding the livability.



Fig. II.III.Ie: Evaluation according to the Leefbarometer

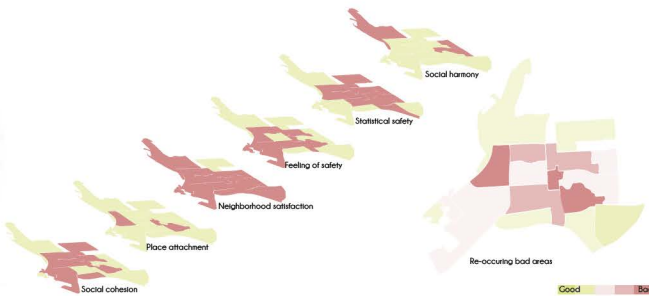


Fig. II.III.Ig: Summary of research done by O&S of the municipality of Lelystad

Problem statement

This by researching the city in the problem exploration the problem statement has been created: The city, as good as it might look like, lacks the opportunities to interact with the social and physical environment for all age groups. The consequence of this is that the groups that are not given the opportunities will not even try to interact. This in the end could lead to social isolation and even migration which would be a bad thing for the municipality and communities.

Hypothesis

So this raises the question: does the city give an opportunity to facilitate for every age group in society, or are some groups not interacting with the city because of the lack in availabilities for them to interact in the environment?

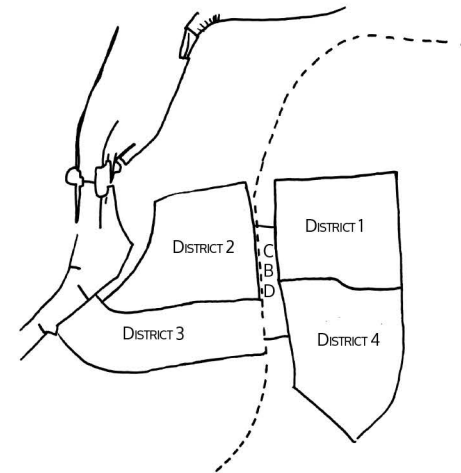


Fig. II.I.IIn: Initial scheme of districts

III.I

Problem statement

Zuiderzeewijk, Lelycenter and Atolwijk

The location, in the planning phase called district 1, is the location which is built with a more orthogonal and functional ideology with 'stempelwijken' and 'woonerwijken' contains mostly urban value regions, with two cultural value buildings (Rode Klif & Smedingshuis) and a hand full of buildings with architectural value according to the municipals policy 'Welstandsnota 2015'. With the only shopping center of this area being the 'Lelycenter' this region, unlike others, has multiple neighborhoods and districts that are reliant on 1 bigger shopping zone. Although this gives more space to the neighborhoods it might also make them more 'sleepy and silent'. But because of this reliance the Lelycenter has also been taken into account for the location.

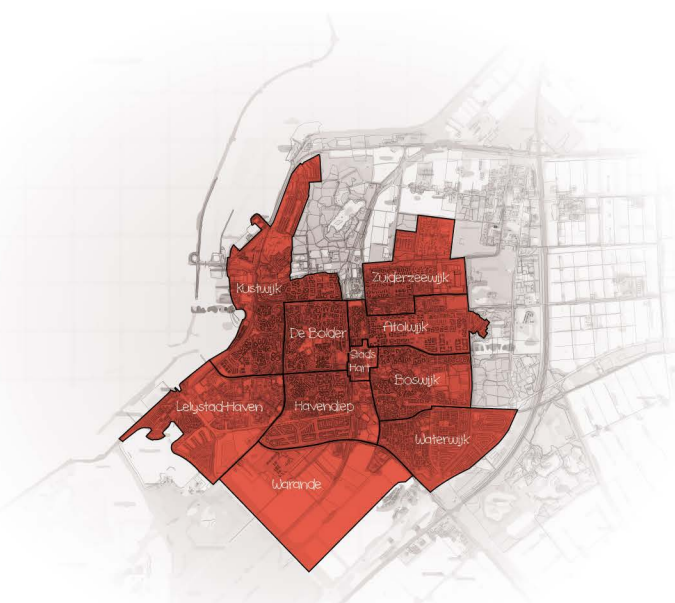


Fig. II.II.Ia: Districts in Lelystad

Livability within these neighborhoods

To improve livability for neighborhoods planners often design for children. This is because children are the weakest and/or most fragile group within society. A quick tour around these three districts will show that this is indeed also the case for Lelystad. However, senior citizens, adults, teenagers, adocelents, they can all do different things within their environment which might not overlap or even coexist with design ideas for children. That is why, improving livability in the neighborhood, should target more then only children. Especially with an aging community of which this aging trend still did not reach its end.

Growth and Decline over years

Age	Year	Year	Growth/Decline	Year	Growth/Decline	Year	Growth/Decline	Year	Growth/Decline
0-4	1981	1982	10	2002	10	2003	10	2014	10
5-9	4644	4315	-329	4125	-500	5051	926	5025	-26
10-14	4787	4848	61	4125	-662	5051	926	5025	-26
15-19	4204	4208	4	4311	7	4326	15	4262	-64
20-24	2888	4026	1138	4623	1735	4555	-68	4467	-88
25-29	2617	2577	-40	4485	168	4396	-89	4295	-101
30-34	4482	3925	-557	38	-5012	1087	1115	4623	174
35-39	5678	4738	-940	4909	131	5164	255	4954	-210
40-44	3442	3213	-229	4214	772	5064	1288	5177	113
45-49	2177	5775	3598	166	5008	-767	14	6046	232
50-54	1286	3281	1995	114	5363	1984	16	5281	-84
55-59	1386	2192	806	38	5452	3280	147	5198	-254
60-64	1404	2188	784	99	3274	294	16	5455	2181
65-69	1116	1172	56	1116	147	1116	0	5212	238
70-74	1005	7168	6163	114	1808	-811	-17	4769	1664
75-79	475	1529	1054	272	1546	17	1882	306	20
80-84	0	0	0	0	816	0	801	76	978
85-89	0	0	0	0	333	0	427	304	99
90+	0	0	0	0	115	0	240	113	115
Total	43220	58638	15418	61320	4482	74502	11382	70185	1683

Fig. II.III.Ia: Lelystad's growth and decline

If we look at the different age groups Kids (0-24) workingclass (25-64) and seniors (65+) We see that there is a continuous growth in seniors which is higher than the rest of the categories

	Kids	Working class	Seniors	
1981	19452	21598	1770	
2014	22925	35495	3178	
2004	23472	35625	3174	
2014	23628	35701	3067	
2014	23474	-1%	41963	-21%

Fig. II.III.Ib: Lelystad's growth and decline in life phases

A possible desired future

As a possible desired future the neighborhoods should be livable, so therefore individuals should be granted the opportunity to interact with their social and physical environment, for all age groups within a community.

III.II

Research questions

Main research question

As followed up from the problem statement and mentioned hypothesis the research question will focus on the Zuiderzeewijk, Lelycenter and Atolwijk to improve the livability for the whole community.

So the main question is as followed.

How can spatial interventions in the public realm be used to improve the livability for all people within the communities of the districts 'Zuiderzeewijk', 'Lelycenter' and 'Atolwijk' in Lelystad?

This main research questions gives us the notion of a few elements.

- The city of Lelystad, a modernistic 'New Town' built in Flevoland and acting as capital town.
- The districts within the city of Zuiderzeewijk, Lelycenter and Atolwijk as specific locations for research and design.
- Target group of the whole community, so no focus on only children but try to address the whole community
- Spatial interventions, this project is still in the domain of Urbanism and therefore the goals should be expressed in a spatial/strategical way.
- The subject of livability, which is related to not only the physical but also the social environment.

To effectively research this question a set of sub questions have been developed to build up knowledge in order to answer the main research question.

Sub research questions

The sub research questions fall in to three groups: understanding the livability, understanding location and understanding community.

The first sub research questions will clear up the importance of livability. The livability is something not always as tangible, and therefore the understanding of Livability is important.

To answer the main research question, the sub questions regarding livability are as followed:

SQ_1 - What are the physical and social aspects that impact 'supposed livability' and indicate possible problems?

SQ_2 - How to use these aspects as instruments to improve the 'supposed livability' of an area?

III.II

Research questions

The second set of research questions is about the importance of location. The location is Lelystad, a 'new town' city under modernistic ideologies inspired by Van Eesteren.

To answer the main research question, this set of sub research questions should answer the following:

SQ_3 - What are the problems regarding 'supposed livability' in modernisticly based 'new towns'?

SQ_4 - What is the historic context of urban development and spatial interventions in Lelystad (as a modernistic new town), and what impact has this had on 'supposed livability' in the city?

SQ_5 - What are the 'actual livability' problems in the districts 'Zuiderzeewijk', 'Lelycenter' and 'Atolwijk'?

For the last set of research questions we address the importance of community. All people, although not everyone will want to actively engage in his or her environment we should give them the opportunity too.

To answer the main research question, the last set of sub research questions that should be answered are:

SQ_6 - What is the current community of these districts, and how might this change in the future?

SQ_7 - How do these different groups within this community wish to see their optimal livable environment?

SQ_8 - How do the optimal livable environments relate to each other in the same physical environment?

III.III

Intended goals

Intended goals on the city scale

This project aims to extract the current problematics of the city of Lelystad. These problematics most likely (as further research will elaborate on) be not equally relevant to every age group within society.

The first goal in this research project is to investigate what kind of age groups could be recognized in the community (this is explained in I.III.IV Notion of life phase). After this separation of age groups it is important to investigate on what the desires and wishes are from their environment per group. By knowing this we can build up a catalogue on which we can separate age groups, see their wishes and desires and possibly also overlaps between different groups.

By analyzing the town of Lelystad and using literature we can also see what kind of opportunities the age groups are missing to actually interact in this modernistically based environment. Out of this the research hopes to extract certain indicators of problems which are normally not that clear to see.

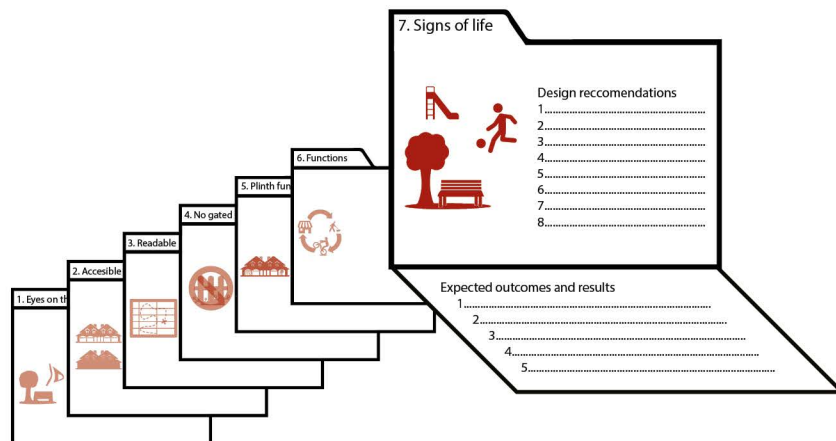


Fig. III.IIIa: Concept of catalogue

The second goal for this project is to actually improve the livability in the Zuiderzeewijk, Lelyscenter and Atolwijk itself. By the use of the previously discussed catalogue and a thorough research the aim is to propose design interventions in the public realm to improve the livability for the communities.

This proposal is intended to be presented to the municipality of Lelystad for inspiration on these or other locations in the city. It is open for them to interact with it the way they want.

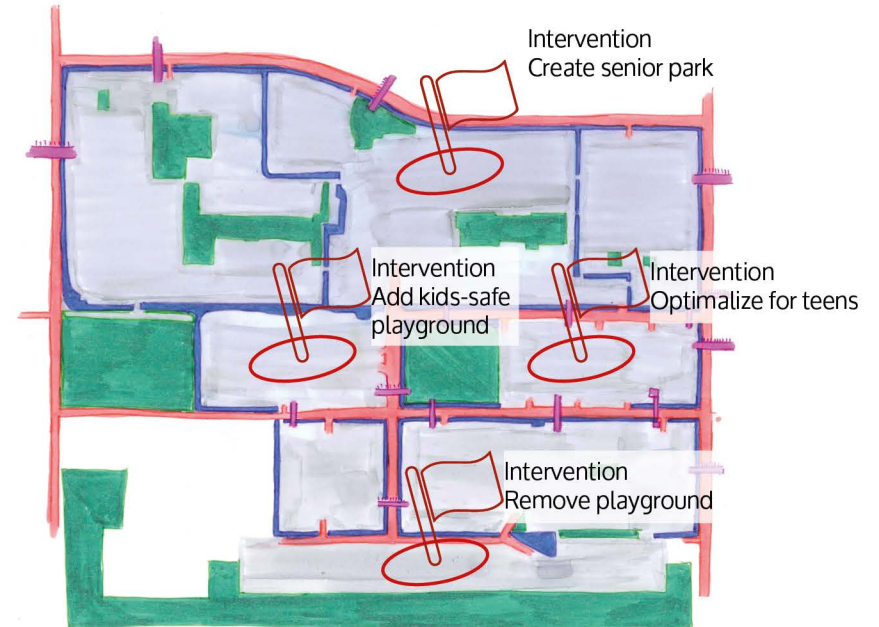


Fig. III.IIIb: Concept of possible neighborhood interventions

III.III

Intended goals

Intended goals on equality and ethics

A goal more personally to me is the goal of equality and ethics.

