

Healthcare 2025:
Buildings
for the future



Healthcare 2025: Buildings for the future



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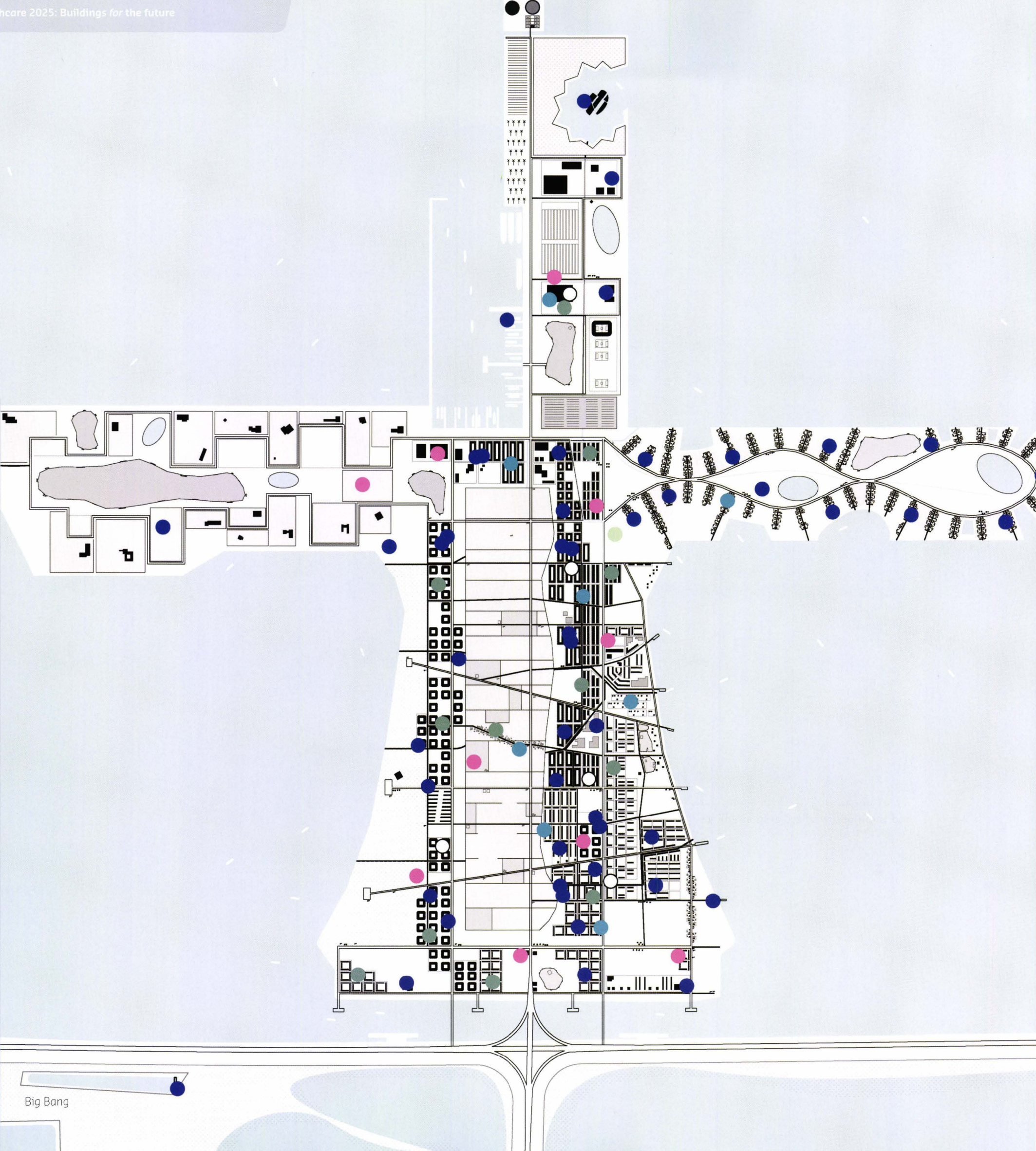
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How to read

In 2007 the *College bouw zorginstellingen* (Netherlands Board for Healthcare Institutions, further also referred to as “Bouwcollege”) organized an international architectural competition “Healthcare 2025: Buildings for the Future”. In this book the results of this competition are presented. The book starts with a description of the competition. The first chapter pays attention to the background, the assignment, the general opinions of the jury and the prize winners.

The following chapters focus on the three main themes of the architectural competition: vision on the future, vision on healthcare in the future and vision on the future design of cities and healthcare assets. Per chapter these themes are described.

The catalogue presents all 46 entries. Per entry three panels and their explanation are shown here. The editors shortened the explanations which were too long. Furthermore, the explanations have been checked for the correct use of the English language.



Big Bang

Preface

Dear readers,

It is a great honour for me to provide this book on the international competition about Architecture in Health Care in the year 2025, with a preface. The introduction itself will be done by the very experienced Chairperson of the jury, Ms Hedy d'Ancona, former Minister of Health and Welfare of the Netherlands. She is the only person who can expertly introduce the achievements of the competitors in the perspective of the assignment, literally in view of 2025.

This preface was written at the beginning of the year 2008. A very important year for the organizer of this competition, The Netherlands Board for Healthcare Institutions. An Organization that has been known in the Dutch field of Healthcare as the “*Bouwcollege*”. The year 2008 will be the first year in which the *Bouwcollege* will no longer regulate and direct the planning and the building of acute hospitals. After 35 years of regulating on behalf of the Dutch government, the *Bouwcollege* will have transferred its regulatory powers and responsibilities to the management of the hospitals itself. In 2008 the hospital boards will be responsible for the design, building, financing and maintaining of their own real estate. In the year before 2007, the Dutch government introduced its new healthcare real estate policy. By introducing more market incentives and more decentralized responsibilities in the whole healthcare system, including the hospital planning and building, the Dutch government tries to put more competition into the system with more power and accountabilities for the players in the health care field: the hospital boards and its professionals. The Dutch government thus put an end to its own direct financial involvement in the investment policies in capacities and buildings in health care. A daring proposition with respect to the decision making on hospital investments. In other countries of the European Union, the national government or government agencies do still have a heavy involvement in regulating capacity, structure and financing hospitals.

In adopting a policy of regulated market principles, this decision on the withdrawal of government involvement in health care real estate, was and is a consistent step in the chosen direction. However it is still a major decision and it means a lot of changes for all those involved in the hospital business. More responsibility means more accountability. More market means more transparency. More competition means more pressure on quality and costs. But it also means that the government regulations will have to be replaced by initiatives from the sector itself, by a more challenging behaviour and by a more cost-conscious investment and real estate policy.

This new policy had been in preparation for some years. In 2007 the necessary changes in the legislation were approved by the Dutch Parliament. However the moment of change in 2008 will still be a bit of a big bang to all those involved. A big bang, because it is a major momentary change in a long standing long term investment policy. Such changes are always difficult, because there are a lot of transitional problems to be solved. However, the *Bouwcollege* has always been in favour of this change in policy and supports the road to more decentralization of the powers and responsibilities with respect to the real estate policy in Healthcare. The *Bouwcollege* is confident that this road of more market and more transparency will eventually lead to a more balanced real estate policy in healthcare. Balanced between on the one hand the demands for quality and security from the customer/patient, and on the other hand the demands for a more cost-effective management on real estate matters from the hospital management under competition.

One of the reasons that supports this confidence is the conclusion that the new policy is built on a solid basis of 35 years regulation and expertise by the *Bouwcollege*, hand in hand with the proverbial Dutch common sense of the hospital management, that has been developed in these same 35 years, to make them ready to receive their righteous responsibilities.

After 2008 the other great sector of health care, the very large sector of Long Term Care Institutions, will be the subject of this change of policy. The planning of the Dutch government is that the big bang for this sector will take place in 2009. After that the “*Bouwcollege*” will gradually fade away as official government agency. It will be replaced by a private agency and will take part in the Netherlands Organisation for Applied Scientific Research (TNO). It will be called The Dutch Centre for Health Assets (DuCHA), and will accommodate all the long standing expertise and know how that was collected during those 35 years of activities. This centre of expertise will act as facilitator, advisor and supporter for all those people involved in strategic decisions on Health Care real estate.

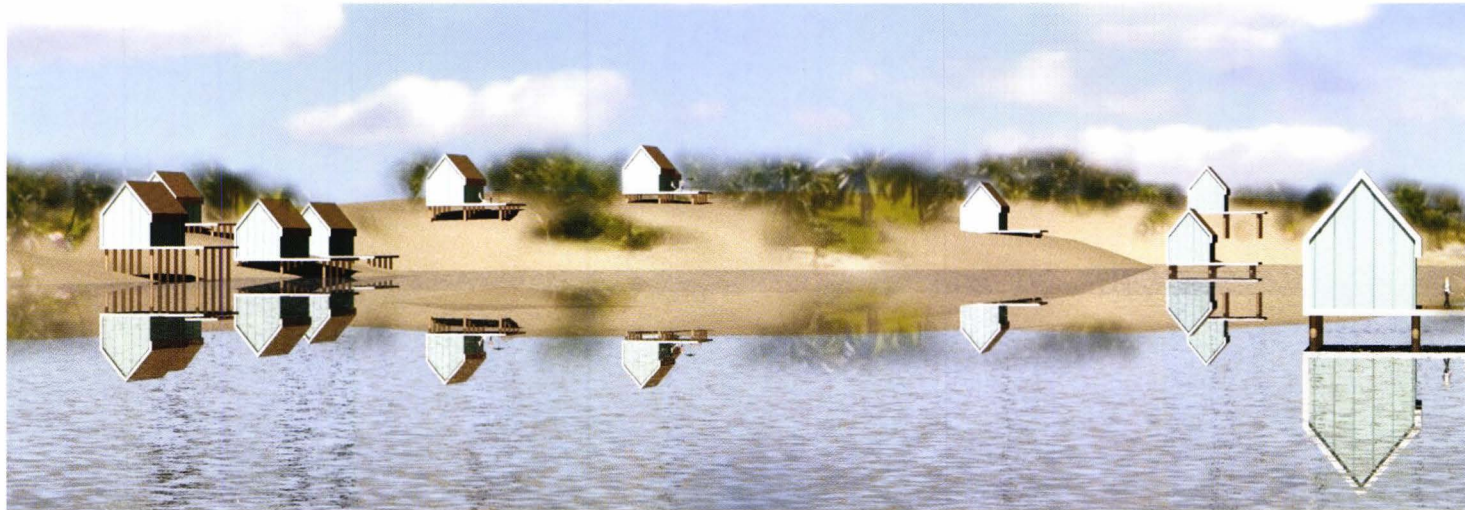
2025 seems to be far away, but if the target is focused on long term investments, such as the making and building of hospitals, costly but precious places for our patients, then the long term view will turn out to be a very actual issue for the future.

Robert L.J.M. Scheerder
Chairman of the Netherlands Board for Healthcare Institutions



Water of Life

Introduction



Water of Life

By organizing idea competitions the Netherlands Board for Healthcare Institutions (Bouwcollege) emphasizes not only the importance of good architecture in the healthcare sector, but also the wish to give concepts such as healing environment or evidence-based design a place in the designing process. By presenting the results of these competitions in clear and carefully edited publications, the Bouwcollege hopes to draw the attention of everyone involved in construction in the healthcare sector to unorthodox ideas and striking designs.

This fifth competition also marks the 35th anniversary of the Bouwcollege. For that occasion the competition programme was expanded: this time the competition was to be about more than just the facility, the building.

Architectonic and urban development solutions were sought for the healthcare facilities required in a city with 160,000 inhabitants to be realized in an imaginary location on the IJsselmeer in 2025. And that means that developments in the healthcare sector itself as well as in technology, energy consumption, the composition and age structure of the population, and the social con-

text within which all this will be playing, should be taken into account.

The fact that we received 46 entries, including seven international contributions, is encouraging considering the extreme complexity of this type of programme, for spatial consequences, based on a comprehensive vision on future healthcare and all factors affecting it, are expected to be visualized on three different levels, i.e. on a regional, a city and a building level. No architect – not even a team of architects – can accomplish that alone. After all, foreseeing developments in so many areas requires interdisciplinary expertise. Consequently, hardly any of the entries met all the requirements. Sometimes the prognoses were interesting; fascinating observations about our future way of living, our societal views, our wishes and needs in the area of healthcare, but the associated architectonic solutions were far less convincing, particularly on the level of the individual facility. Other entries stood out for the exciting relationship foreseen between people, their behaviour and their daily living environment.