By using the catalogue as argumentation this project can give voice to not only the most obvious actors of the public realm, but also the lesser represented actors. These actors may vary from organizations like the housing corporations and to municipalities but will also include local residents from all age groups.

Apart from the goals for Lelystad itself this project will also try to bring all age groups under the attention to everybody. Trying to advocate that "designing for the weak means designing for the community" is something that generalizes the community far too much and will argue that for example senior citizens should also get attention. Certainly given the fact that we are still in an aging society.

So this would suggest to be the next step in approaching a livable environment. Following M. van Dorst's research on livable residential environments and continuing on this.



Methodology

IV.1

Methodology

Methodology flow chart

The methodology is based on three theoretical frameworks which have been described in the beginning of this report.

The dominating framework within this project will be the framework of livability.

Within the framework of modernistic new towns is the context of the city and project location. These two aspects will inform the catalogue and the design proposal and recommendations for the location itself.

The framework of live phases, fully interconnected with the livability framework will get formulate life phases after which this will inform and therefore re-evaluate the catalogue again.

End goals

Catalogue

The end goal of the catalogue will be complete after the design re-evaluates this catalogue formed by literature.

The design proposal itself will be developed by its context and the catalogue and will be constantly re-evaluated as well, just like the catalogue itself does.

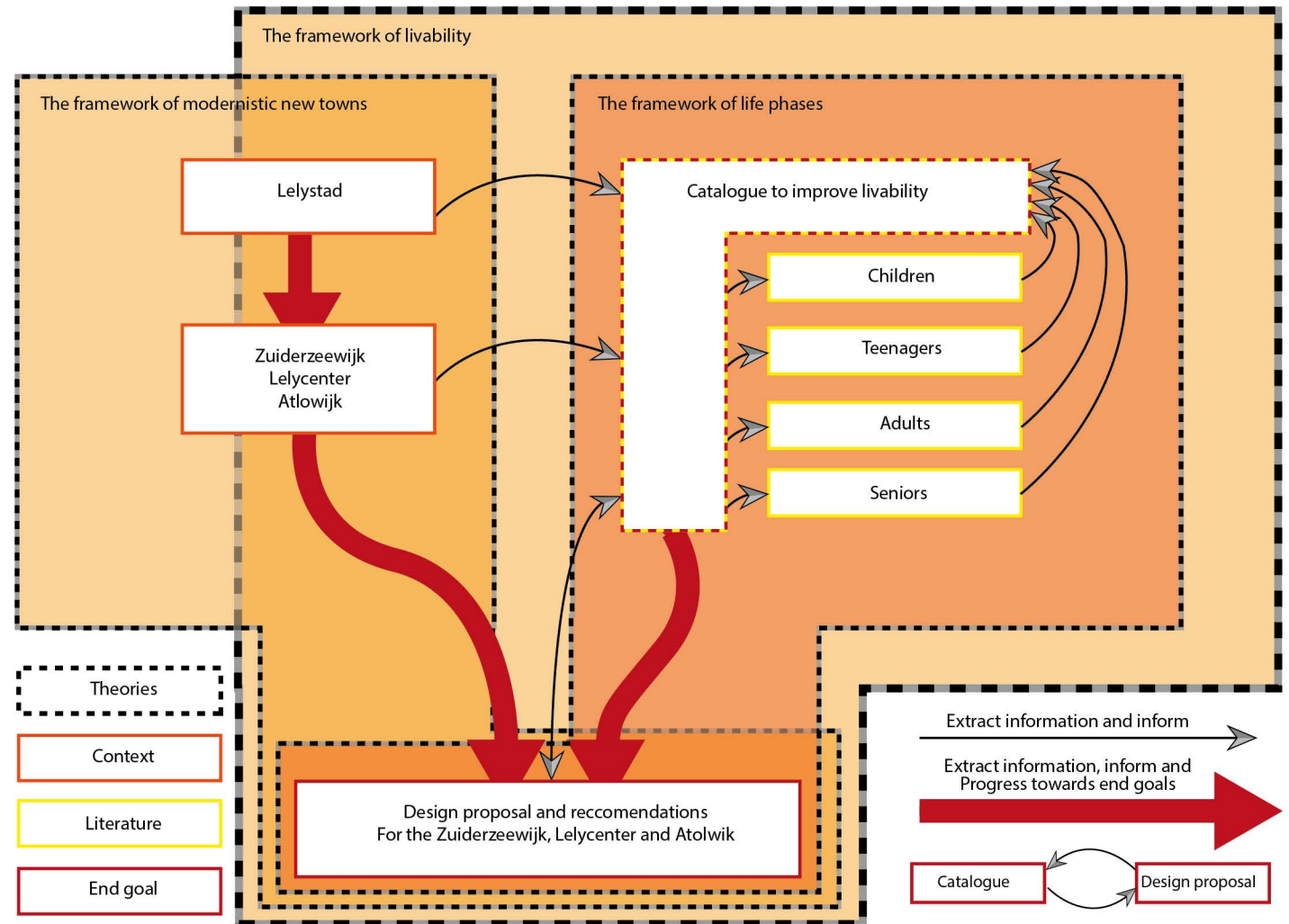


Fig. IV.1a: Methodological flow chart

IV.II

Planning

Global planning scheme

The scheme is quite tight but manage-able. The idea is to start off with the life phase of senior citizens which seems to be the most interesting target group. Other target groups will most likely go a lot faster in designing, researching and making theoretical backgrounds. Partly because I build up on previously done research and also partly because I know what could be the bumps in the road.

During P3 my products would be two designs for two groups.
 During P4 my products would be desings for all groups.
 During P5 the catalogue and design reccomendation would be fully finished.

Week 4,8	Week 4,9	Week 4,10	Week 4,11	Vakantie
Jun 6 - 12	Jun 13 - 19	Jun 20 - 26	Jun 27 - Jul 3	Jul 4 - Sep 11
ToU Essay	P2 Presentations			
P2 Report hand-in	P2 Presentations			
	P2 Presentations			
	P2 Presentations			
Re-evaluate Essay	P2 Presentations			
Prepare P2 Presentation				
		Start with life phase seniors		
		Research the districts for livability of seniors		
			Get in contact with seniors	

	Week 1,1 Sep 5 - 11	Week 1,2 Sep 12 - 18	Week 1,3 Sep 19 - 25	Week 1,4 Sep 26 - Oct 2	Week 1,5 Oct 3 - 9	Week 1,6 Oct 10 - 16	Week 1,7 Oct 17 - 23	Week 1,8 Oct 24 - 30	Week 1,9 Oct 31 - Nov 6	Week 1,10 Nov 7 - 13
Monday							P3 Report	P3 Presentations?		
Tuesday								P3 Presentations?		
Wednesday								P3 Presentations?		
Thursday								P3 Presentations?		
Friday								P3 Presentations?		
Saturday										
Sunday										
Overall	Design proposals and/or reccomendations for seniors							P3 Presentations?		
				re-evaluate with seniors						
				Design proposal seniors finished						
			Start with life phase children							
			Research the districts for livability of children							
			Get in contact with parents of children							
					Design proposals and/or reccomendations for children					
								re-evaluate with actors		
									Design proposal actors finished	
						Prepare P3 documents				
								Start with life phase adults		
								Research the districts for livability of adults		
								Design proposals and/or reccomendations for Adults		

	Week 2,1 Nov 14 - 20	Week 2,2 Nov 21 - 27	Week 2,3 Nov 28 - Dec 4	Week 2,4 Dec 5 - 11	Week 2,5 Dec 12 - 18	Week 2,6 Dec 19 - 25	Christmas vacation Dec 26 - Jan 8	Week 2,7 Jan 9 - 15	Week 2,8 Jan 16 - 22	Week 2,9 Jan 23 - 29	Week 2,10 Jan 30 - Feb 5	Week 2,11 Feb 6 - 12	
Monday			P4 Report	P4 Presentation	P4 Presentation		Christmas				P5 Presentation	P5 Presentation	
Tuesday				P4 Presentation	P4 Presentation		Christmas				P5 Presentation	P5 Presentation	
Wednesday				P4 Presentation	P4 Presentation		Christmas				P5 Presentation	P5 Presentation	
Thursday				P4 Presentation	P4 Presentation		Christmas				P5 Presentation	P5 Presentation	
Friday				P4 Presentation	P4 Presentation		Christmas				P5 Presentation	P5 Presentation	
Saturday							Christmas						
Sunday							Christmas						
Overall	Prepare P4 report and presentation			P4 Presentation	P4 Presentation						P5 Presentation	P5 Presentation	
	Design proposal children finished			Start working on the ideal design for all life phases combined									
	Combine information for catalogue							Prepare beautiful presentation					
				Formulate final product: Catalogue				Formulate final product: Design					

Fig. IV.IIa: Global planning

IV.II

Applied methods

Applied methods

In general the applied methods that will be used are;

- 1 - Literature studies; by using journals/books/articles and other scientific sources to define arguments and positions
- 2 - Desk analysis; research done by combining different types of information like drawings, reduction drawings, news articles and other (spontaneous) sources to come to conclusions and base arguments for analysis, designs and literature.
- 3 - Observations; site visits based on the physical and social aspect. For the physical aspect it is an assessment of the current situation and possible modification by users. For the social aspect it is to see how people interact or not interact with their environment. Using an objective approach and trying to 'see through the glasses' of different types of users (which requires a certain amount of empathy)
- 4 - Interviews; depending on the actors to address the interviews will be from formal to informal. Varying the use of questionnaires, pre-defined questions to an unstructured 'chat' with people.
- 5 - Research by design; using proposed designs to research an area, this design itself will be used as an instrument to see how this is perceived by those interviews regarding their perceived 'actual livability'

Each sub question will use one or more of these methods. The method applied varies from question to question. To elaborate on the actual applied methods they will be described per question. What is most important for all methods applied and each sub question is to stay non-biased. Livability, especially actual livability is dependent on the individual and therefore I have to set my personal and professional values aside.

Overall all subquestions are interwoven with each other and therefore can not be answered in a linear way.

SQ_1 - What are the physical and social aspects that impact 'supposed livability' and indicate possible problems?

To get grips on this 'supposed livability' *literature study* will be done which will translate into the theoretical framework. Indications of possible problems will be made clear after the answering of the other subquestions. The answering of this question will be done by *desk research* of findings from other answers.

SQ_2 - How to use these aspects as instruments to improve the 'supposed livability' of an area?

In correlation with subquestion 1, 7 and 8 *desk analysis* and *literature studies* will guarantee the scientific significance of the aspects to improve livability.

IV.III

Applied methods

SQ_3 - What are the problems regarding 'supposed livability' in modernistically based 'new towns'?

For the understanding of 'modernistic 'new towns'' *literature studies* will be done. The problems itself will also be part of a *literature study*.

SQ_4 - What is the historic context of urban development and spatial interventions in Lelystad (as a modernistic new town), and what impact has this had on 'supposed livability' in the city?

Using the literature studies of SQ - 1 the problems within this context will be researched by *desk analysis* and *observations*. If necessary in a later stage these problems could be strengthened by *interviews* as well.

SQ_5 - What are the 'actual livability' problems in the districts 'Zuiderzeewijk', 'Lelycenter' and 'Atolwijk'?

To get grip on this 'actual livability' *literature study* will be done after which *observations* will be done and *interviews* will be held. This gives insight in the 'actual livability' since this type of livability is more personal. To assist in the accurate questions *literature studies* on the life phases will also be done.

SQ_6 - What is the current community of these districts, and how might this change in the future?

Research on the current community will be done mostly by *desk analysis* and changes in the future will focus on *desk analysis* and *literature studies*.

SQ_7 - How do the different groups within this community wish to see their optimal livable environment?

This subquestion is strongly related to subquestion 5 and therefore will be interconnected in finding the answer. Methods applied will be the same as subquestion 5 (*literature study, observation and interviews*) with the addition of *research by design*. The optimal livable environment is an environment as seen by the individual, therefore a proposal of a design might help to stimulate the right formulation of an individual's desires.

SQ_8 - How do these optimal livable environments relate to each other in the same physical environment?

This research question could only be researched when the previous questions of 4, 5 and 6 are answered. By using developed literature of the desires of life phases and overlapping them a combination of *desk analysis, literature studies, interviews* and *research by design* will be applied to see an optimal livable environment.

IV.II

Fields of inquiry

Organisations and/or institutions

New Town Institute
<http://www.newtowninstitute.org/>

Nieuw Land archive
<http://www.nieuwlanderfgoed.nl/>
 contact: studiecentrum@nieuwlanderfgoed.nl

Municipality of Lelystad
 contact person: R.M. Zijp, RM.Zijp@Lelystad.nl (senior urban planner, Policies & Regional economic policies municipality of Lelystad)

Van Eesteren museum
<http://vaneesterenmuseum.nl/>

Kennisconferentie: Toekomst van het IJsselmeergebied
 17 June 2016 Het Waterschapshuis, Waterschap Zuiderzeeland, Lelystad.

Dag van de Architectuur Nieuw Lelystad
 16 June 2016 Lelystad.
 contact person: Dick Koster
 subscribe to event: info@stichtingals.com

CENTRADA, WOONZORG & PARARIUS
 Housing corporations in Lelystad

Possible contact persons

P. Broekhuisen,
 Tutor at Faculty of Architecture TU Delft & affiliated with Van Eesteren chair

M. Provoost,
 Director of the International New Town Institute (INTI)

D. Koster,
 Strategical advisor urban planning at Cittanova , previously worked in the municipality in urban developments and landscape

R.M. Zijp
 Senior urban planner at the municipality of Lelystad

N. Tillie
 Researcher/lecturer at Landscape Architecture, Faculty of Architecture TU Delft

IV.IV

Fields of Inquiry

Literature & recommended reads

van Dorst, M. (2005). Een duurzaam leefbare woonomgeving. Eburon Uitgeverij BV.

Rooij, R. van Dorst, M. Klaasen, I. Wind, F. (2012). transformatiestrategieën voor verouderde stadswijken. Techne Press

Carmona, M. (2010). Public places, urban spaces: the dimensions of urban design. Routledge.

Gehl, J., & Gemzoe, L. (1996). Public spaces-public life.

Veenhoven, R. (2000). Leefbaarheid, betekenissen en meetmethoden.

Rotterdam, Erasmus Universiteit Rotterdam

Ellard, C. (2015). Places of the Heart : The Psychogeography of Everyday Life.

Bellevue Literary Press

Regarding the modernistic post-war 'New Towns'

van Bergeijk, H. (2015). Atlas of the functional city. CIAM 4 and comparative urban analysis. Planning Perspectives, 30(3), 475-476.

Regarding Lelystad, Flevoland and the IJsselmeerpolders

Hemel, Z., & Bock, M. (1994). Het landschap van de IJsselmeerpolders: planning, inrichting en vormgeving. NAI Uitgevers.

van Eesteren, C. (1964). Stedebouwkundig plan voor Lelystad. Ministerie van Verkeer en Waterstaat.

Van Casteren, J. (2011). Lelystad. Prometheus.

Wal, C. (1997). In praise of common sense: planning the ordinary: a physical planning history of the new towns in the IJsselmeerpolders. 010 Publishers.

APA

Wal, C. (1997). In praise of common sense: planning the ordinary: a physical planning history of the new towns in the IJsselmeerpolders. Rotterdam: 010 Publishers.

Publishers.



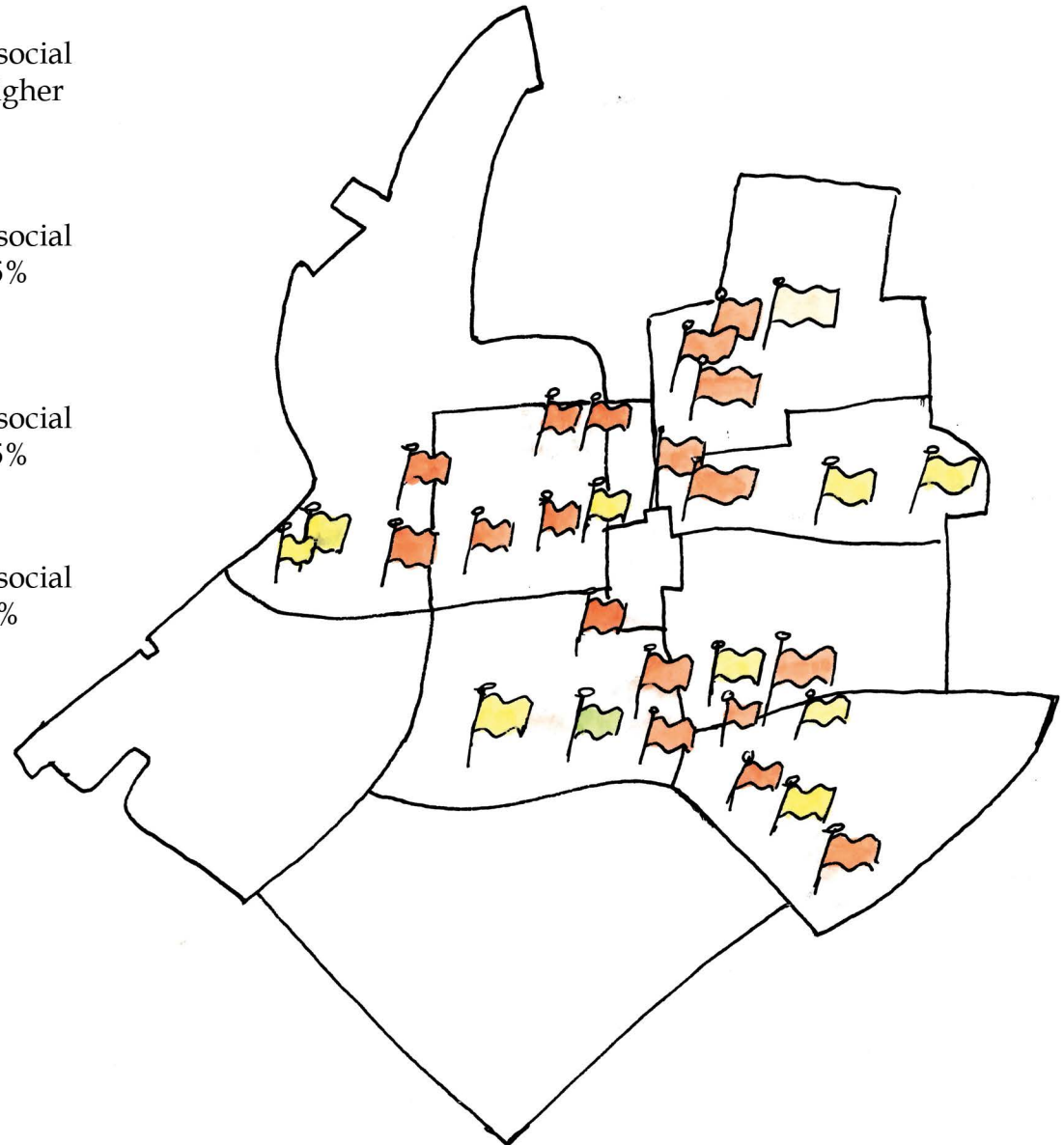
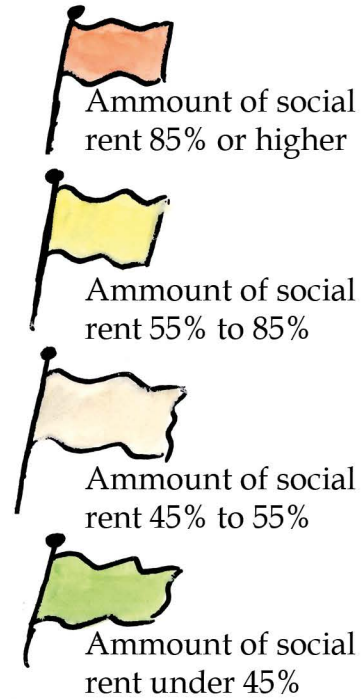
Continued research

V.I Research on the city

Variations within renting

Nearly all the rent is under control of the corporation called Centrada.

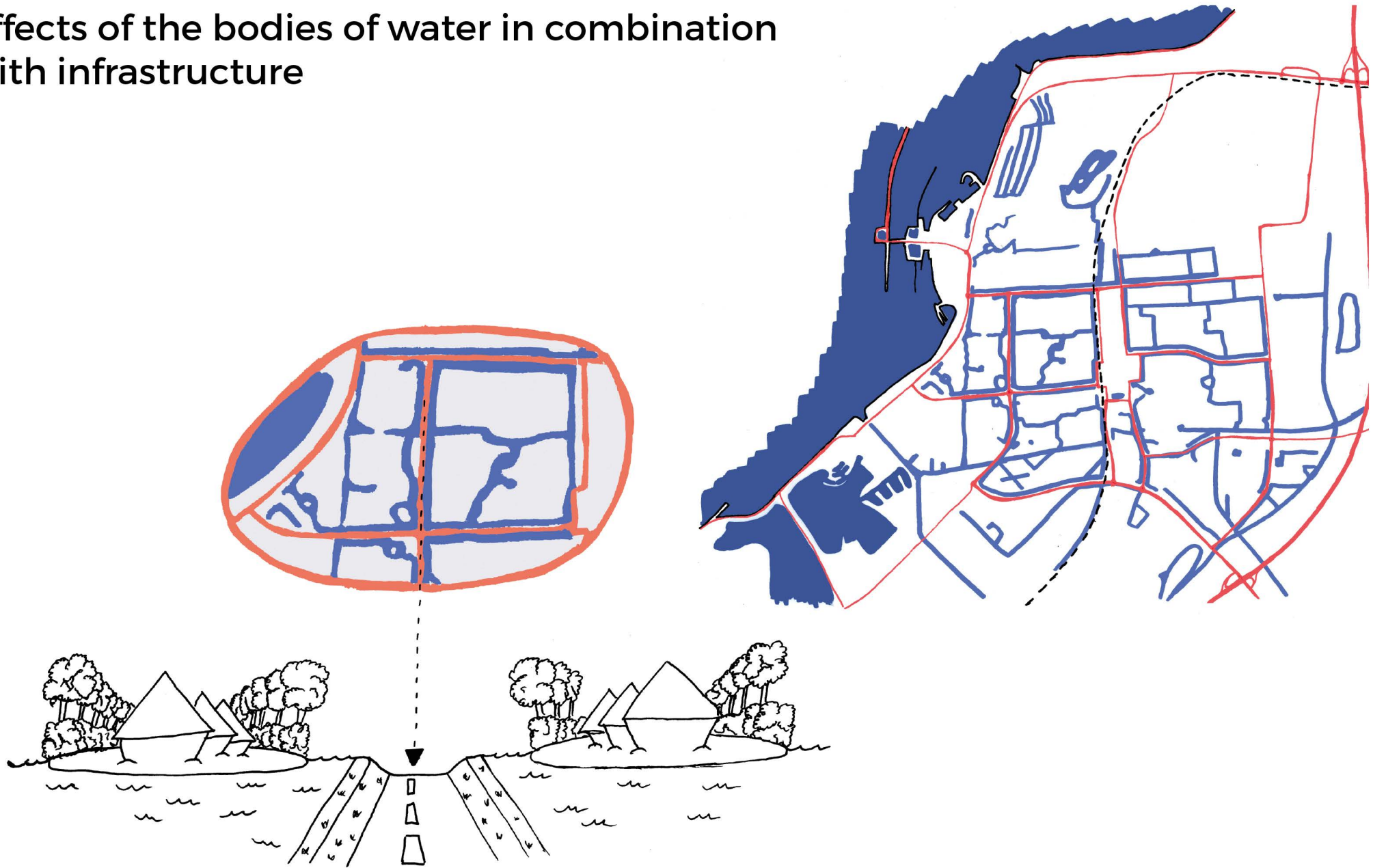
For seniors the organisation "Woonzorg" provides housing.
Other small corporation are "Pararius" and "Van Der Linden".