Nearly all the entries in this competition are characterized by a strong belief in tech-

nological progress that will be used to our advantage, and a strong belief in the social commitment of citizens. In other words: the conviction that we will eventually find ourselves living in a healthy society that proved to be realizable by government policy. As a result, the concept of healing environment no longer regards only the appearance and layout of a mere healthcare facility, but the organization of life in the city and the residential areas in it.

By inviting this kind of ideas in competitions, and by publishing and discussing them, the Netherlands Board for Healthcare Institutions makes it clear that this is another way of identifying and studying possible innovations in healthcare. It is one of the activities with which the Bouwcollege positions itself as a high-quality knowledge centre in this area.

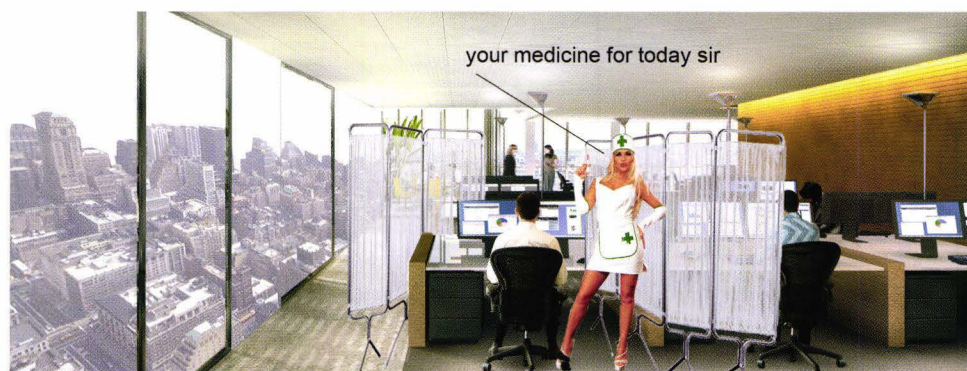
Hedy d'Ancona
Chairperson of the Jury



Fair Care - Care Fair

The architectural design competition Healthcare 2025: Buildings for the future

For the fifth time the Netherlands Board for Healthcare Institutions (the Bouwcollege) held an architectural design competition. In this competition, the Bouwcollege called upon designers and care experts to present their outlook on the spatial implications of the changing healthcare sector. The designers were challenged to elaborate on this concept for an imaginary location in the IJsselmeer in the year 2025.



CARE-4U



Hygiopolis

With this architectural design competition the Bouwcollege wanted to encourage innovative and future-oriented thinking about building in the healthcare sector. For the encouragement of interdisciplinary and unconventional thinking geared towards care, policy, entrepreneurship, planning and technology. The Bouwcollege wanted to inspire designers and clients in the Healthcare construction sector by presenting possible solutions to issues of the future.

Background of the competition

The healthcare sector in Europe is changing. Many countries are pursuing reforms to enable the supply of care to correspond better with the demand, and to keep care at an affordable level, amongst other things, by bringing about greater competitiveness and free market operations between care institutions. Simultaneously, it is realized that care should not merely be considered as a cost item, but that investing in care and in a healthy population also serves the social and economic interests.

Aside from these reforms in the European countries, as a result of economic developments, alterations in the living patterns and

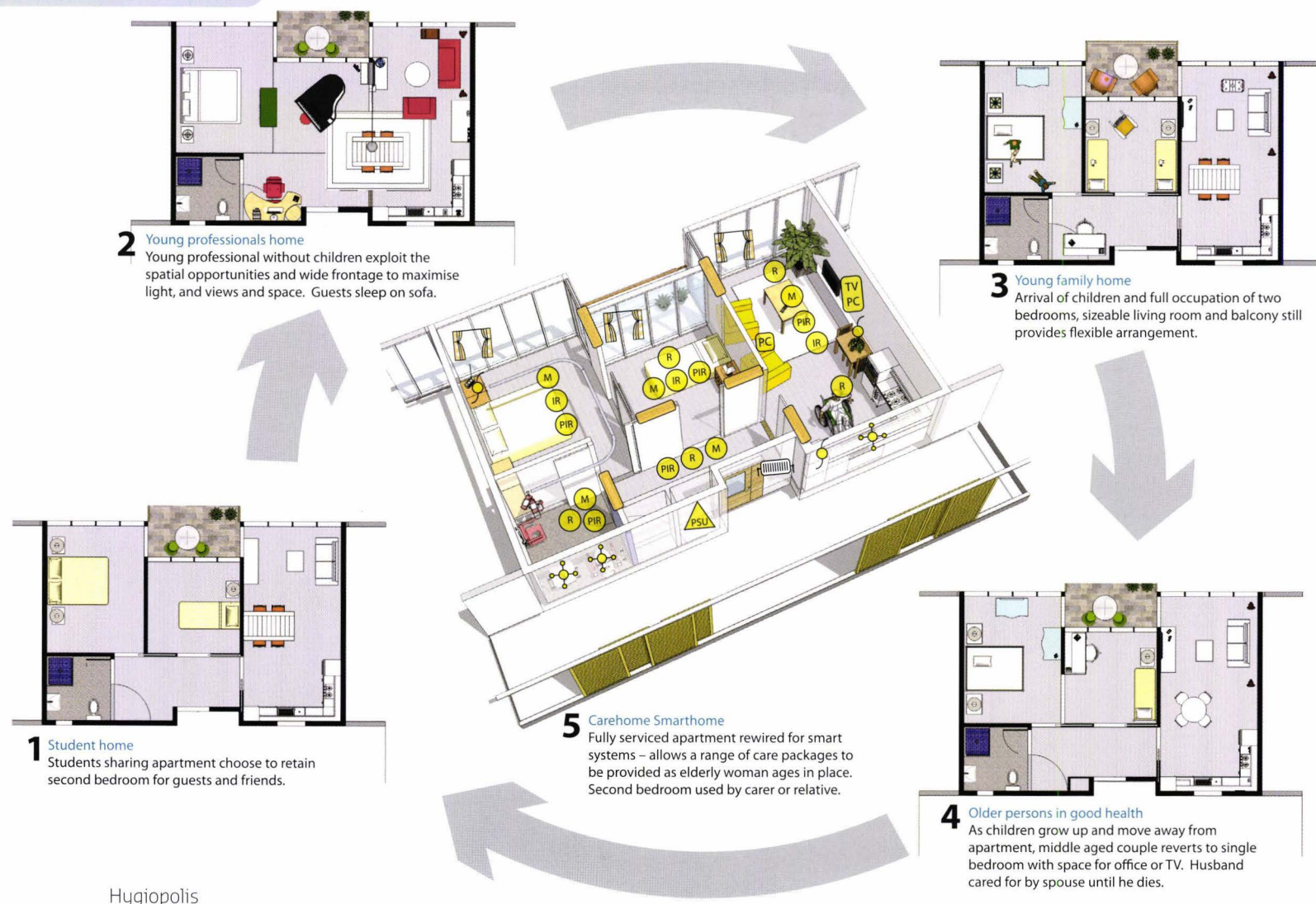
climate changes, there are also changes in the health of the world's populations. The aging of the population plays a role in the changing demand for care. Europe has an ever increasing population over 65 years of age and the number of 'aged' senior citizens is increasing: the group aged 80+ is increasing in relative and absolute numbers. This increases the number of age-related illnesses (diabetes, arthritis, dementia). There is a major increase in the number of overweight people. Moreover, due to the climate changes, there is the possibility that diseases which are seen only in tropical countries, could also occur in the Netherlands. Generally one can say that patients are becoming more outspoken, which results in a demand for better quality in the care requirements.

All these changes will lead to new kinds of healthcare facilities. In the oncoming era of healthcare facilities, other avenues will be explored regarding the spread of facilities and more attention will be paid to sequenced healthcare and the supply of customized care for the chronically ill. In this the affordability and accessibility of the care are, however, continually under pressure.

Within the healthcare sector the dynamism is not exclusive; so too are changes taking place in the circumstances outside. In 2025 a reduced availability of (fossil) fuels and a higher energy price must be taken into consideration. Climate changes will have consequences for the spatial planning, urban planning and architecture. The pressure on the space in the Randstad will be even higher than today and mobility issues will possibly be given a different character. Changing lifestyles, individual preferences and physical opportunities call for a new way of thinking about flexibility in types of organizations and accommodations, so that institutions and buildings can continue to function properly in the rapidly changing circumstances. Policy makers and care providers will have to find answers to these new major issues, and this will have consequences for the landscape, the urban planning and for the architecture.

Assignment

The assignment for the design competition concerned a hypothetical location. The given situation is that new land will be completed in the IJsselmeer in 2025; enough to build a city for 160,000 inhabitants. After a pio-



neering phase which can be ignored in view of this assignment, the new city will reflect a population which corresponds to similar Dutch cities in 2025 of that size. The healthcare for this city still has to be developed in its entirety. The city requires all the basic facilities, so that the residents only need to go elsewhere to top specialist medical care.

The assignment was to develop ideas for the layout of the healthcare sector in this new city in 2025. These ideas must be translated into a spatial and/or organizational design of the healthcare facilities, and an elaboration of a portion thereof. The full spectrum of the healthcare sector is broached. The location is bordered by the current banks of the Markermeer. The type of land reclamation is unrestricted, and likewise that of the city which arises therein.

General opinions of the jury

The jury was enthusiastic about the responses to this design competition and appreciates the amount of energy and creativity that the participants have put into the elaboration of the competition. However, the jury has observed that the general level of quality of the entries was disappointing. Entrants apparently had difficulty in providing care and

architecture at a high level all over. There are only a few entries with professionally elaborated designs with a surprising, exciting, innovative and visionary character. By comparison with preceding editions, more teams of students have participated in this competition. It is gratifying to know that the theme of the competition has drawn interest amongst young (upcoming) designers. The jury found that the given competition assignment was extremely complex which placed a high demand on the entrants. The jury thought it is remarkable that the entries portray a strong belief in the technological progress as well as a strong belief in a socially involved future society. Many assume that it is possible to create a healthy society and healing environment, and that people will stay healthy longer in a well designed city. Many entrants applied known spatial concepts and assume that the design in itself already creates a healing environment. Also, the jury could not deny the fact that the majority of the design teams do not have an overview of the broad scale of the healthcare sector. For most of the entries only one target group is highlighted. The pictures and collages presented predominantly contain relatively healthy people. The disabled and

other users of healthcare services are hardly shown at all. Among the entries more attention seems to be paid to prevention rather than to care and cure.

Conclusion of the jury

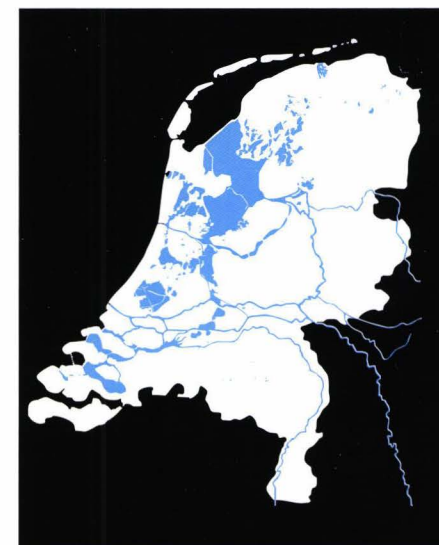
The jury is of the opinion that the main objectives of the competition have largely been complied with. According to the jury the European architectural competition can be considered a success. After all, a large number of ideas have been developed which justify a detailed analysis. With the results of the competition, the innovative and future-oriented thinking about building in the healthcare sector and the inspiring of designers and clients can be encouraged. Some entries stand out because of one or more aspects. If certain ideas or sections from various entries could be combined, then the end result could be seen as very refreshing, innovative and daring.

Mentionable entries

There are two entries, according to the jury, which deserve a mention in the jury report. The one entry's motto is *Water of Life* and



Water of Life



Water of Life

the other entry's motto is *Hygiopolis*. The entry with the motto *Water of Life* is one of the few proposals in which use is made of the unique possibility offered by the chosen location to make use of the surrounding water as a spatial quality aspect. The designers opted for positioning a number of (copies of existing) buildings which appeal to the imagination in the water, hence an attractive image comes about. The jury thinks that the entry conjures up a positive feeling. The entry with the motto *Hygiopolis* is appreciated because of the basic idea behind the design and the attention for a healing environment. The designers don't only assume that the inhabitants of the city have a healthy lifestyle but also take into consideration the course of life of the residents. Many aspects of the competition schedule are incorporated in the design.