V.I

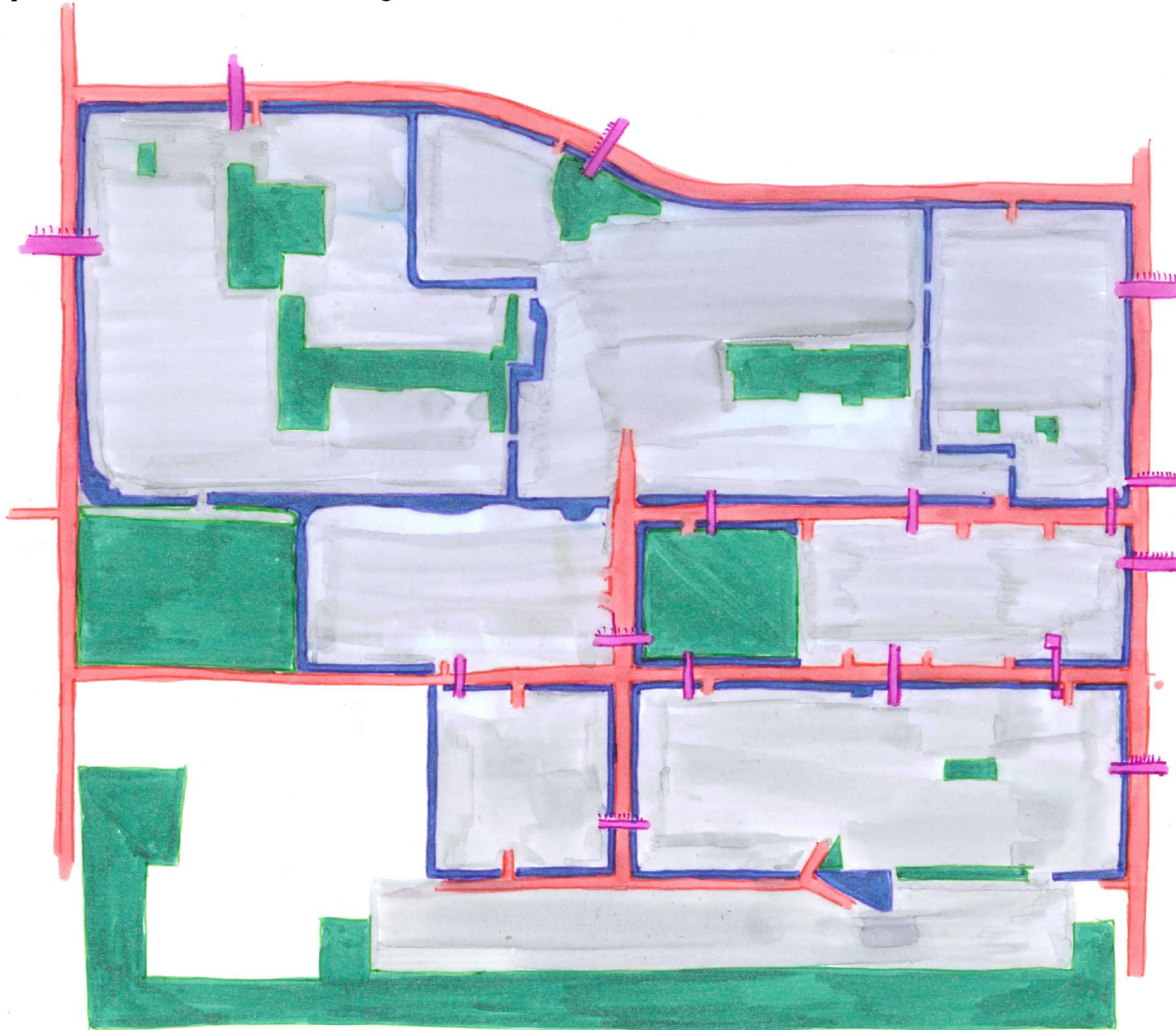
Research on the city

Effects of the bodies of water in combination with infrastructure



V.II Research on the district

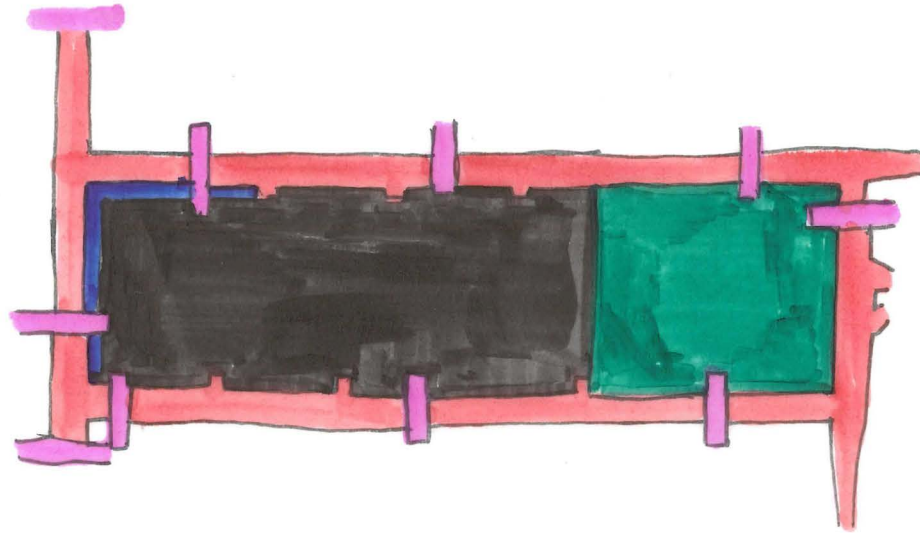
General setup of Zuiderzeewijk



V.II

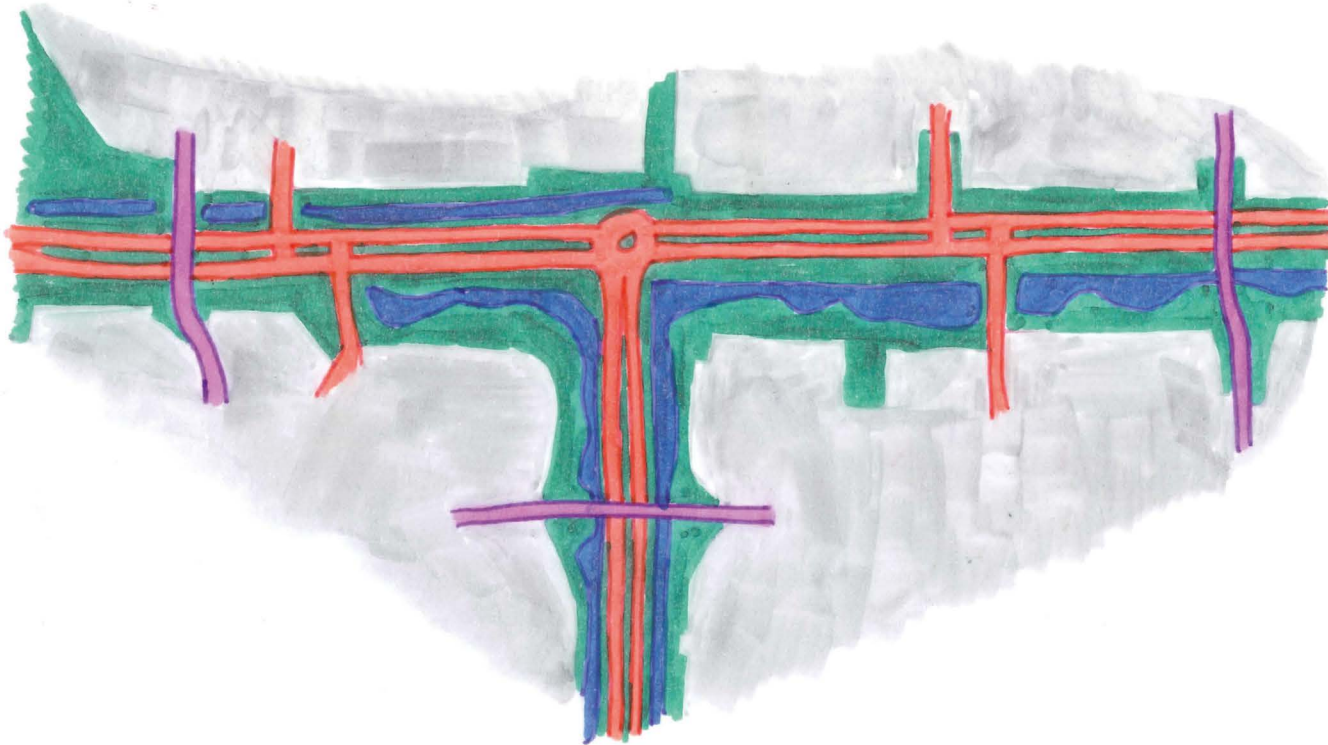
Research on the district

Accessibility of Lelycenter



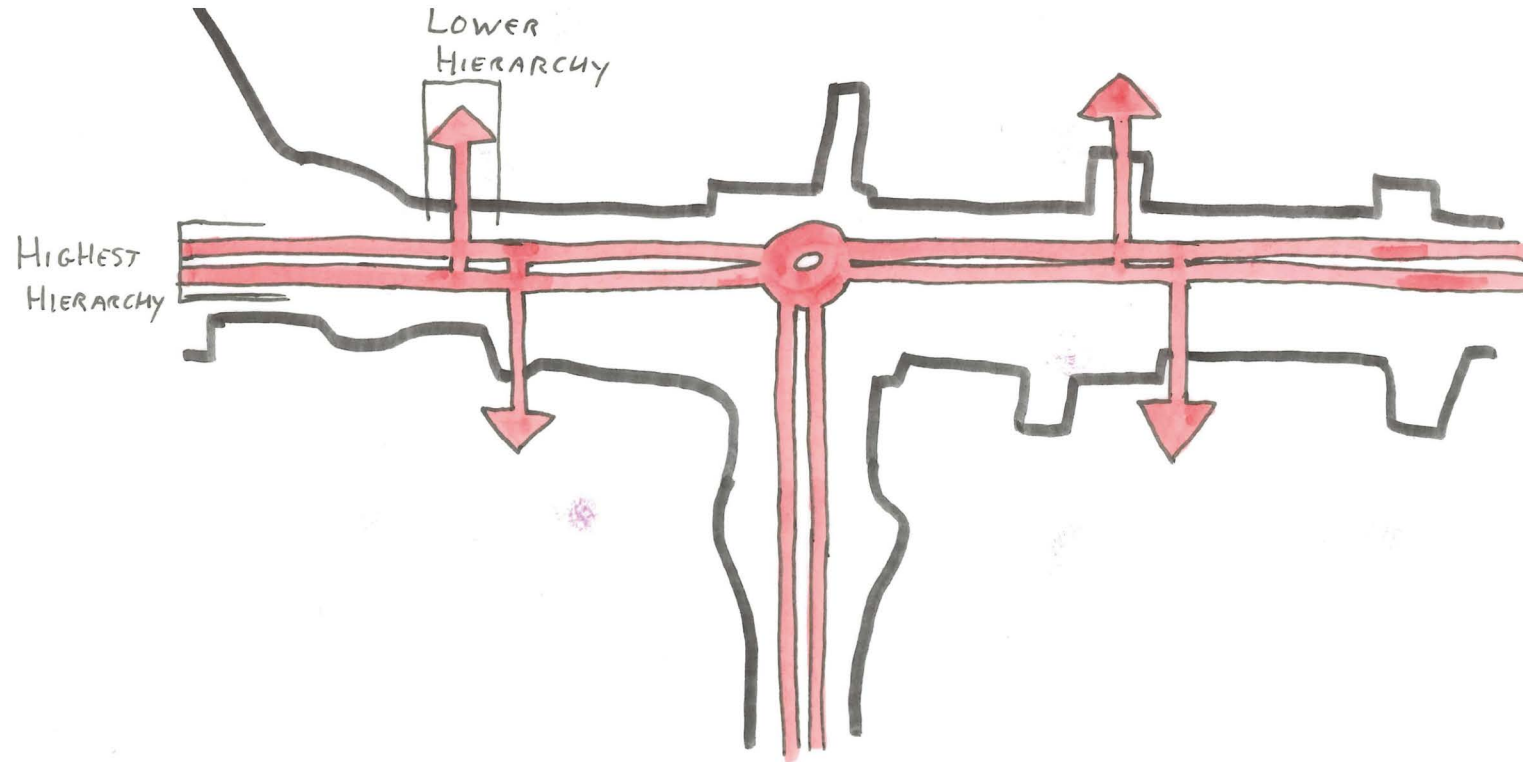
V.II Research on the district

Interaction between districts from the perspective of infrastructure



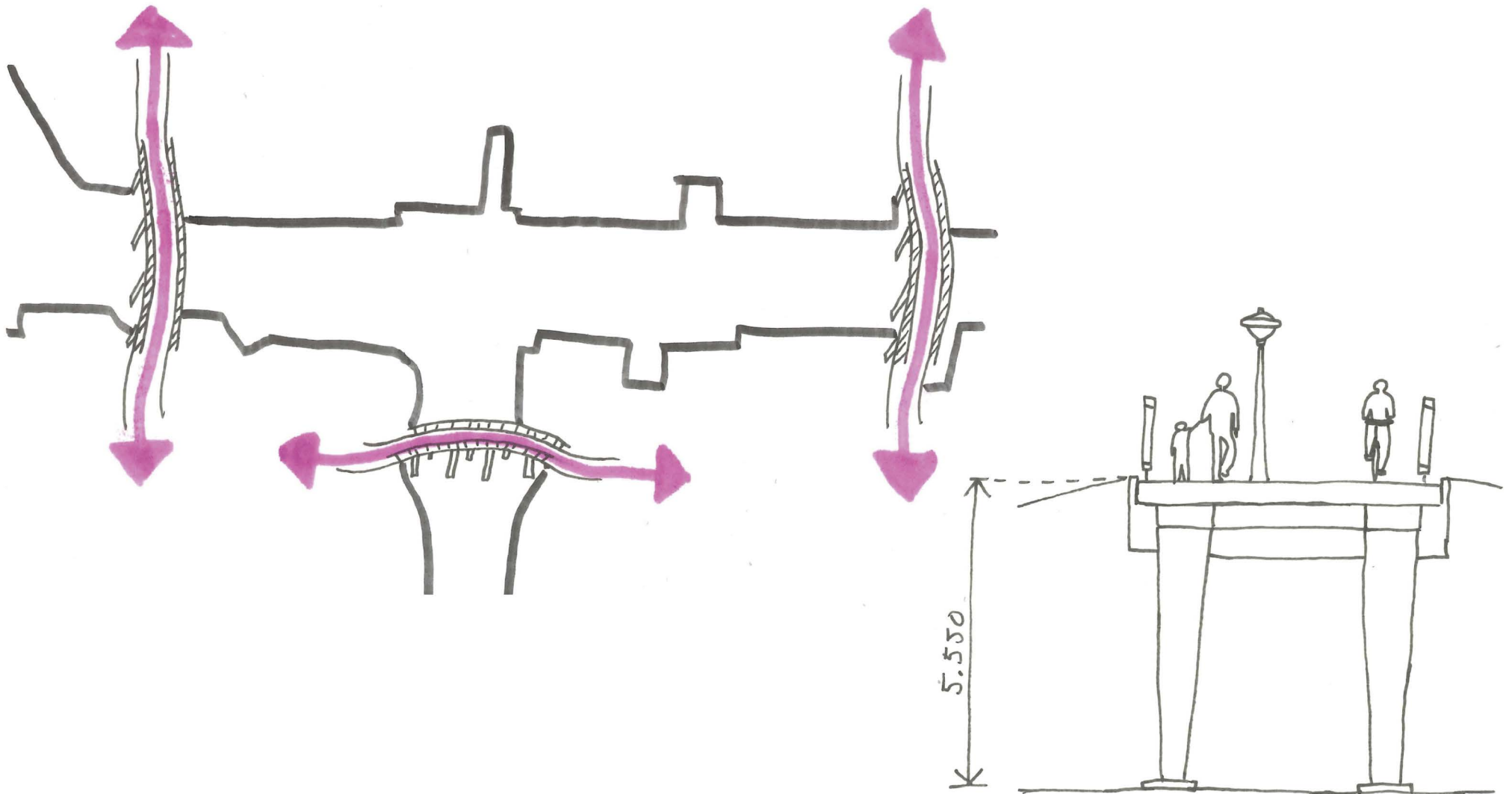
V.II Research on the district

Interaction between districts from the perspective of the car



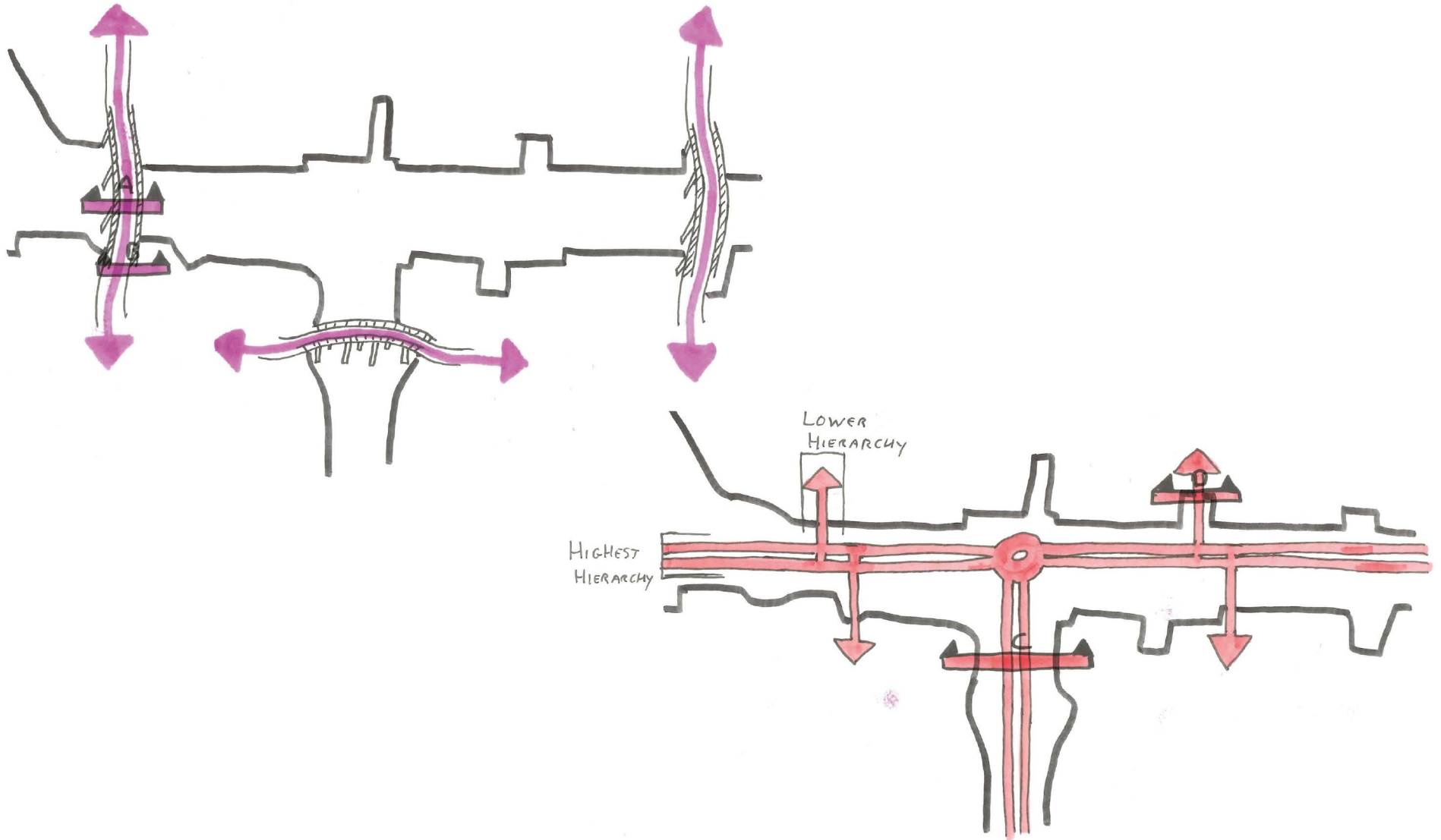
V.II Research on the district

Interaction between districts from the perspective of the pedestrian and cyclist



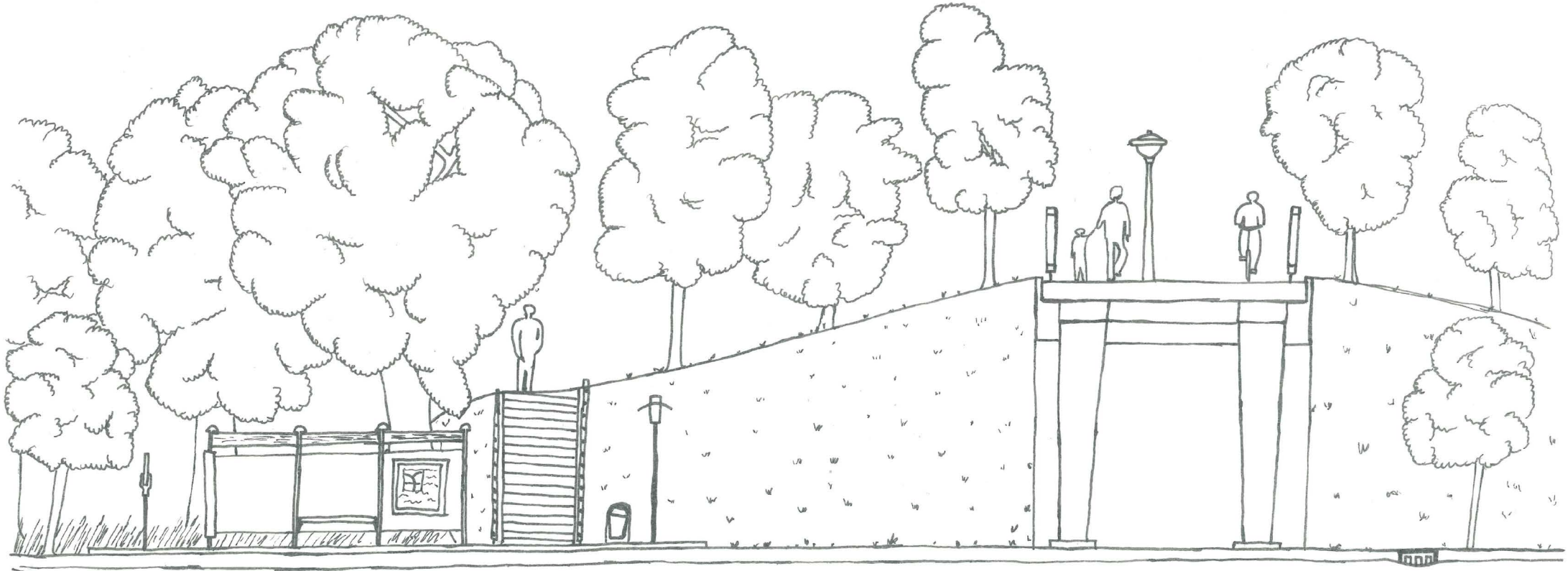
V.II Research on the district

Overlap of networks



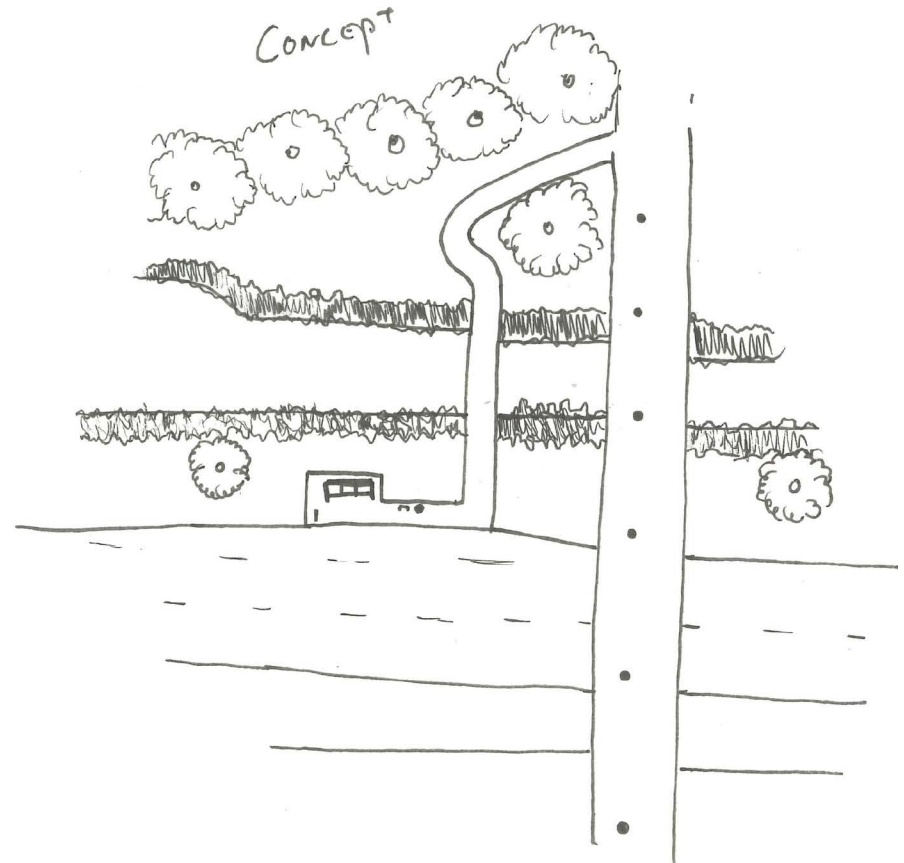
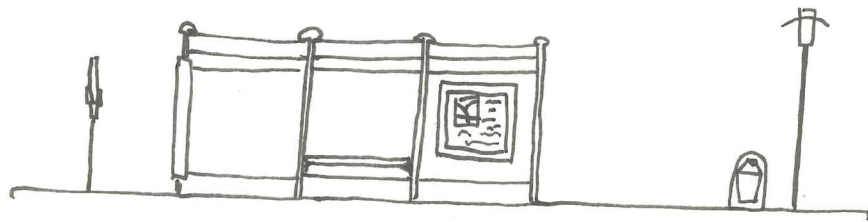
V.II Research on the district

Typology of the edge of districts



V.II Research on the district

Typology of the edge of districts



V.II

Research on the catalogue

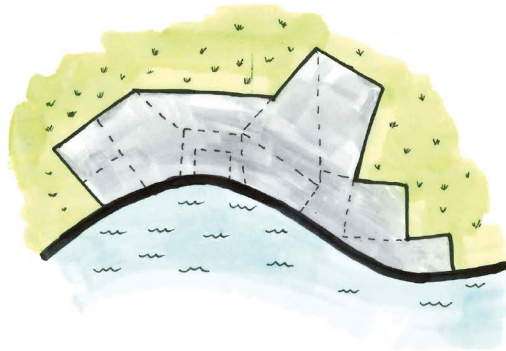
Introduction

To improve the livability in the city an instrument was needed to apply on cities. This instrument should not dependant on a specific city or situation. Therefore the idea of a catalogue was formed. The catalogue will be an instrument to tackle problems of livability in a different contexts. The catalogue will provide possible solutions for possible problems. The solutions are always guided solutions which will still require some adjustments for a specific context and will therefore be general/ideological solution in essence.

V.II

Essence of the catalogue

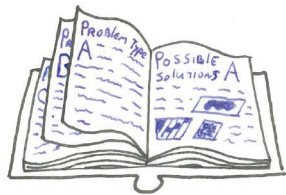
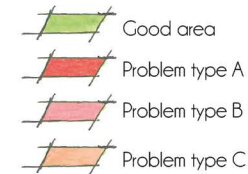
The essence of the catalogue is to improve the livability of a city or area firstly an assessment of the situation should be done. From this assessment a clear idea of the current problematics can be summed up. By the use of the catalogue you could find multiple possible solutions depending on the context you are working in which will finally result in a design or strategy proposal.