Nominated entries

Honourable mention:

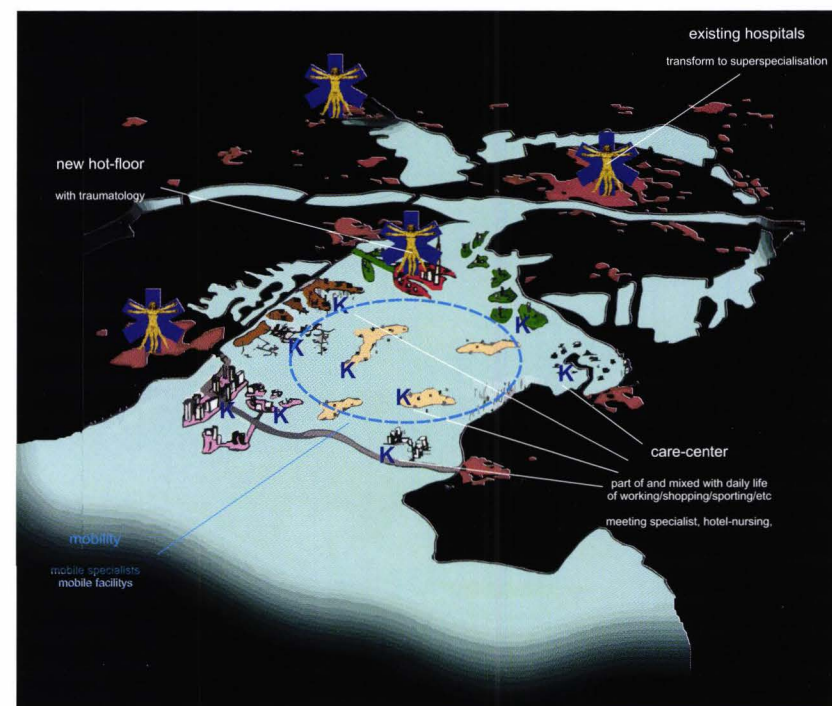
zorgeNLoos living

The entry with the motto *zorgeNLoos living* puts communal involvement first and foremost. The future healthcare sector, in the en-

trant's opinion, will be dependent on a large group of volunteers. So-called ZorgPunten (Care Points) are established in the city. These are low-threshold neighbourhood healthcare centres which provide important additional services on three care levels. Counselling for the needy is organized from the Care Points. Information, courses and preventive advice are given via a system of coaches in the healthcare sector. In this proposal a large portion of the healthcare is taken up by a social communal network consisting of family members and volunteers. Thus the costs for the other (buildings) care facilities, in the opinion of the entrants, could remain low. The Care Points could be structurally integrated in existing buildings or in new building projects.

Adjudication:

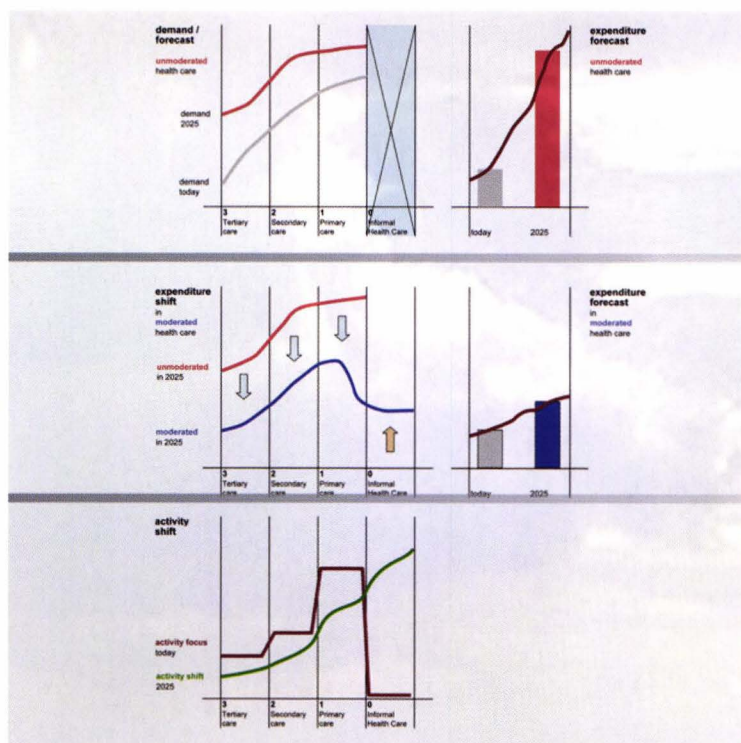
The entry with the motto *zorgeNLoos living* offers a most original outlook by anticipating the expected increased need for healthcare in 2025. It is perhaps naive and optimistic to assume a relatively healthy urban population, who can depend on neighbours, family or volunteers when they're ill. However, in order to continue guaranteeing the healthcare called for in the future, offer-



Water of Life



zorgeNLoos living



zorgeNLoos living

ing a greater communal involvement could perhaps be a solution. The jury has appreciation for the system of immediate and accessible care which is offered via the Care Points. The idea is elaborated for an existing city; an urban proposal for the location suggested, however, is missing. The architectural elaboration is described as effective. For the interior, the design is realistic and convincing and as far as the jury is concerned, it could be built as it is. The entry with the motto *zorgeNLoos living* is given an honourable mention by the jury.

Honourable mention:

CARE-4U

For the entry with the motto *CARE-4U*, the welfare of the residents in their own urban living environment is put first and foremost. The driving force behind this design is the placement and space granted to people's various lifestyles.

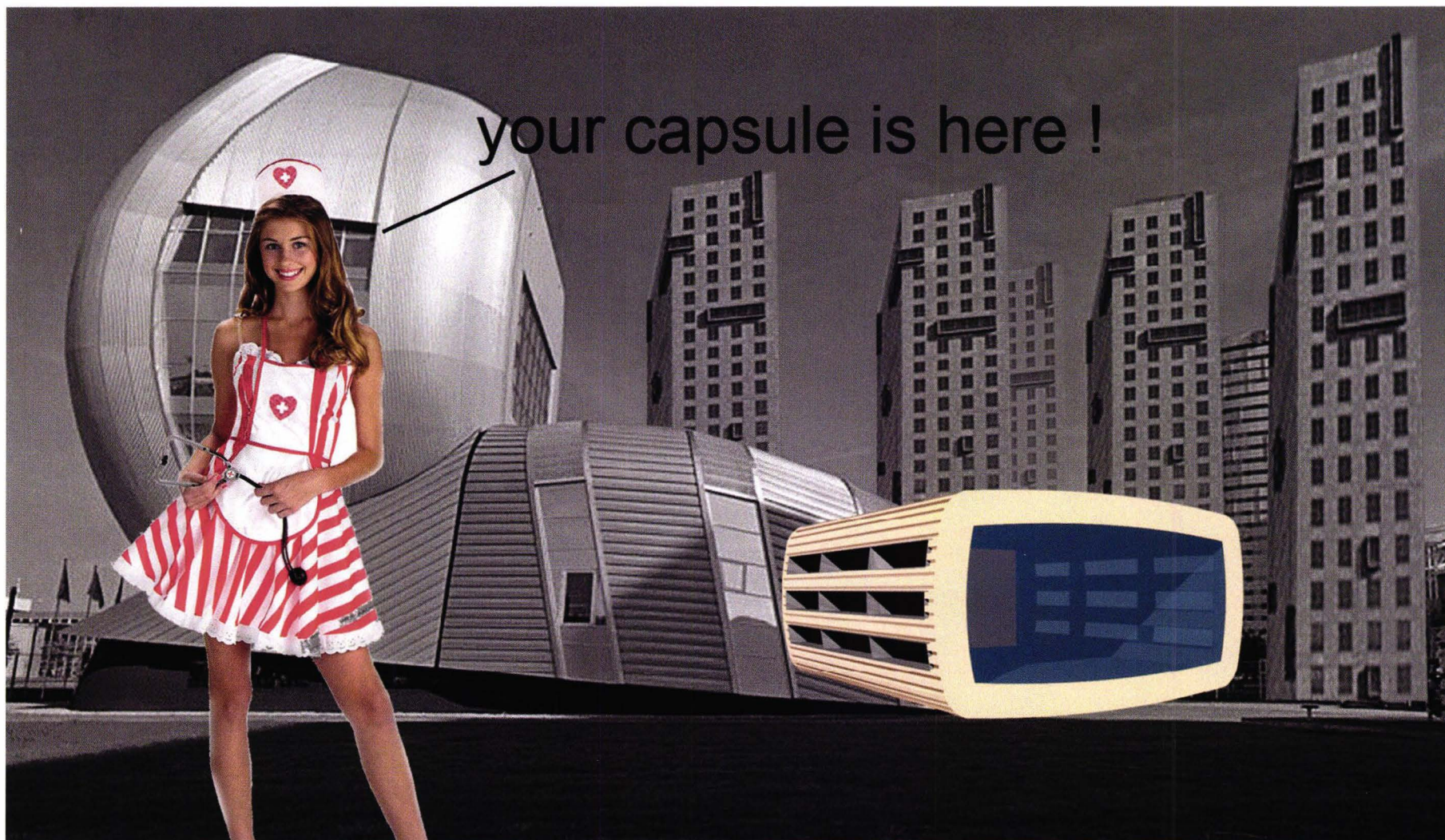
In this city which is geared to welfare, health and energy conservation there is no place for cars, but an excellent public transport network is constructed, which, according to the entrants, will cause the future residents to feel challenged to keep on the move – which will contribute to their well-being.

Three living environments are differentiated in the design: in the centre, urban and suburban. The city consists of different islands. According to the designers, the presence of the water offers an added quality which is advantageous for the welfare of the residents and, from an urban point of view, it is the crux of the design. The design is not a final picture, but provides a spatial structure which can incorporate future changes in lifestyles and urban transformations. In order to enhance flexibility and diversity in the supply of care, housing, healthcare facilities and general and technical services are detached. The idea is that changing needs can be anticipated on. The healthcare facilities could be positioned, like inserted modules, at different places in the city.

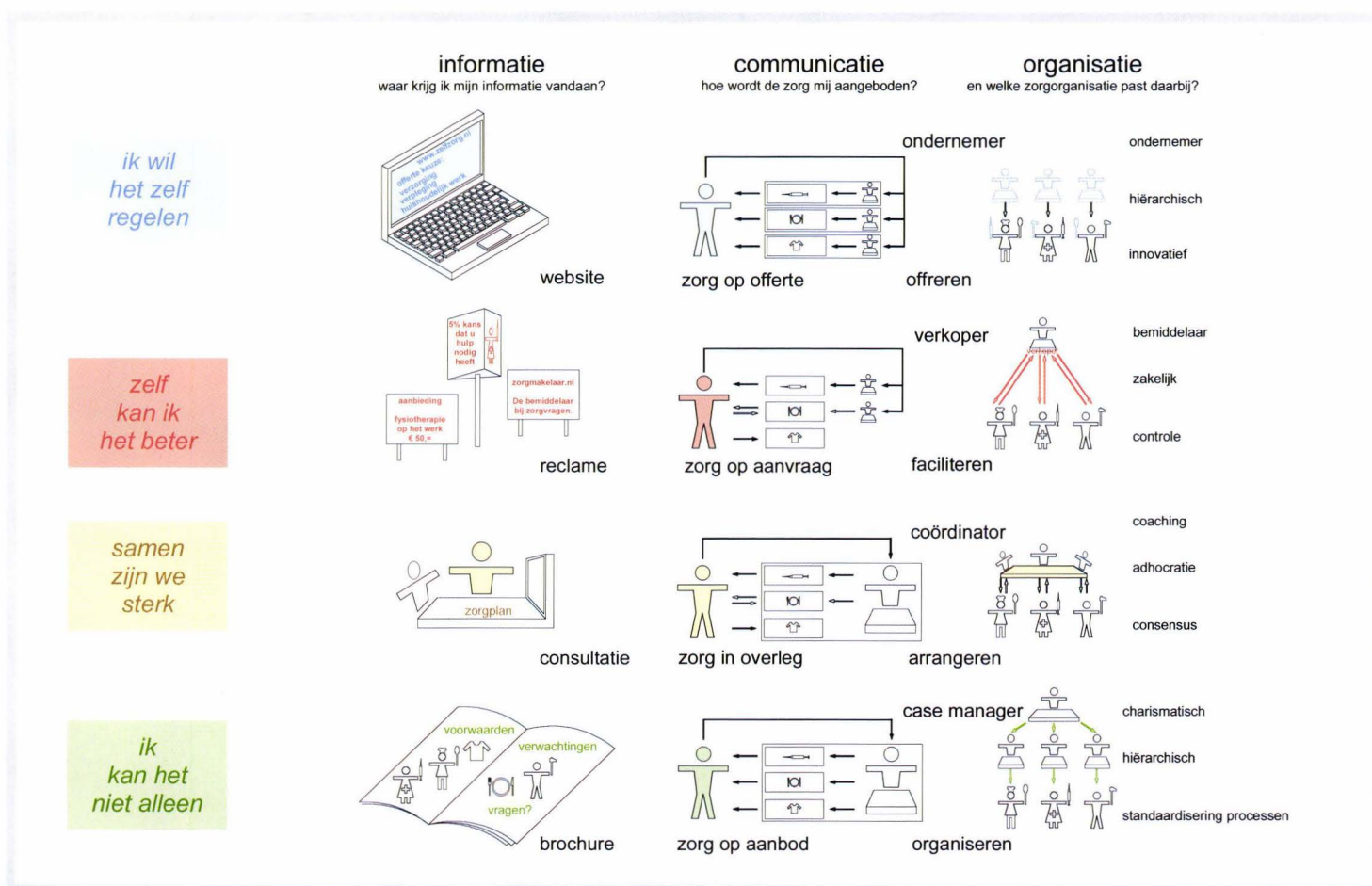
Adjudication:

The entry with the motto *CARE-4U* has been well elaborated according to the jury. The relaxed proposal offers a professional view on the problems posed and contains innovative elements.