Original setting

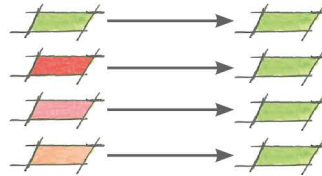


Assesment of livability



Implementing the catalogue

Using the catalogue to find possible solutions for problems that occur in the area



Improving livability with catalogue



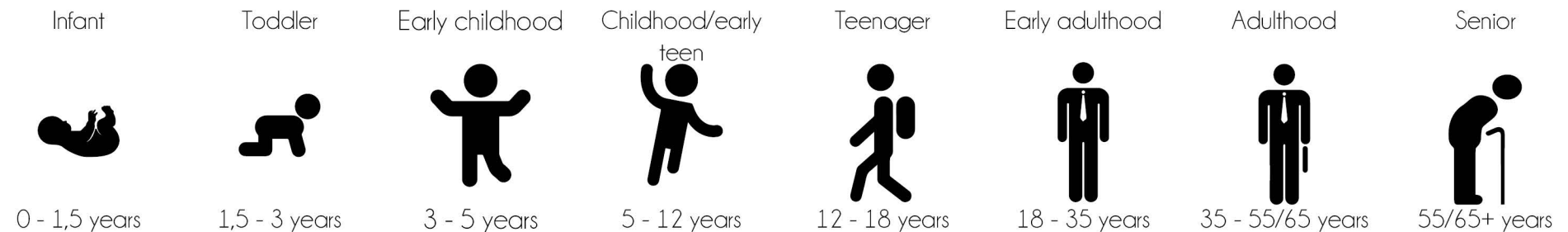
Possible outcome

V.II Groups within the catalogue

To make the catalogue more efficient for the different contexts there is a separation within the phases of life. With this deviation a proposed design or strategy can focus on the needs of the group that benefits the most. Reason for this deviation is that in the urban profession there is a preference to work for the weakest target group. This target group is children. They are the most fragile in society. Allegedly designing for the weakest group means that all other groups benefit as well. This however is only partly true.. (source this)

People from different phases of life require different things from their public space. For example the needs of children in the public space is a safe environment based on the limitations of a kid. Limitations like a low height and therefore not having an overview over the whole area, a yet developed calculation of risk assesment and so on. But what if we relate these limitations to elderly? Elderly can assess risks far better than children of course but they react slower then children, elderly are also less mobile than children. Where kids jump up the sidewalks, elderly with strollers that can not lift this up are not even able to go on the sidewalk.

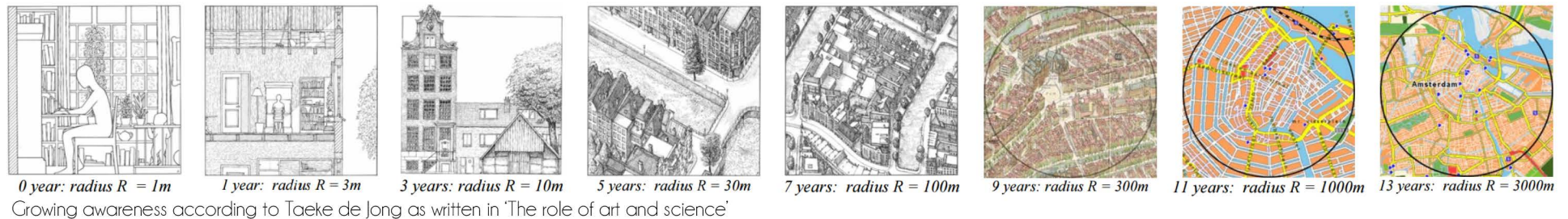
This presses the importance of separation of the target groups. The separation is made in the different phases of life as described by psychologist Erik Erikson. The phases are closest together in the beginning, ranging from infant (0-1,5 years), and infant (1,5 - 3 years) to Senior (55/65+ years).



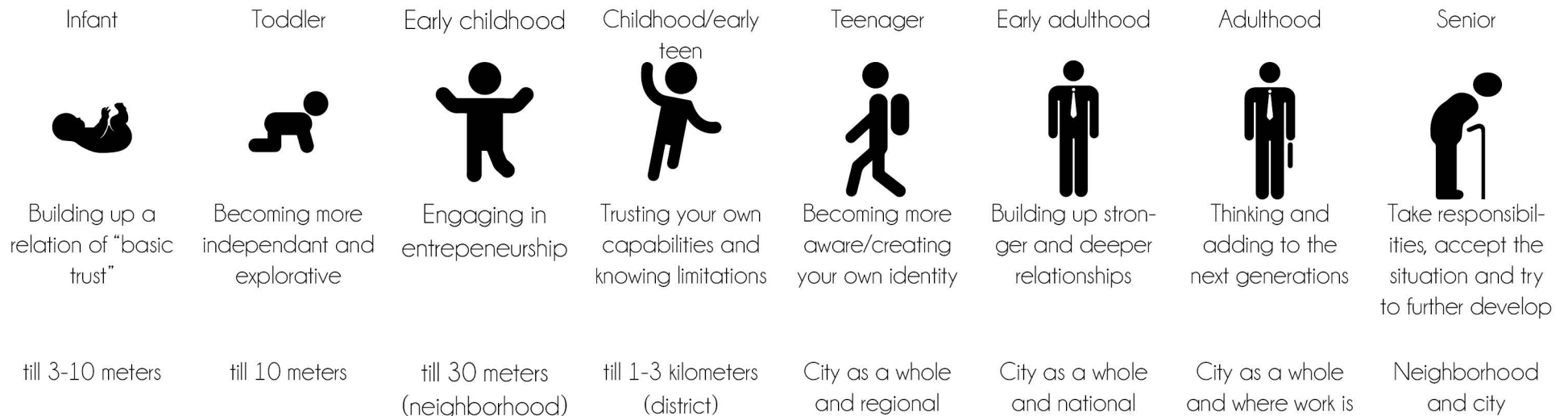
V.II

Groups within the catalogue

Each group also has its different schale of which he/she uses their environment. This also effects the possible proposals for the physical environment. Taeke de Jong wrote about the schales of interaction within these groups from 0 till 13 years in his report (source this).



Next to the scale of interaction per life phase, each phase also undergoes certain challenges. Things that develop within these phases and which can be related to the way they use the public space and their environment. According to E. Erikson the following goals of development of personal growth are important per lifestyle:



V.II

Groups within the catalogue

















Apart from the scale of interaction each group also has different ways to interact with their environment, different usages of these environments. The following usages are a few of the usages but nearly not all since this is related an unlimited ammount of factors.

Infant	Sitting in a buggy, getting pushed around by parents. Exploring the world by looking and observing.
Toddler	Sitting in a buggy, getting pushed around by parents. Walking around for a short ammount of time guided by parents. Exploring the world by engaging, looking and observing.
Early childhood	Walking around for a short ammount of time, can play in a playingground, can kick around a ball and exercize more motoric skills. This all under supervision of parents.
Childhood/early teen	Cycling around, playing on fields and playgrounds, doing sports like football, running & strawling around. This can be under the supervision of parents but is not always the case.
Teenager	Doing outside sports, hanging and strawling around, going shopping and going out.
Early adulthood	Doing outside sports, shopping, going out and participate in social events.
Adulthood	Shopping, participating in social events, walking pets and kids around.
Senior	Walking and sitting outside, relaxing and enjoying the rest occasionally walking pets and kids around.

V.II

The Catalogue

All the previously mentioned aspects have been gathered into one scheme which will be the basis of the catalogue. The spatial problems and possible solutions will follow later.

Life phase*	Personal growth*	Perceptive scale	Usage within the public space
 Infant 0 - 1,5 years	Building up a "basic trust" relation	 **till 3/10 meters	Nearly none, getting a tour around in the buggy Always assisted
 Toddler 1,5 - 3 years	Independence and explorative behaviour	 **till 10 meters	Touring around in the buggy, learning to walk, jump, run and basic motoric skills Always assisted
 Early childhood 3 - 5 years	Engaging in Entrepreneurship	 **till 30 meters	Walking around, learning the tricycle, walking, running, playing Mostly assisted
 Childhood/early teen 5 - 12 years	Trusting in own capabilities	 **till 1.000/3.000 meters	Cycling around, playing, doing sports, running, strolling Sometimes assisted, sometimes not
 Teenager 12 - 18 years	Building on own identity	 City and near by cities	Outside sports, hanging around, shopping, going out On an individual basis
 Early adulthood 18 - 35 years	Building up stronger and deeper relationships	 No limitation	Outside sports, shopping, going out and social events On an individual basis
 Adulthood 35 - 55/65 years	Thinking for the next generations	 No limitation but walkoriented	Shopping, social events and walking pets and kids
 Senior 55/65 years	Take responsibilities, accept the situation and try to further develop	 Because of inreibility the city and nearby cities	Walking around and sitting around, relaxing and enjoying the rest, occasionally walking pets and kids

*Source: Erik H. Erikson: Het kind en de samenleving: Het Spectrum, Utrecht/Antwerpen, 8e druk 1977, p.255-256. **Source: De Jong, T. M. (2010). The role of Art in Science. METU JFA, 27, 23-44.

V.II Catalogue with spatial implications

Possible spatial problems and their solutions

Life phase*	Personal growth*	Perceptive scale	Usage within the public space
Infant 0 - 1,5 years	Building up a "basic trust" relation	 **till 3/10 meters	Nearly none, getting a tour around in the buggy Always assisted
Toddler 1,5 - 3 years	Independence and explorative behaviour	 **till 10 meters	Touring around in the buggy, learning to walk, jump, run and basic motoric skills Always assisted
Early childhood 3 - 5 years	Engaging in Entrepreneurship	 **till 30 meters	Walking around, learning the tricycle, walking, running, playing Mostly assisted
Childhood/early teen 5 - 12 years	Trusting in own capabilities	 **till 1.000/3.000 meters	Cycling around, playing, doing sports, running, strawling Sometimes assisted, sometimes not
Teenager 12 - 18 years	Building on own identity	 City and near by cities	Outside sports, hanging around, shopping, going out On an individual basis
Early adulthood 18 - 35 years	Building up stronger and deeper relationships	 No limitation	Outside sports, shopping, going out and social events On an individual basis
Adulthood 35 - 55/65 years	Thinking for the next generations	 No limitation but walk-oriented	Shopping, social events and walking pets and kids
Senior 55/65 years	Take responsibilities, accept the situation and try to further develop	 Because of inreibility the city and nearby cities	Walking around and sitting around, relaxing and enjoying the rest, occasionally walking pets and kids

Spatial problems

Spatial solutions

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Research on senior citizens

In an attempt to see why seniors are more fragile, what their importance is of the physical environment and what the desires are of this physical environment an essay has been made. The full essay is to be seen in the Appendix

The desires for senior citizens of a livable residential environment.

A research to improve the liveability of the physical environment for senior citizens.

AR2U120, Theory of Urbanism

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June, 2016

Abstract - The research in this essay will elaborate on the aspects that influence a liveable residential environment for senior citizens. The group of senior citizens within the community is one of the more fragile groups and therefore this group deserves special attention. Most conventionally, designing for children, is designing for the community but this research will elaborate that the desires and aspects that enable seniors to interact with their environment differs from the desires and aspects of children. Results of this research will be elaborated in the form of results, recommendations and conclusions that help designers create a physical environment that includes the desires of senior citizens.

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Flevoland, new province during new policies

The consequences of the five spatial planning memorandums in the youngest province of the Netherlands

AR2U120, History and Theory of Urbanism

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Abstract – This essay gives an answer to the question on how the spatial planning memorandums changed the initial plan op de 'Zuiderzeewerken' to how they look today. Most striking outcomes are that until the third memorandum the cities of Lelystad and Almere have been equally supported, but after the third most consideration was put on only Almere. Therefore the capital city of the province did not, nor will it ever reach its full potential as proposed in the original plans by Cornelis Lely. Other cities in Flevoland like Dronten developed like they were supposed to since the memorandums did not drastically influence them.

Key words – Flevoland memorandum , Flevoland VINEX, Flevoland spatial planning, spatial planning memorandum.

1. Introduction

The aim of this essay is to investigate the consequences of the spatial planning memorandums issued by the government of the Netherlands from 1960 till 2001. The essay will elaborate these consequences in the case of South Flevoland. This is because this part of the province

emerged in the late fifties and the spatial planning memorandums started around this time. Therefore the constraints of other ongoing legislative and political affairs are diminished and a clear image of these spatial planning memorandums can be illustrated.

Beginning with the overview of the east and south of Flevoland in general the

essay will give a brief explanation of the initial goals of making this polder. In the following chapters these memorandums of spatial planning will be explained in general and then elaborated in the context of Flevoland. In this approach all five memorandums of spatial planning will be discussed and an answer will be given on how the initial idea of this polder has

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changed through time and governmental spatial planning legislations.