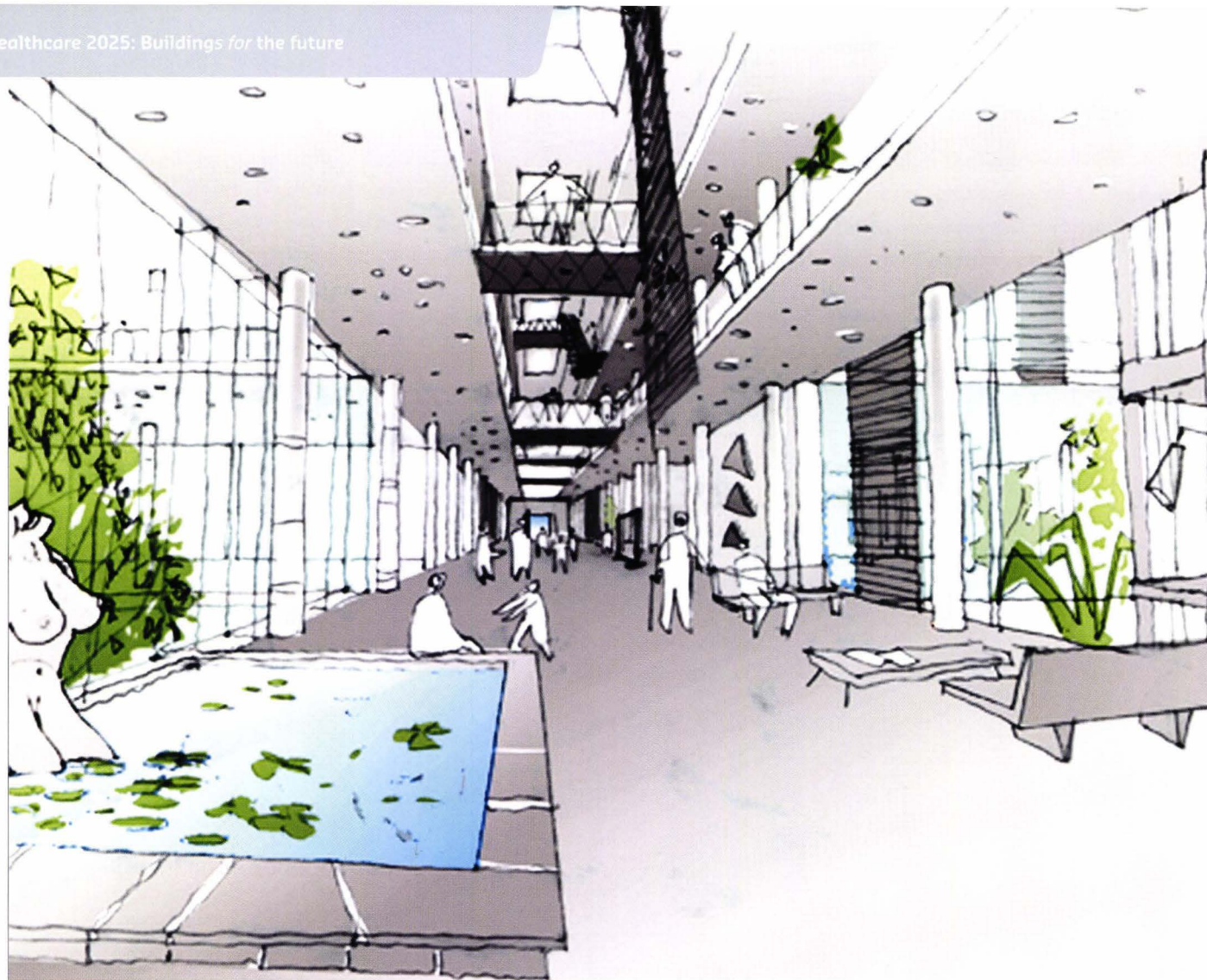
The proposed urban development design, of which the jury associates the architectural elaboration with typical high-rise schedules of the 1960s, does raise some questions.



CARE-4U



CARE-4U



Fair Care - Care Fair

The entry clearly differentiates the various users with the associated healthcare facilities. The manner in which users deal with their demand for care in the future is original and well thought-out. The idea of introducing a flexible system for the healthcare sector in which – unlike many other entries – attention has also been paid to the hospital patient, is appreciated by the jury. The jury considers an honourable mention for the entry with the motto *CARE-4U* in order.

Winner:

Fair Care - Care Fair

Making reference to the ancient Greeks, where the sick and the elderly were taken care of in an activities centre with cultural and sports facilities, the entrants of the motto *Fair Care - Care Fair* have designed the new city of Elysiadam, which they call 'Modern Asclepieions'. An Asclepieion can be situated both in the city centre near cultural facilities and along the beach.

Housing for senior citizens is in close proximity. Aside from a system of neighbourhood centres which provides for low-threshold access to healthcare, the designers also propose a centrally situated hospital, which is worked out in further detail in the entry. The hos-

pital is built up of modular units, hence the changing needs can easily be anticipated.

Adjudication:

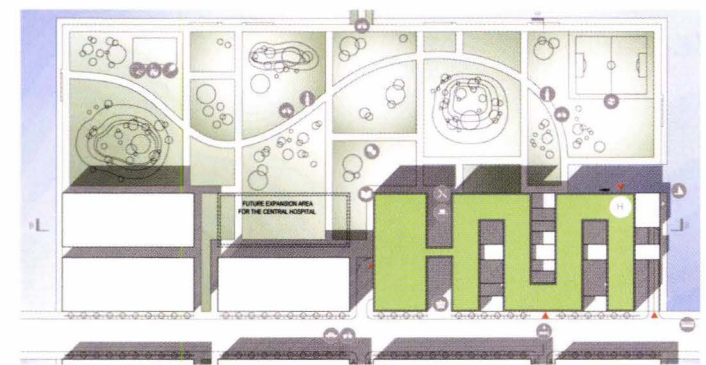
The jury considers the entry with the motto *Fair Care - Care Fair* to be one of the most complex entries because attention is paid to all the aspects of the competition schedule. The entrants envisage providing solutions for multiple target groups, including the disabled and the elderly. Even though this is not remarkably innovative or renewing, the jury is sympathetic towards the proposed system of spreading healthcare facilities.

The urban development plan is well thought-out, realistic and appeals to the imagination. The atmosphere of the architecture which is conjured up in the outlines of the buildings, is relaxed yet of a changing quality. A relatively great deal of attention has been paid by the designers on the elaboration of the central hospital. The entry with the motto *Fair Care - Care Fair* is marked by the jury as one of the two winning entries.

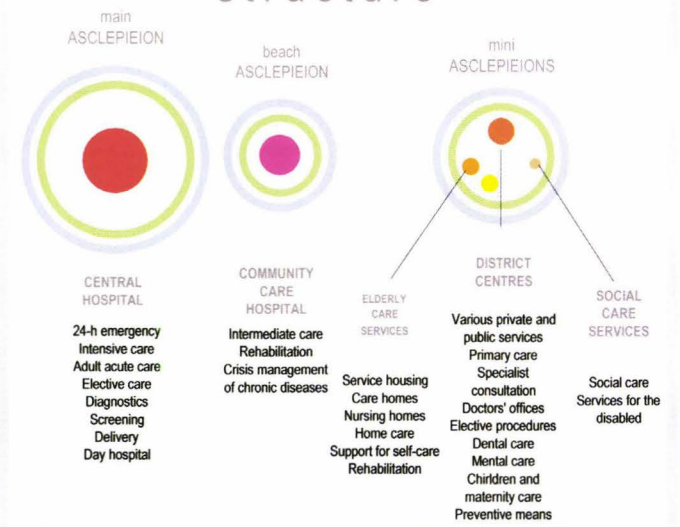
Winner:

Big Bang

The entry with the motto *Big Bang* outlines a scenario for a Healthcare system in 2025.



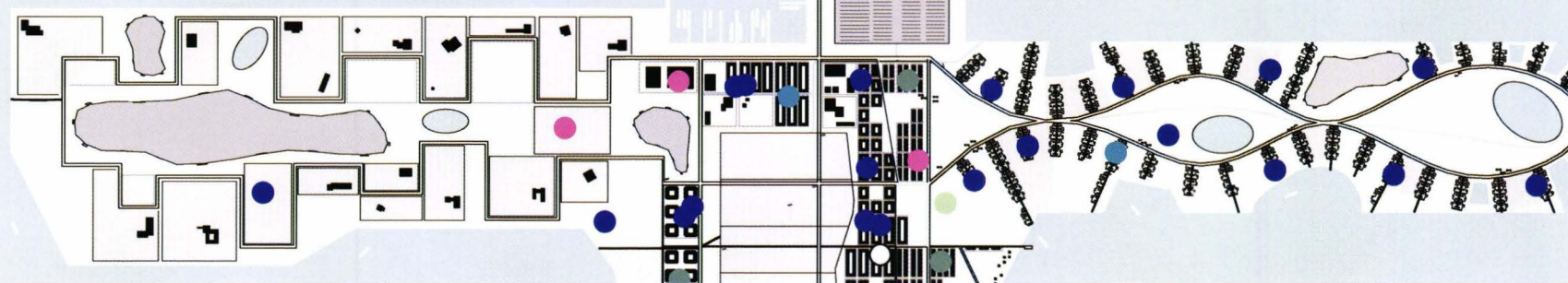
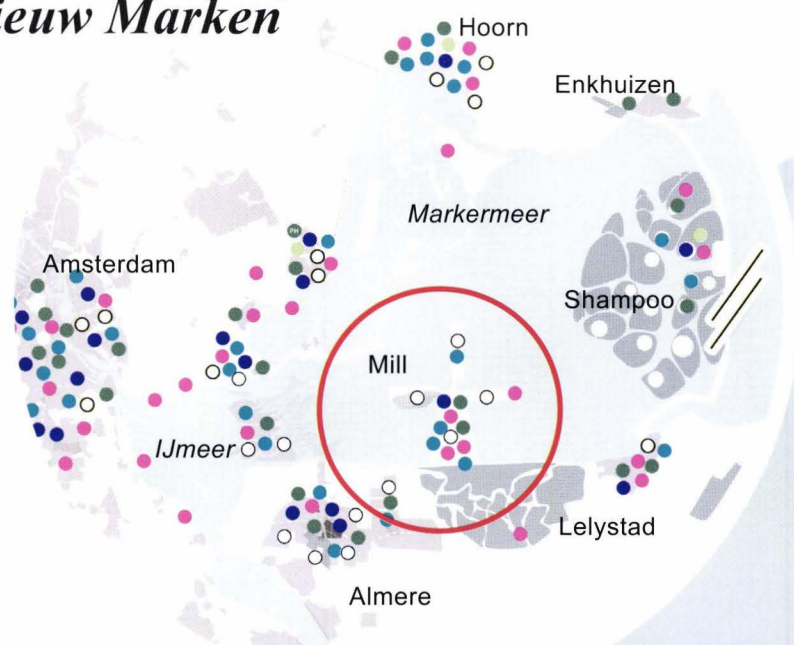
health and social care structure



The motto refers to the time that the hospitals that have grown into megastructures as we know them in 2007 – have exploded in one fell swoop into a fanned-out swarm of individual clinics and healthcare facilities, geared to the needs of specific target groups. The scenario assumes a highly advanced form of free-market operation and a regrouping in the healthcare sector, in which the client and efficiency improvement stand at the forefront. In this new system, DokterPlus (Dr.+) establishes the diagnosis in the Diagnosis Centre – backed or not by one of the so-called LABS. Then via the so-called Health Information Centre the patient can orientate himself on the most suitable healthcare facility. This new Dutch healthcare system, according to the designers, is so advanced that it even ends up in the top 10 of exported products and is also the reason for an increasing number of foreign visitors.