2. 1.000 square kilometres of manmade polder, east and south of Flevoland

The east and south of Flevoland is a part of reclaimed land of a bigger plan initially developed by Cornelis Lely called the 'Zuiderzeewerken'. In this plan the government wanted to reclaim land in the Zuiderzee, of which the left-over bodies of water are now renamed IJsselmeer and Markermeer. Five polders were suggested of which only four were realized. The southern part of the now-called province of Flevoland was developed in two stages and therefore was seen as two polders. The eastern stage was prepared for urbanisation and cultivation in 1957 and the southern part later in 1968. The original purpose for these polders was purely for agricultural reasons (Dienst der Zuiderzeewerken, 1961), to be less dependent on the import of foods and wares.

The province consists of four municipalities. The main municipality with the capital city is Lelystad and combined with the municipality of Dronten they form the eastern part of the province, with Dronten being the only municipality that represents multiple towns (Biddinghuizen, Swifterbant and Dronten). The southern part is formed by the municipality of Almere and the municipality of Zeewolde. All

together they form 1.000 square kilometres of urban and agricultural area.

3. The necessity of change

The first spatial planning memorandum was issued in 1960 after seeing a trend of migration. In 1950 5.000 people moved to the west of the Netherlands, the metropolitan region named 'Randstad', because most work was to be found in this area. In 1953 this number of migrants grew to 13.000. If this trend continued 700.000 people would migrate from the outskirts to the western region of the Netherlands in the coming 25 years (Angenot. L. H. J., 1959). This trend had to be stopped before all other regions apart from the west would become un-urbanized. So the first spatial planning memorandum was made (Ministerie van Volkshuisvestingen Bouwnijverheid, 1960). This memorandum acknowledged the west to be the beating heart of the Netherlands but wanted to maintain a balance between this metropolitan zone and the rest of the country. It tried to influence this in multiple ways.

One of them was giving Dutch residents that migrated out of the west a financial compensation for moving to an industrial area outside of the metropolitan region (Klerk, 2003).

Another way was to give financial aid to companies and firms that would settle in these more distant and seemingly problematic areas.

And the last one was to subsidize on social and cultural developments outside of the west.

So overall the government tried to de-motivate people to not only settle, or even migrate out of the metropolitan region. The part of the Netherlands where all the located work was at that moment. This was not only aimed to migrating people but also to the (industrial) companies.

3.1. Effects on the south-east Flevopolder

With Dronten, Biddinghuizen and Swifterbant starting their existence, the first inhabitants of these towns settled in 1962 and 1963. The Flevopolder, with a rather agricultural purpose, did not start rapidly with its industry developments next to the main agriculture. In Dronten for example the first migrated industrial company that settled was a grass-drying company called Grasdrogerij Marknesse (Gemeente Dronten, 2011) which was clearly related to agriculture. Dronten would be of a medium size city functioning as a caretaking city for the surrounding region including the towns of Biddinghuizen and Swifterbant. Therefore Dronten had more shopping and cultural functions whereas Biddinghuizen and Swifterbant would be kept a lot smaller (Dienst der Zuiderzeewerken, 1961).

4. Continuity of policies

After the first spatial planning memorandum the Netherlands grew

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enormously on economical aspect and the trends were looking promising. This was because the reconstruction of the war bore its fruits (van Velzen et al., 1989). The growth was even more than anticipated. "Never in the human history has it been needed and possible to urbanise tens of square kilometres to gigantic structures of residential areas where the terms like city and outskirts no longer hold meaning" as quoted by N.J. Habraken in 1964. This called for a new memorandum to guide that growth. The second spatial planning memorandum was issued in 1966 with the guiding theme 'bundled de-concentration' (Rijksplanologische Dienst, 1966). This was supported by the ideas of living in a green environment and living in the urban region of the cities (Dutch: Stadsgewest). In this policy they categorized the urbanization into four types; A-milieus being cores of around 5.000 inhabitants, B-milieus were the newer 'garden cities' inside urban regions, C-milieus were the middle-sized cities and D-milieus the bigger 'Randstad' agglomerations (Rijksplanologische Dienst, 1966).

4.1. Effects on the south-east Flevopolder

But unlike this trend that was going on in the rest of the Netherlands, Lelystad barely grew. With the first settlers arriving in 1967 it was a slow process of growing, because the city of Lelystad was poorly connected with the 'main land'. Another

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aspect of its slow development was that there was still no clarity on this point on whether the fifth polder would be made. Without this polder, called Markerwaard, strategically speaking Lelystad would be on a way weaker point as capital as initially expected (Gemeente Lelystad, 2015).

5. The third and conceivably most influential memorandum

Eight years had passed and cities were under a new thread. The un-urbanisation of cities was a current issue that should be tackled by the government before it got out of hand. A few other factors also lead to parts of this spatial planning memorandum. These issues were so closely related but bore such an importance that the third spatial planning memorandum was divided in three parts.

The first part issued in 1974 tried to stop the migration of people out of cities. In the previous spatial memorandums cities were supposed to grow and the government also forced this growth on the bigger cities because they were the motor of the Dutch economy. This was to continue growing to preserve their quality. This should be done by stimulating migration of the above-average income families to these cities, engaging in the unemployment problematics. So there was a slight duality in this process, stop migration by migrating people.

Because the migration had to be stopped, they restricted cities to only build new developments within in the urban region of the city with rules such as 'from each point in the city it should be possible to use public transport and reach the city centre in 25 to 35 minutes' and 'new extensions should be 5 minutes of cycling (or 4 km) away from a train station'. So the second part of this act did not only focus on upholding the city as a whole but also tried to stimulate the use of public transport, therefore de-motivating car use for longer distances.

In the third part of the memorandum (Ministerie van Volkshuisvesting en Ruimtelijke Ordening, 1977), which came out in 1977, the government realised they should stop focussing on strenuously growing the centres of urban development (Dutch: groeikernen) and put the attention on the tension between urbanized areas and the landscape. Because of the continuation of the urbanization the spatial variation of the landscape would get lost. Therefore this part of the act acknowledged three different kinds of landscapes; Zone-A was an agriculturally dominated area like the Flevopolder. Zone-B was a transitional area where the use could be varied between urbanized and landscape. Zone-C was similar to Zone-B but the use of the land parcels was on a much smaller scale. Zone-D were areas that should be dominated by nature; like 'De Hoge Veluwe' and 'De Utrechtse Heuvelrug'.

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5.1. Effects on the south-east Flevopolder

During the first two parts of the memorandum, with Lelystad being one of those centers of urban development expectations were that this city would develop a lot more. However because of the newer southern part of the polder there was a competition with Almere. Almere, given its better connection to the Randstad, was now also appointed a center of urban development and completely overshadowed Lelystad, creating a standstill in its development. The other cities in Flevoland like Dronten did not encounter any unexpected issues nor changes.

The third act of the policy did not help Lelystad either. They stopped with the centers of urban development system, but because of its location Almere was still growing in contrary to Lelystad, which was outside of the newly redefined limits of the metropolitan region of the Randstad (Dieleman and Musterd, 2013). Lelystad now faced the issue of vacancy and impoverishment which gave the city a bad reputation (Gemeente Lelystad, 2015). With the whole polder marked as Zone-A Dronten slowly but steadily continued its growth with extensions in the south (Zijlstra, 2009).

6. Fourth memorandum and the additional VINEX

In 1988 there was a need for a new policy, the third spatial planning memorandum proved to be successful and brought the opportunity that a new spatial planning direction could be taken. The government wanted to participate in the fast growing international market. "At a European and a global scale, there are signs of increasing competition between cities. The Randstad has the opportunities to join the competition. The best points of departure for an internationally competitive metropolitan locational environment are the agglomerations of Amsterdam, Rotterdam, The Hague. The Randstad is not only an area of opportunity. Nowhere else in the Netherlands do so many people live and work, or is there so much unemployment, nor are so many people on the move. Nowhere else is there so much pressure on the liveability of the cities, the opportunities to move around and the quality of the rural areas." (Ministerie van Volkshuisvesting en Ruimtelijke Ordening, 1988). So as a country we should not be conservative but more progressive to also catch up on the speed of this vivid and dynamic market. The core business of the Netherlands has always been distribution, transport and trade, and strategies should be contributing to this (Klerk, 2003). The memorandum exercised that in two ways: The first aspect was to compete in the global market in spatially the best opportunities. An example of this is the extension of the Rotterdam Port. This approach was guided with the spatial developments perspective ROP (Dutch:

Ruimtelijk Ontwikkelingsperspectief) . The second aspect was to at least maintain, and where possible improve, the quality of the infrastructure. This was approached in multiple plans like the 'Second structural plan of Mobility and Transport' SVV-II (Dutch: Tweede structuurschema Verkeer en Vervoer) and the Rail-21 plan from the Dutch Railway Company NS. The points achieved in the third memorandum of intensively creating a balanced demography were changed to guide and maintain this balanced demography, taking a lesser active role in it, but still controlling and overseeing it.

Two years later there was an addition to this memorandum called VINEX (Vierde Nota EXtra) that concentrated on managing the growth of mobility and engaging the environmental and spatial problems simultaneously (Ministerie van Volkshuisvesting en Ruimtelijke Ordening, 1991). According to this memorandum the government expected to build 835.000 more houses of which half should be build in the Randstad. The strategy of this approach was to prioritize densification in the cities first. If that densification was optimized, developments on the edges of the city could be built. If then the city still needed to expand they were allowed to have city extensions outside of the edges of the city. Hereby the government kept the idea of the previous memorandums of protecting the urban region of the city and not allowing an uncontrolled urban sprawl. However, the government did change its attitude towards

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these developments and had a more guiding and overseeing approach via subsidies and support than actively developing these projects. This response now lied in the hands of the municipalities themselves and the project contractors involved. To ensure durability of the projects the government paid out subsidies only ten years after delivery. This shifted the task responsibility of urbanization towards market instead of the government, resulting in what some may call more efficient but uniform and stale architecture.

6.1. Effects on the south-east Flevopolder

With the fourth and extra spatial planning memorandum Almere was appointed to facilitate expansion location to house the overflow from Amsterdam and 't Gooi. Appointing Almere because of its location close to these cities therefore empowering the SVV-II policy. The standstill that Lelystad faced starting off during the third spatial planning memorandum was unchanged but there were plans to revitalize the neighborhoods and the city center making it more attractive to live in. These plans started being realized in 1995 giving the city its own, new identity.

7. The unofficial final memorandum

The last spatial planning memorandum that was made, which never

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officially passed by the House of Representatives, was the fifth spatial planning memorandum (Ministerie van Volkshuisvesting en Ruimtelijke Ordening, 2001). The ideas of this memorandum have still partly been put into future policies. The reason for making this memorandum was that the government realised that the last decade there was not a lot of consideration for the soil and water management, it was demoted. Also the SSV-II was becoming outdated, the trend of owning a car and being more mobile was not only just a trend but widely encouraged by everyone. The last thing this memorandum drew its attention on was that the policy of the fourth memorandum created a friction between urbanised area and rural area, which was supposed to be tackled by previous memorandums but undermined by the fourth and VINEX.

There were a few concepts thought upon to tackle not only this friction itself but also, influenced by the economic atmosphere, the ownership of rural property. The space-for-space arrangement (Dutch: Ruimte-voor-Ruimte Regeling) stated that for example farmers who would demolish their agricultural structures could replace them with other function like residential structures. These arrangements are seen in all provinces of the Netherlands except for Flevoland. According to the policy given by the province of Flevoland "Urban extensions, new infrastructure, development of nature and recreation will shrink the agricultural production surface.

In most cases this will influence the decisions of entrepreneurs and companies to make investments and company-developments. It requires an early and careful communication between government and entrepreneurs." and "The province wants to support the agricultural sector in her future developments so that there is a more sustainable and vivid agricultural sector with more possibilities for developments of other economical functions in the rural area" (Provincie Flevoland, 2006). So the province wants to protect this agricultural identity it has.

7.1. Effects on the south-east of the Flevopolder

The consequences of this train of thought was that the initial function of the agricultural landscape in Flevoland is nearly unchanged. The quality of this landscape however did increase. Agricultural landowners bought over other lands and intensified their production. The amount of farmers became lower but the amount of production increased. The city of Dronten was still following the slow and steady trend of growing in inhabitants and had to facilitate for this on the outskirts of its urban region. The city of Almere was still growing rapidly with VINEX areas still being built from the former memorandum, but having problems with the outdated SVV-II. With these newer extensions comes the problem that the infrastructure cannot keep up with the rapid speed of these urban developments, creating problems with a

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good connectivity with not only outside of the province but also with the center of the city itself (Berg et al., 2007).

8 Conclusions

With the initial plan of creating a polder that would be directed towards agriculture the south and east polder of Flevoland succeeded in its goal. The success of the agricultural land is however a different story than the success of the urbanized areas. This is mainly due to the fact that one of the polders that were initially part of the overall plan was not made, the Markerwaard. The consequences for the smaller cities in the polder were quite minimal like Dronten, Swifterbant and Biddinghuizen. This is because they are reliant on the agriculture itself, which was, is and will most likely stay one of the strongest elements of this polder. The capital city however is only partly reliant on this agriculture because it also had the task of taking care of the whole province in the social and cultural facilities. With the city not growing as fast as it should in the beginning and later being outmatched by Almere in growth there is an unbalance in Lelystad which is being repaired now. This is a slow process that still did not reach completion yet. Almere on the other hand, growing out of initially thought proportions, did not only become a vivid and interesting city. But also became part of the metropolitan region of the Randstad because of its importance in this region. The

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first few memorandums made by the government were still partly supportive on Lelystad and Almere but later memorandums were mainly in favour of Almere. Therefore we can conclude that the agricultural goals of the Flevopolder could be seen as accomplished and supported by the spatial planning memorandum, but for the urban areas themselves there was an unexpected twist favouring the city of Almere above the capital city of the province, Lelystad.