The city of Molen (160,000 inhabitants) is part of Nieuw Marken (500,000 inhabitants) and has been developed entirely by private parties. There are three 'wings' connected to the main structure of the city which house all the facilities. There is no traditional city centre nor any large-scale medical facilities.

Nieuw Marken



Big Bang

The transport system is a road system. Prototypes for the various care buildings required in the system have been developed by the designers. These can be elaborated on dependent on the location, atmosphere or taste.

Adjudication:

The entry with the motto *Big Bang* is complete and convincing. According to the jury, the original layout of the new city, in the form of a windmill, has a strong influence on the imagination. The whole entry can be described as "smart logo architecture", because the typology of the various building designs can also, as such, be more or less classified as simplistic. As compared to the many other entrants who have island structures, this proposal is considered to be one of the most interesting spatial compositions. The proposed system for the healthcare as such, is not pioneering innovation, but the jury does appreciate the clever manner in which the today's developments, such as free market operations and scale changes in healthcare, have been carried through to a new model for the future. The proposed healthcare system and the spatial elaboration, have been integrated in a lovely way. The jury is somewhat unsure about the pro-

posed modernistic architecture, but in an urban development respect it's an innovative concept. The entry with the motto *Big Bang* is marked by the jury as one of the two winning entries.

Cure

medical proto types amount places

HCI HealthCareInformation	5	
DR+ DoctorPlus	6	
LAB Laboratory	1	
DC DiagnosticsCentre	1	
PH Pharmacy	20	
CL Clinic mental	5	100
CL Clinic somatic	5	100
UC UrbanCareHouse	2	100
RC RuralCareHouse	2	110
		410

Composition of the jury

Chairperson: **Ms. H. d'Ancona, MSc.**, former member of the Bouwcollege

Ms. R. Glanville, Head of Medical Architecture Research Unit, London South Bank University

Ms. J. Rodermond, MSc., Director of the Netherlands Architecture Fund

M.A.M. Crouwel, MSc., Chief Government Architect of the Netherlands

J. Hamel, MSc., former Chairman of the UMCG Supervisory Board

M. Verweij, MD, Member of the College bouw zorginstellingen

Prof. W. Patijn, MSc., Architect and Dean of the Building and Architecture faculty at the University of Technology Delft

Supported by

The Bouwcollege:

Ms. P.S. van der Schaaf, MSc.

P.W. Heijmen, MSc.

Ms. W.H. van Staalduinen, MSc.

S@M stedebouw &

architectuurmanagement:

M.A. Visser, MSc.

Ms. M. Paulissen, MSc.

Statistics

Start entry: December 1, 2006

Closing date entries: July 2, 2007

90 registrations

46 entries: 11 (teams of) students, 7 from abroad

EUR 30,000 prize money

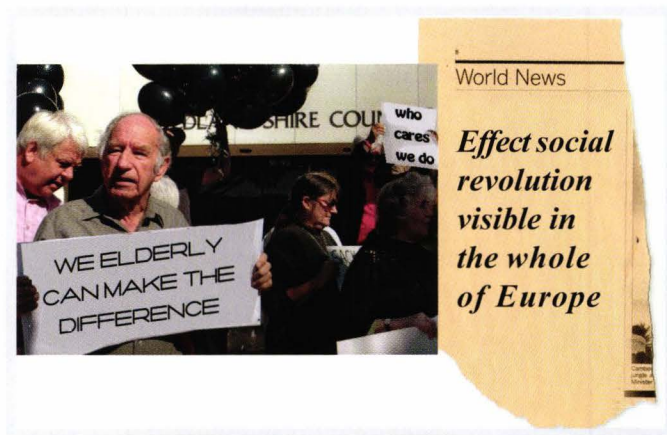
The results of the competition were presented at the jubilee congress of the Netherlands Board for Healthcare Institutions, September 25, 2007



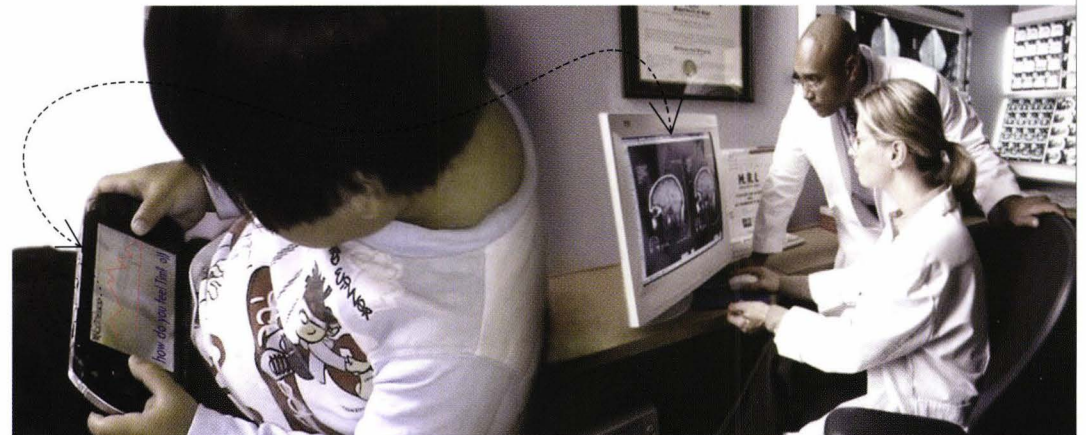
MEERmarken

Vision of the future

A vision on healthcare in 2025 cannot ignore the changing circumstances that city planners and healthcare entrepreneurs have to deal with. In part, future circumstances can be reasonably predicted, but much is also a matter of speculation, or design. In the proposals there is a wide range of views, based partly on likely scenarios, partly on politically-laden revolutionary changes. Recurrent themes are government and market, collective and individual, lifestyle and diversity, nature and a healthy city, and mobility and energy. In the most creative ways design teams have combined economic, architectural, social and environmental theories to come up with a rich diversity of possible futures.



Care in motion



A caring network

The brief asks for a vision of the future, translated to the design of a city, of which the healthcare system is elaborated. Of course, the visions that are returned are mostly centred around healthcare. Striking is the trend that environmental issues, which were part of the conditions in the programme, turned out to be the leading themes in the scenarios outlined.

The link between environmental quality and health is put forward in many entries. Changes in social relations are also mentioned quite often – partly because of population aging and changing patterns of health, partly as a result of developing or retreating individualism.

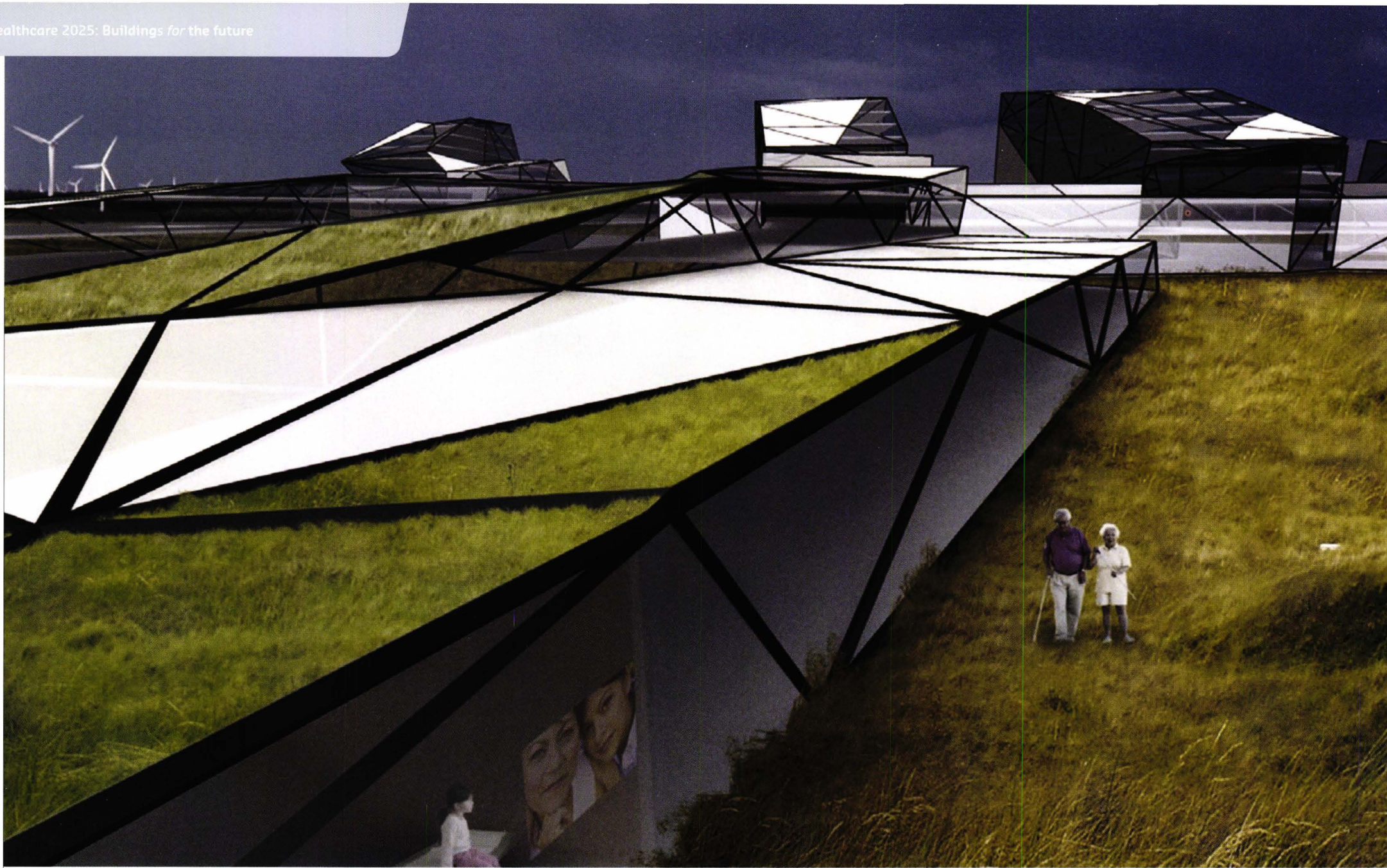
There seem to be two major movements among the participants in the competition, that have hardly any common ground. On the one hand there are the technological optimists, who start from the idea that technological progress and economic growth will solve many of the problems that society

faces today, making those issues obsolete. In the future, there will be different questions to answer, and the presented scenarios seem to focus on the higher expectations of quality of health and care, and growing individualism.

Technological optimism seems to be based on the current state of mind, where solutions are expected from engineers and economists, but people are not prepared to accept substantial changes in their way of living or being cared for. This will only become problematic when reality will show that the technical solutions don't materialize, or that they don't offer what they promise to, or that they cause new problems. The competitors cannot be asked to offer solutions to every possible scenario, but analyzing the proposals, it must be concluded that some are dependent on external developments in such a strong manner, that this weakens the credibility of the schemes.

On the other hand, we see the social optimists, who believe that the major issues of this time need to be solved by changes in behaviour of people and changes in social structures, as technology and money will not be able to solve large parts of these issues. The optimism lies in the assumption that in 2025 much of the population will have come to understand that such changes are inevitable, and that on this basis governments or market players will choose to radically alter their ways. And that individuals will be prepared to change their life patterns in such a way as to make new structuring principles possible, which are not viable today.

These proposals demand a great deal of solidarity and unanimity from the people living in the city, the voters in its democracy and the customers on its markets. One basic assumption then is, that this unanimity will grow out of itself as a result of a changing mindset of the entire population, or that it



A caring network

can be realized by design. Changes of this magnitude have not occurred successfully in the past, and too much dependence on such developments raises questions about the feasibility of the projects.

Both movements do show interesting and original ideas, which offer possibilities and opportunities even in a less utopian future. Some of the entries are so realistic as to state that the solidarity which is needed for the plans to succeed cannot be expected from just anybody, making the designed city a niche environment for those who make a conscious choice for a different way of living and caring.

Both winners are clear examples of proposals that don't assume spectacular external developments, but find a way somewhere in between the outlined movements. *Big Bang* starts from an ongoing individualization, limited technological progress but also nec-

essary choices in the distribution of available care. Likewise, *Fair Care - Care Fair* needs no major technological innovations or social adaptation to realize the proposed vision.

Government and market

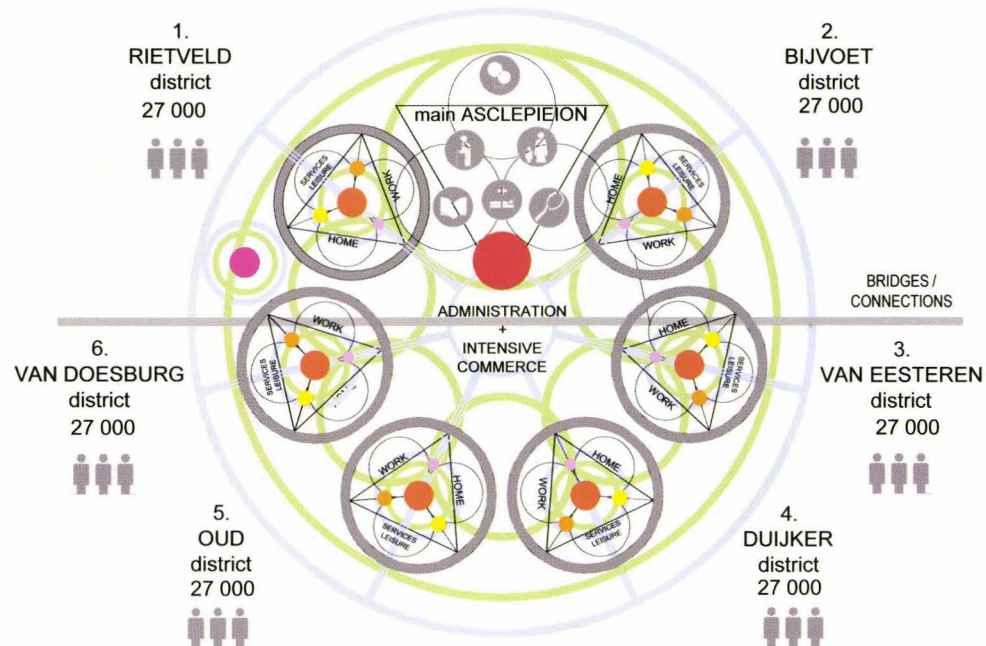
Recent developments in several European countries including the Netherlands have clearly made competitors think about the relative position of government and market mechanisms in healthcare. In several countries, a movement can be seen towards privatization and differentiation of available care, in which the consumer of care is approached more as a customer than as a patient. At the same time, the solidarity of healthcare systems is under pressure because of limited resources and a large group of people needing care, that cannot afford the increasing costs. Aging leads to a higher demand for specific care for the elderly.

An increase in scale of health facilities and organizations is a classical way of respond-

ing to the need for a better price-quality ratio. But at the same time care consumers grow more independent and demanding, and ask for security and small-scale homeliness. The possibilities of planning on the one hand and market competition on the other have inspired architects and planners to find very diverse solutions.

Fair Care - Care Fair is a clear example of a planning model with government steering, although this is not elaborated in detail. In ancient Greece the State provided an activity centre with cultural and sporting facilities. The sick and the elderly stayed in this healing complex enjoying maybe their last days in a human and inspiring environment. This concept has been modernized and is projected onto a resourceful system of care facilities. The urban planning, distribution of care facilities in the city plan, the programme of these facilities and even the building constructions are described as

the city-island ELYSIADAM



Fair Care - Care Fair

a homogenous city-wide system that is accessible to everyone. This is not a market-like situation at all, but a well-planned city controlled by a strong government.

Other entries define a government role as essential, but less than in *Fair Care - Care Fair*. *MEERmarken* is a joint venture of government and market, NGOs and individuals. The aim is to create a society that cares, instead of waiting to be cared for. By co-funding innovative projects, the government strives to lower the need for healthcare, which is kept public. These projects strive to achieve less cars, less fuel, less energy, and correspondingly less health problems. The money saved is translated into time spent with the people who need support. The assumption is that when people take care of each other, public healthcare will become much cheaper. Insurance companies will grant discounts because of this lifestyle and this will help make the system economically viable.

Healthdome.org sees commercializing of healthcare as a problem. The government must preferably continue to play an important role in financing, facilitating, controlling and steering healthcare. There is a growing need for diversity in healthcare, resulting in diverse procedures, residential forms, etcetera. A multitude of providers in varying coalitions react to all opportunities and constantly work at developing new healthcare products.

In this multicoloured healthcare landscape, *Healthdome.org* aims to increase accessibility and recognizability for clients by giving healthcare an image and a characteristic location in the townscape. By making use of the town identity and by connecting healthcare functions to that identity, 'care' can be made a positive component of urban life. There is an organization in the city which is responsible for the recognizability of the health information points. This is a cooperation between the local council, healthcare



MEERmarken

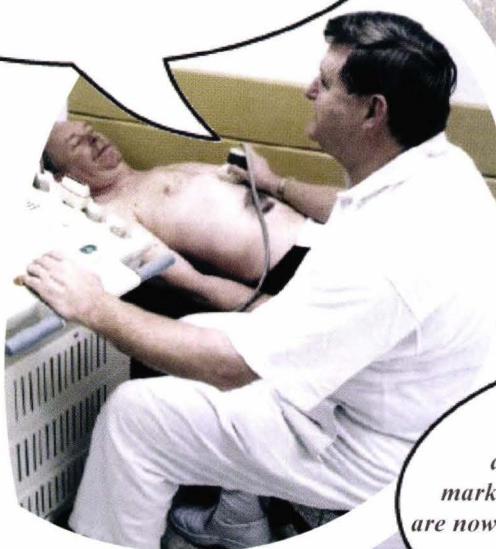


CIT-Y

institutions, insurers and market parties. The city council remains in charge.

Big Bang assumes that medical professionals will soon choose to free themselves from the chains of government-planned care in city-like megabuildings. They will go private and choose more flexible ways of working in a diverse, market-driven manner. The government plays a role in establishing a mandatory health insurance that covers all treatment in clinics, guaranteeing solidarity in the Healthcare System. Differences in class, prices and luxury only show up in Care Houses, which are more hotel-like. All health organizations and chains in this scheme are privately owned. They lease from the real estate market. Location factors for each facility and service are defined by health impact, accessibility, density and environmental qualities, to service the patient's individual needs. Government planning is absent. In 2025, healthcare will

"...In 2025 we doctors are in the driver's seat again. New technology finds its way into our practice easily. If it works for the patient, is cost-effective and we can afford it, all it takes is the time to get it in place..."
Dr. Janssens. Coronary Clinics NL



"...Our ready-made foods have always been successful in the consumer market. With slight additions in terms of diets we are now the No. 1 provider of food for clinics. None of them have kitchens, we do ..."
Sales director Ahold



Big Bang

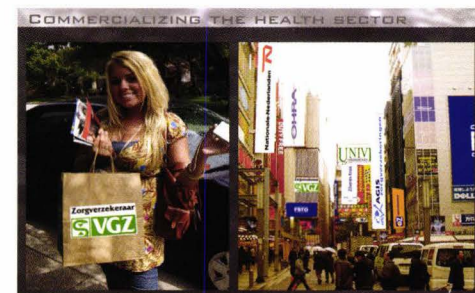
have become one of Holland's top export products. By treating patients from abroad, who bring their families along for support, Dutch economy is boosted.

In *We Care*, healthcare becomes health business, efficiently run by private organizations. By market laws, healthcare institutions will have to approach people as individuals, instead of as 'patients'. Healthcare buildings will more closely resemble shops or wellness institutions than today's clinical and bureaucratic bastions, since the new-style businesses will have to compete for their customers' attention. Insurance companies play a central part in the system: Their aim is to keep care affordable and accessible. To do this, they will have to integrate care more than usual into other types of services and business. By offering to all what can only be afforded by a happy few today, companies will ensure that health problems are less of a barrier to an enjoyable life.

Collective vs. Individual

Another leading issue in many of the proposals is the equilibrium of individuality and collectiveness. This is visible in many aspects of urban design, city life and architecture, but especially in care system and caring philosophy. Issues of solidarity, volunteers' work and social support are treated as the essentials. The threatening shortage of healthcare workers necessitates clear choices. Should healthcare adapt to society, or should society adapt to healthcare? How much can one ask from non-professional care-givers, and what is there to be offered in return?

Isle Care argues that it is possible to describe the social frame of mind of a community parallel to the Kondratiev curve (an evidence-based economic model used for development scenarios). Sometime around 2007, there would be a shift from an individualistic mindset to a more socially aware



We Care



Blooming up

one, which would continue up to 2025 and then reverse. This trend can be combined with two other developments, growing individual self-determinacy and the diminishing influence of space on social structures due to growing physical and virtual mobility. Together, this indicates a development towards a society in which people are more socially aware, primarily within their chosen social groups but also to society as a whole, as long as this doesn't compromise one's individuality.

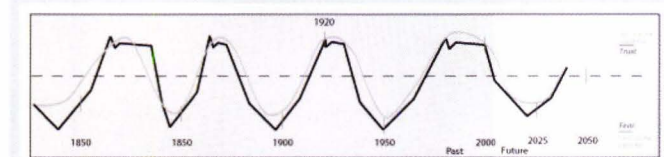
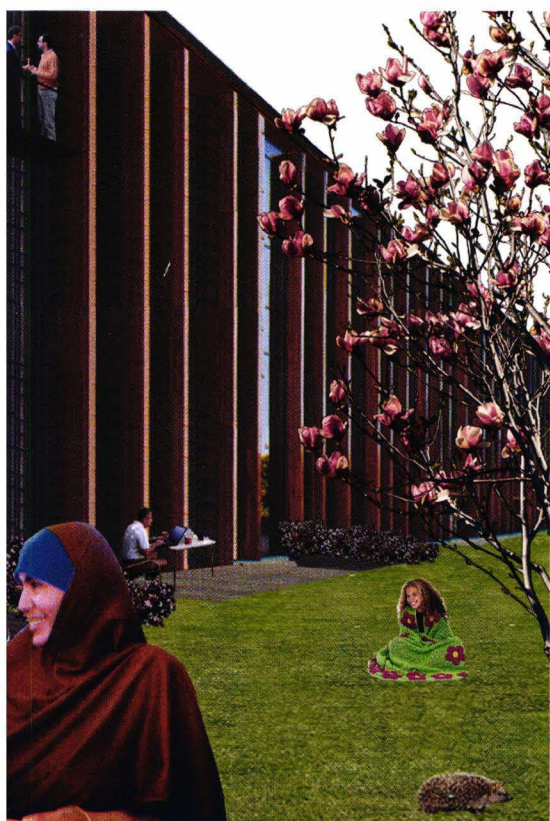


fig.2 Kondratiev-wave and social mindset

Isle Care

In some schemes, there is a focus on informal care from the social vicinity of the people needing it. In *Blooming up*, individualization will supposedly have left a



City without a Care

spiritual vacuum which will ask to be filled with a new kind of social contract. Older and younger generations will have realized that they need each other for healthy and fulfilled lives. The scheme is based on the idea that different age groups need to live in close proximity to each other, to create a diverse and stimulating living environment. Multi-age buildings should nourish social cohesion, and stimulate more 'informal' ways of care, thus helping to prevent alienation and lifestyle related illnesses. Medical, social or household support are available at home where needed, creating formal and informal networks. This suggests that people will take responsibility for caring for people voluntarily beyond their social network, if spatial planning steers them that way.

The same suggestion is made in *City without a Care*. The idea of *City without a Care* is to prevent curing care by providing voluntary daily care in advance. This can take

the shape of private initiatives, commitment of other people or coincidence, and prevent people from requiring curing care. Daily care cannot be organized in a spatial sense and depends on the social coherence in a city. The designers state that the right urban planning can create the conditions for social coherence to develop naturally. Part of this strategy is to create a group identity similar to a cruise ship.

It seems more manageable to look for voluntary care in the social network of those who need it.

In *zorgenLoos living*, Informal Health Care is a voluntary service in close cooperation with the existing primary, secondary and tertiary care and delivers care to the living environment of all people. The voluntary workers receive special benefits, like health insurance reductions or social benefits (and of course, appreciation).

Informal Health Care is supported by communities and insurances with a running

cost budget. Empowerment and responsibility for oneself are key parameters.