9 Recommendations and/or further research

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The desires for senior citizens of a livable residential environment.

A research to improve the liveability of the physical environment for senior citizens.

AR2U120, Theory of Urbanism

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Abstract - The research in this essay will elaborate on the aspects that influence a liveable residential environment for senior citizens. The group of senior citizens within the community is one of the more fragile groups and therefore this group deserves special attention. Most conventionally, designing for children, is designing for the community but this research will elaborate that the desires and aspects that enable seniors to interact with their environment differs from the desires and aspects of children. Results of this research will be elaborated in the form of results, recommendations and conclusions that help designers create a physical environment that includes the desires of senior citizens.

Key words - senior citizen planning , aging, planning, desires seniors environment, perception safety seniors

1. Introduction

Just like all people within the community the senior citizens are users of the public realm. However, what distinguishes seniors from the rest of the community is that their physical environment, just like children, is fairly smaller than for adults. As individuals grow old their geographical mobility decreases and they become more interested in the neighborhood (Schwirian and Schwirian, 1993). This group within the society also functions differently because they are in this different phase in their lives. Most to all seniors will go towards retirement and, depending on their health, be (partly) taken into the health care. This makes the group of senior citizens more fragile and their environment more essential. This relation with the environment is emphasized by Skinner and Stearns (1999), Lin (1999) and (Rosenbloom and Morris, 1998) who argue that "people tend to retire 'in-place', so they stay in the neighborhood they lived in for the majority of their adult lives". Aging and retirement also leads to an increase in the amount of time the seniors have to spend in their homes and neighborhoods. Therefore the seniors are also likely to be increasingly affected by the environmental influences of residential settings (Rowland, 1984). In general seniors will face age-related

difficulties like lack of mobility, lack of sight and other age related issues. These age-related difficulties are partly what makes this group so fragile and different from people in other phases of their lives. This results in more specific desires for a livable residential environment.

2. The relevance for senior citizens

The importance of involving the senior citizens in planning decisions is that aging is a trend which has been going on as a consequence of post-war industrialization. For example from 2016 till 2040 the elderly society within The Netherlands will grow from around 18% to 26% while the children and teens will drop from around 24% to 22%. So the seniors will out-number children and teens under 19 for the first time in history (Van Duin, 2009). There is, however, a scarce and limited amount of instruments in designing and planning for these senior citizens. Most conventional instruments focus on the qualities of housing itself. So to build up on designing livable residential environments this essay will elaborate on the desires of these seniors of their environment. With these instruments the suggested interventions will not only be useful for the current generations

of seniors but also the future generations, with the notion that aging will still continue to rise until 2040.

3. Continuation of scientific research

The conclusions, recommendations and points of attention that are addressed are a continuation of the previously done research to improve the durable livable residential environment as researched by Van Dorst (2005). Van Dorst's research however, does not specify what the desires for this durable livable residential environment are per life phase. This essay will combine Van Dorst's methodological approach with theories based on senior citizens. Therefore this essay will be one in a series of more to investigate all the life phases as described by Erikson (1959) of which seniors of around 55/65 till death is the last category.

In an overall attempt to generate a catalogue with desires for each of these groups the findings of the series of essays will be overlapped with each other. Most likely some aspects for seniors will not be able to co-exist with for example children, and possibly other aspects for seniors will strengthen aspects for other groups. However this is also dependent

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on the context itself, which applies not only for the life phase groups but also the community in general. For example, in research done by Van Dorst, there is a certain gradation of perception in livability. He researched the livability in Poptahof a neighborhood in Delft, and Ruigoord a neighborhood in Amsterdam. In Poptahof other factors were more urgent, like safety, than other aspects and therefore were deemed not important enough and did not appeal to the inhabitants to improve their feeling of livability. They were looked upon as more 'luxurious or secondary' aspects of livability (Van Dorst, 2005). This research will take a more objective standpoint to see the results for an optimal livable residential environment. The degree of which aspects should get more or less attention depends on the context and location like shown in the comparative results of Poptahof and Ruigoord and are for the designers and planners themselves to balance out.

The livability that is addressed is the 'supposed livability'. This is a summary of values in the livable environment that takes into account the healthy and hygienic environment, the physical surroundings and the social aspects of an environment. Still this supposed livability itself is a complicated term which is intertwined with a lot of factors like health, safety and feeling of belonging. All these factors are interconnected with each other and therefore it is also hard to fully appoint

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the influences of one factor to only its own. To get a grip on the factors they have been categorized in three parts which will be described further on. The first part is the characteristics of health and safety, the second part characteristics of contact with natural environment and the last part characteristics of control and social relations. But because livability consists of these non-causal relations there will be a relation of even interconnection with these characteristics.

4. Importance of health and safety

The health of human beings have always been of a high priority. So high that regulations regarding health are even being enforced by the government in policies since 1901 starting off with the 'Housing Act' in The Netherlands. A certain degree of health is a common good for everyone. But as mentioned before senior citizens are more fragile than others and therefore they have more demands of health than other groups. Health itself could also be broken up in mental and emotional health and physical health of which policies mostly guide on ensuring a certain degree of physical health. Emotional health is influenced by feelings, anxiety, thoughts and behaviors and could be seen as forms of stress. These types of stresses are intertwined with each and every factor described in these characteristics. Varying from the perception of safety to the feeling of isolation. So although health is a virtue we all should be granted and even

enforced by the government, the emotional and mental health is something which is not enforced and often not regulated. It is a part of the virtue that is somewhat hidden and often not tangible. Regarding physical health, which could also improve the emotional and mental health, for seniors it is good to exercise. Exercise will improve endurance, is good for coordination, it will improve the way seniors rest and it will keep their mental condition healthy as well so seniors can perform daily tasks themselves. By doing exercises seniors can care for themselves longer instead of getting professional or institutional health care (Wijlhuizen et al., 2011). There are two forms of exercise classified by the TNO, an institution who does research for companies and government. The functional exercises which mainly consist of daily tasks and the recreational exercises like walking around and playing games. These recreational exercises could be linked best with the outdoor environment. Safety also could be seen as intertwined with health. This is because safety also plays a role in the recreational exercises. The reason for this is that, if a place feels unsafe, people will not interact with this place. This will improve the social isolation and the in-ability to do exercises. As Van Dorst mentioned, the environment has clear influences on the perceived safety. This relates to not only the social environment but also the physical environment. Most important factors are the feelings of unsafety, the social control,

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visibility and legibility and attractiveness of the physical environment (Hoek, 1990). The perceived safety can also influence the supposed safety. Austin et al. (2002) found out that "deteriorated neighborhood conditions increased concerns of safety, but they also decreased levels of satisfaction with the neighborhood physical environment, which raised concerns about the safety issues" so this highlights the importance of safety. Therefore safety for seniors will be one of the most important aspects since this will able or disable them to interact with the environment. For the people who do migrate, research has proven that there are three criteria for a senior that they base their location/migration on. The first is moving to a place with many amenities, the second moving closer to friends and family and the third and the last is for more institutional reasons like health care (Alsnih and Hensher, 2003). The importance of amenities is emphasized by Rosenberg and Everitt (2001) and Michael et al. (2006) who say that the livability of senior citizens will improve by having a variety services and amenities on walk-able distances which creates more autonomy and independence for the senior citizens. In his research Rosenberg also defines this walk-able distances by saying that trips that involve walking distances for 0.5km and lower are still within reasonable walking distances. The longer the trip, the more likely a car or other assisted mobility is used according to Rosenberg.

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5. Importance of contact with the natural environment.

Contact with the natural environment has a relation with health (Van Dorst, 2005). It can stimulate the emotional wellbeing of a person. Indirectly this is therefore also part of the emotional and mental health of a person. The natural environment itself should not be seen as a direct aspect of a livable environment but as an instrument to reach the goal of improving livability on a different way. For example nature reduces the stress level so if applied correctly in a design this could reduce stress levels and indirectly fear of victimization for users (Gullone, 2000, Ulrich et al., 1991). Especially for seniors the natural environment could be used as an instrument to reach certain goals. This is because the attractiveness of a space effects the way seniors engage with this environment. Other research done by (Michael et al., 2006) mentioned that seniors identified several aspects of attractiveness: gardens, well-kept yards, design of buildings and streets and interesting things to look at of which three aspects directly relate to the natural environment. Research of Mesch and Manor (1998) has shown that local attachments are still important and are not only results of locally based social relationships. In particular, at a time of high geographical mobility, the subjective evaluation of the features of the physical and social environment, such as the presence of open space (parks and

playgrounds) the lack of air pollution and noise and the kind of people who reside in the immediate area, are characteristics that bind people to place. So this means that a positive evaluation of a natural environment links people to the place. If the environment fails to meet at an individual's needs, the person will withdraw, if not physically, then socially and emotionally (Hunter, 1978, Kasarda and Janowitz, 1974) which will lead to more social isolation. An increase of the evaluation of environment however could lead to positive potential for not only the current but also future generations. "As an indirect benefit of the behavioral changes is that the elderly of the future may well be more willing to act in a volunteer capacity to their fellow elderly, and this help reduce the financial impact of the increasing number of elderly upon the formal support system" (Rosenberg and Everitt, 2001). The natural environment could also be part of the identity of place, something which is valued by seniors since they seniors spend more time in their homes and neighborhoods. Research done in Portland also shows that elderly also want to contribute to attractiveness of an area "Further, a few had participated in organized neighborhood activities, such as park clean-up days, litter patrols, and community gardens, or took individual action, such as cleaning graffiti off a sign, to improve neighborhood attractiveness." (Austin et al., 2002) The results of another study suggest that "improving the quality of neighborhood

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environmental characteristics will increase residents' concerns with appearance of the neighborhood along with their concerns about the quality of people who live there, which in turn enhances higher perceived levels of neighborhood safety. Therefore, this process is assumed to lead to a reduction in fear of crime" as quoted from Baba and Austin (1989). So overall the natural environment is best used as an instrument to reach goals on a different aspect.

6. Importance of control and social relations

Control is linked with safety as are social relations too. Control could be seen as the ability to control a situation. This control itself will give the seniors the feeling of security. However this control cannot be ensured directly by seniors themselves. It could be enforced more formally by for example having professional neighborhood watch but could also be done by having residents of this environment interact. The cognitive and emotional links that individuals have for their residential environment has been shown to affect the extent of involvement in keeping up the neighborhood, individual willingness to organize in collective action, and the exercise of social control to decrease signs of disorder and incivilities perceived as indicators of crime (Mesch and Manor, 1998). A network of social relations is often already strong with senior citizens because most seniors aging-in-place have lived here throughout their years of

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adulthood (Rosenberg and Everitt, 2001) so indirectly they might be able to help ensure control. Aspects like legibility also improve the possibilities to control the social and physical environment (Newman, 1972). Apart from the safety control also touches upon other aspects that are related to livability, like involvement, tolerance, social interaction, privacy and the social network. Regarding the improvement of livability some aspects cannot ethically be forced upon. Social interaction and involvement for example. People are free to participate if they want. But the risk of the modern individualistic society is that this created a downward spiral of social isolation. Because people do not interact with each other they feel like the people around them do not want this interaction and might see it as a burden (Kissane et al., 2001). Consequence of this is that people don't initiate on building up a social network. Especially for seniors who do not have a big social network or their network is shrinking this social isolation can lead to mental and emotional health issues (Ellaway et al., 1999).

7. Recommendations and points of attention for the physical environment

Overall the importance of health, safety, the natural environment control and social relations have been described. These descriptions lead to a series of recommendations for the physical environment. This mainly starts with removing

the feeling of an unsafe of an environment. This could be done for seniors by improving the legibility of an environment, having more people on the street or watching the street, using green as a barrier to put for example heavy traffic at distance (Austin et al., 2002). Next to the safety, health is also one of the main aspects that should be looked at for seniors. Improving health could be done by making areas more accessible, lowering the distances to be traveled, if distances are too far then a provide good public transport system in close range, make the environment attractive to walk through and support exercise by giving enough opportunities to rest. As last part which makes the senior citizens more involved with their physical environment is by creating platforms for individuals to interact with each other. The natural environment can be used as an ideal tool for this by for example public gardens, playgrounds and places where people can get together.

8. Conclusion

Results of this study show that one of the most important aspects that should be addressed is providing a safe environment. Both emotionally and physically the area should be safe, if not seniors will not even interact with their environment. Next to safety the health is an important issue of which the emotional and mental health should get more attention than the physical health, which is

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enforced in a certain degree already.

Secondary, but still important, is to involve the seniors in their social environment, which does not only improve their livability but also the livability of future generations.

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