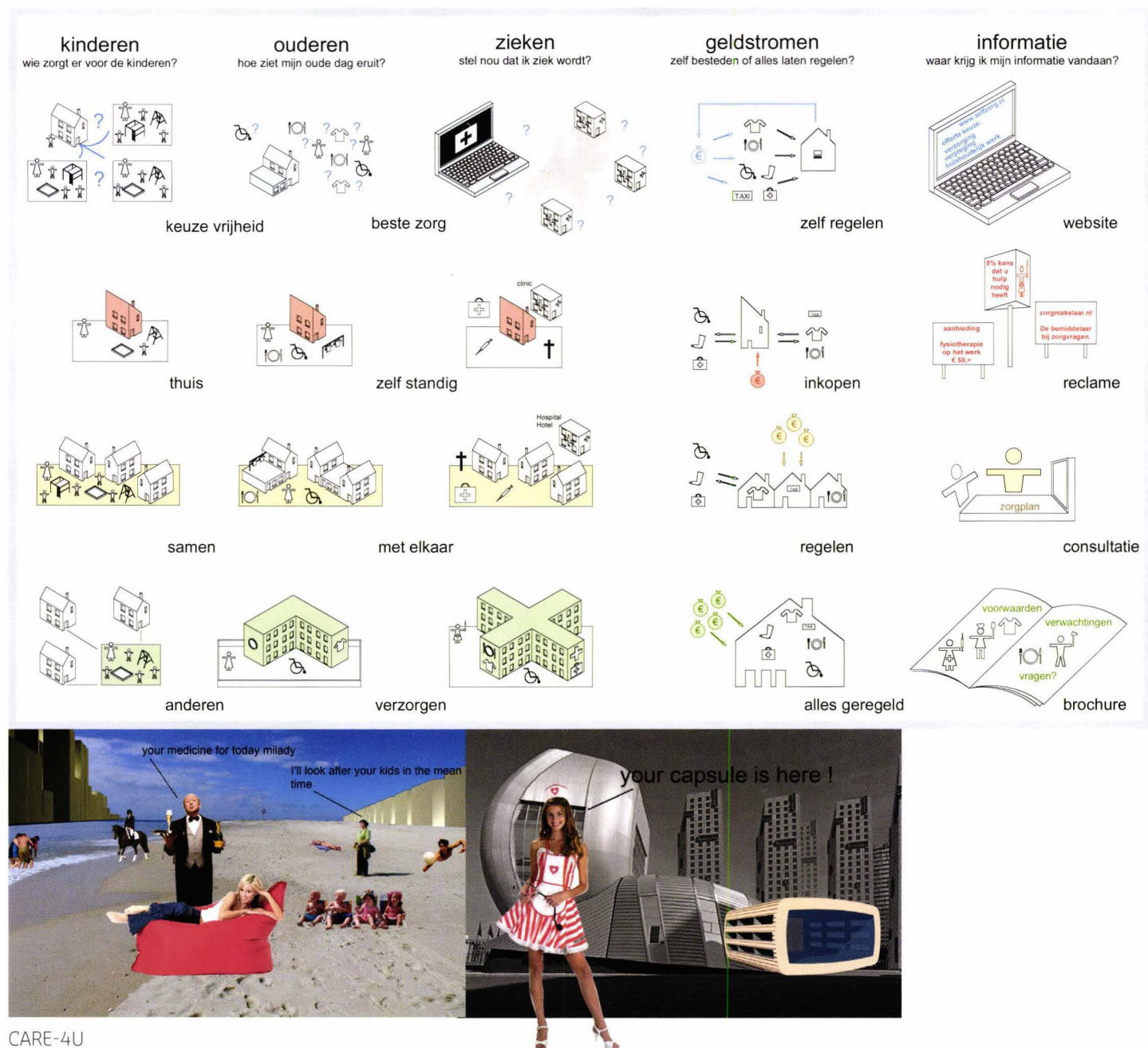
In *Holon* the social network is tested a little less; a 'care consultant' facilitates a social network, that organizes care for someone in a period of chronic disease or revalidation, thus relieving the professionals.

Lifestyle and Diversity

An ongoing development that is influencing society in all its layers is a growing diversity in lifestyles, habits, expectations. People stay healthy longer and are more educated than they were before, and this development will strengthen in the future. The urban planning will have to take into account that people set high standards; cities will have to compete for inhabitants by offering attractive surroundings for living, and these need to be different for different groups of people. The growing diversity of lifestyles is addressed in many entries.



Carefree2025 Markerdam



Based on lifestyles, in *CARE-4U* a city has been designed that suits the wishes of various social groups. *CARE-4U* responds to the challenge to identify these various lifestyles, use these as a starting point and translate them into a design for a city. From those with a traditional bourgeois, to a cosmopolitan to a new conservatist lifestyle, everyone will find their place in this city. Based on these lifestyles the city is structured along three distinct living environments: city centre, urban and suburban. The urban planning model does not present a final state, but provides a spatial structure that can respond to changes in lifestyles and urban transformations. As regards architecture and urban planning this means that the solution is not sought in one ideal care building but instead in flexibility and diversity of care supply. For the real estate in the care sector this means differentiation. Housing is separated from care facilities and care services. This should provide the care sector

with the necessary flexibility to respond to the ever-changing care needs in society.

Moreover, inhabitants' life attitudes towards care are distinguished into four segments. For each segment, not necessarily corresponding with a similar living environment, a different type of care path is suggested, with different facilities.

Other projects show adaptations to very specific groups, without applying this need to the whole of society. *Water of Life* for example chooses to design an area specifically for seniors. In spite of scepticism, senior citizens and developers have taken initiatives to realize specific housing for the elderly. One of the islands of the newly built city houses the Seniors' City with approximately 3000 houses. These are rental and owner-occupied houses in various price ranges. The inhabitants of Seniors' City want to grow old happily, in an environment in which they feel at home and in

which all care is available. This care can be provided at their homes. The houses, however, are suitable for people in any stage of life or health situation, which raises doubts about the 'seniors' city' approach.

Carefree2025 Markerdam is all about promoting a healthy lifestyle; citizens of the 'Healthy City' will live a carefree life in an attractive surrounding for as long as possible. The local authorities promote this lifestyle with preventive campaigns, low-priced body checkups and attractive insurance policies. The urban design forms a base for healthy living by attractive parks, foot and cycle paths and short distances. Cheap rate car rental for outside the city and free use of public transport are part of the deal.

Nature and a Healthy City

This makes the connection with the next theme that is regularly referred to in many entries: making the city healthy by means



Water of Life

of urban planning, mainly by using green spaces and natural areas. “The basis of every vision on healthcare in the future must be a healthy living environment. This can be regarded as ‘stupid optimism’ but may well turn out to be a bare necessity given the enormous demographic, economical and ecological changes we are facing today” (*Blooming up*). Prevention is regarded a key element in the care strategy, and to facilitate this, many designers aim for a clean, green and safe city that invites its inhabitants to move around by foot and bicycle, and to play outside.

Strip City 2025 is designed around a green strip, that is at the same time the heart of the city, the green lung and the location for most of the healthcare facilities. In an otherwise very compact city, a long-stretched park is located, containing sports facilities, water with piers for boats, and coffeehouses. Between quarters that are varied in charac-

ter, the strip is a continuous connecting design element. The aim of having a healthy and social space in the centre of the city is to influence the attitude and behaviour of the inhabitants. “The principle is simple: have people live in a different manner, by a subtle change in their environment.”

In *Carefree2025 Markerdam*, the healthy city is seen as the first of a four-layered health structure. A car-free city is the starting point: no air pollution, no traffic accidents, less noise nuisance, no traffic jams, more room for green areas and slow traffic. By stimulating healthy exercise for the elderly and playing outside for the children, the incidence of obesity can be reduced. Elderly feel safer out in the streets. The designers assume that this concept is well realizable in a city that is built from scratch, because a good urban mobility network can be designed at once. Because of the seriously increased environmental problems that will be felt in 2025, it



Mensen ontmoeten elkaar op straten van wijken. Autovrij en groen

LEEFI – gelukkig zijn, bewegen en ontmoeten in een gezonde stad!



Hygiopolis

will no longer be much of an idealistic step to do away with one's car.

A likewise approach can be seen in *LEEF-gelukkig zijn, bewegen en ontmoeten in een gezonde stad!*. Here, besides physically healthy life, social and mental health are put forward: By investing in a city where people can meet out in the streets, isolation and loneliness are prevented. This way, the psychological fitness of people is improved. Sports and games are facilitated in urban design since they are seen as important preventive measures.

Water of Life shows that nature in the city is not necessarily green. Different parts of the city each have their own ways of dealing with the water as city nature. This includes an extension of the 'Eastsailing waters', 'for people in tune with nature'. The Markermeer ecological system is allowed to develop freely and the city adapts to it,

by means of floating islands and buildings on piles. Green nature is strikingly absent in the design.

Marker islands, landscape for a healthy lifestyle chooses to keep a clear distinction between city and nature. Every inhabitant of the city is expected to own both a city home and a rural dwelling. On these rural islands, nature has the double function of recreation – offering a way out of the excitement and stress of the city – and food source. The new islands are meant to enhance the ecological quality and biodiversity of the Markermeer, and by doing so to make the area more interesting for visitors.

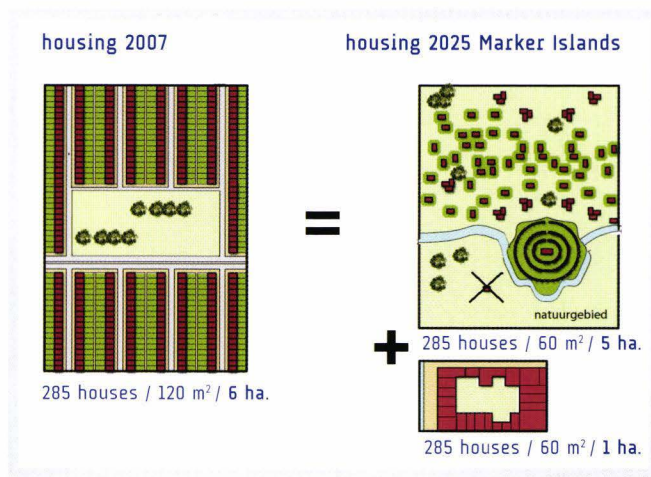
The opposite approach is taken in the third of *3 Propositions for Healthcare and City 2025*. Here, every street in every part of the city is designed to be a healthy place. Not only are cars kept out of the city, but every street should be green and clean and safe,

so that daily life can take place outside. Linear parks, canals and green routes connect open and natural spaces. These can be programmed to provide activities that promote healthier lifestyles.

Hygiopolis deals with another natural process that can improve health: sunlight. The orthogonal urban plan is rotated 45 degrees from the North-South axis, to maximize sunlight access into streets and buildings. Why this orientation is the best is not supported by evidence. This is meant to prevent winter depression and shortage of vitamin D. On the roofs, vegetables are grown in roof gardens.

Mobility and Energy

Climate change is addressed in most entries, both by the design of protective measures against flooding and by preventive measures against carbon emissions. Energy provision is taken as one of the leading de-



Marker islands, landscape for a healthy lifestyle



MEERmarken



Carefree2025 Markerdam

sign conditions in the 21st century. And since the three largest energy consumers are building, heating and transportation, these themes have been taken on as innovation targets.

In the case of transportation, not only the climate issue is raised, but the importance of mobility in the broadest sense.

People will have even higher expectations of mobility, continuing until long after retirement, but nearly all entries show concern that this will have to be accommodated in different ways, to prevent the city from collapsing. The new city should not suffer the fate of the old cities, which are expected to be clutched by traffic jams by 2025.

Blooming up assumes that car traffic will co-exist with more innovative and environmentally friendly means of transport, both on land and water. Nonetheless it aims to limit motorized traffic to the inner rings of the neighbourhoods, thus reserving the wa-

terfront and central squares for slow traffic. The main circulation of the city takes place on a circular boulevard which features a custom designed 'circle line' train, connecting all parts of the city. Shuttles take off into the different neighbourhoods. Since the city is compact, everything can be reached within walking or cycling distance.

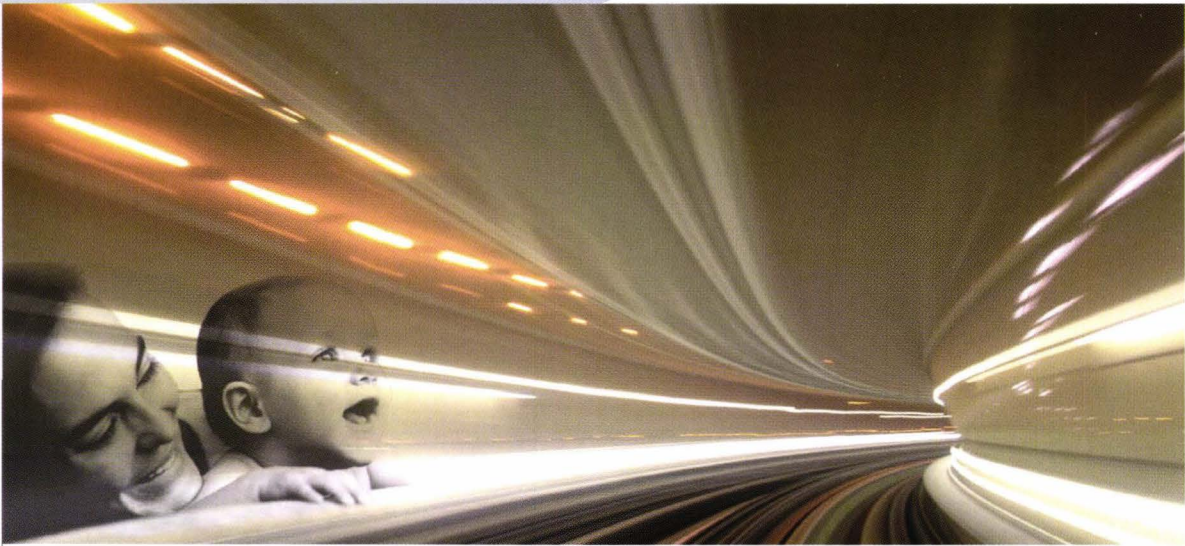
CIT-Y totally banishes the car from the city, and has a metro system connect the floating islands with one another and with the mainland. Since shopping is done online, transport of goods is conveniently organized by metro as well. For transport on the mainland, there is a possibility to use the white DAF system, situated on three islands between city and coast. The classical Dutch car reinvented, hopefully, with a more low-emission engine block.

In *Big Bang* a different choice is made and carried through rigorously. Traffic is ar-

ranged by road only and there are no railroads. The environmental impact of this decision is not an issue in this project.

Holon reduces the need for mobility by introducing the 'Werkhuis'. This teleworking facility with state of the art technology available, makes the daily trip to an office in the city superfluous for some people, who are not now in the position to work from their homes. Daycare, supermarket etcetera are included, to induce office workers to start teleworking and to keep the roads navigable. Outside of the city, the traffic jam hell is expected to be inevitable...

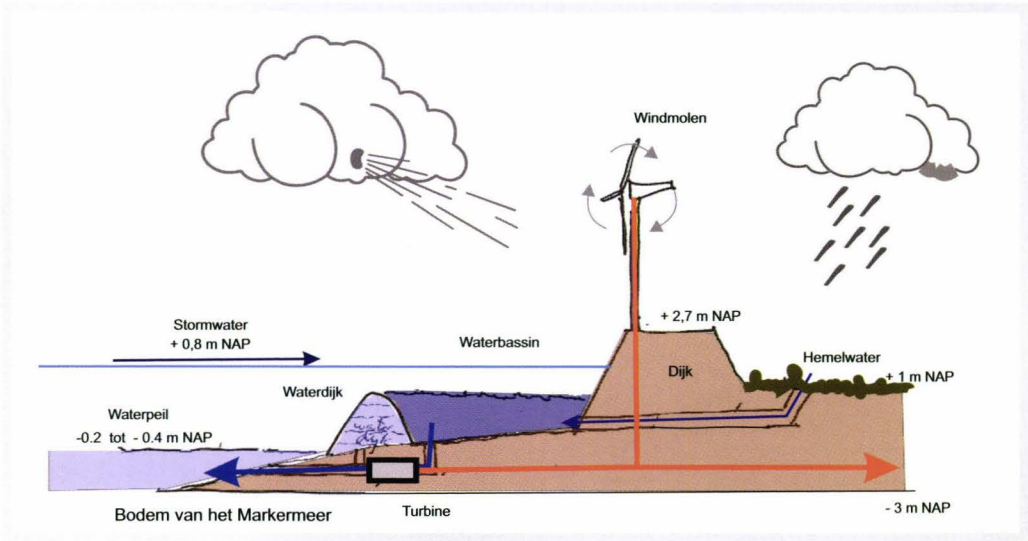
MEERmarken has a more radical perspective on reducing mobility. A strongly locally oriented economy means that hardly any goods are transported, and people mostly stay near their home. People here don't believe in self-containment or isolation but do believe in a self-



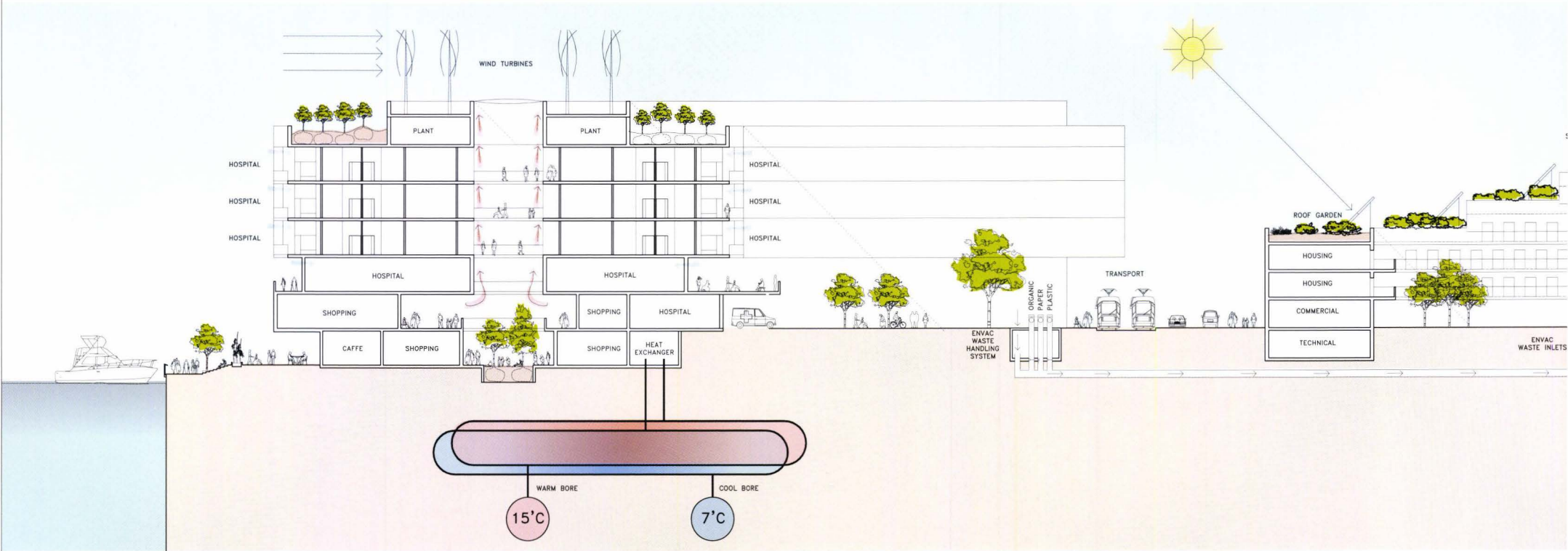
Health to the People



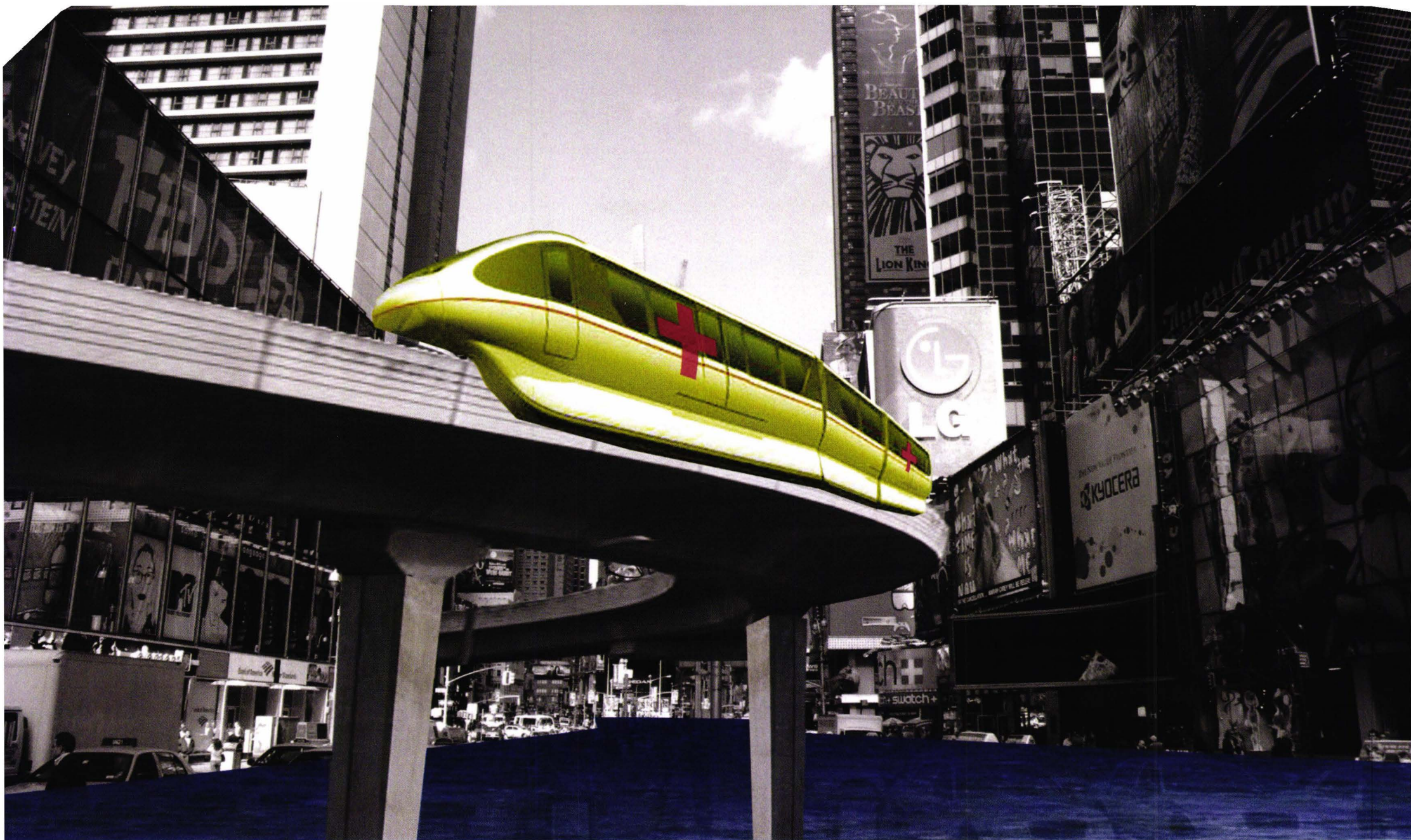
Marker islands, landscape for a healthy lifestyle



Square City



Hygiopolis



CARE-4U

sufficient way of life. This means they don't commute unless on a bicycle or over the internet. They don't ship their food in from the next continent but from the next island, because they believe that even if things are cheaper in price, they carry a hidden cost.

The hidden cost of climate change is addressed in many entries. Few however actually show how they incorporate energy sources in their urban scheme. Even less have innovative approaches of energy supply. *Big Bang* mentions decentralized energy provision, claiming not to need an energy distribution network. In itself, this is an ambitious approach, which many other entries lack. But the actual propositions of energy generation are not elaborated, so for these we need to look at other entries.

Geheel en al opens up the Afsluitdijk for generators to generate energy from tidal currents between the Waddenzee and IJsselmeer.

The IJsselmeer is salinized. This new 'Delta Project' is the city's major source. The impact on all shores of the IJsselmeer is huge, and it seems unlikely that the energy provided by this project will even live up to the energy needed to improve all dikes and pumps.

Vital Wise Water positions the city along the Afsluitdijk as well, but chooses a more novel way of generating energy by combining fresh and salt water. Along a membrane, pressure is built up by the difference in saltiness of the waters, which can be transferred to electrical energy. Due to the strong linear base construction of the dyke and the continuous presence of the two resources along the entire length of that construction, it enables the decentralization of the entire energy system for the city. At a certain distance from each other large energy generators will be positioned, which for a small part will supply primary energy on the one hand and serve as

back-up storage for surrounding generators on the other.

Square City starts from the assumption that the need for energy will increase in the future and the capability to produce energy must be incorporated into the design of a city. Here, one large energy source is not seen as the solution, but a more decentralized system, like in *Big Bang*, is elaborated. Cooling elements in a pile foundation retain warmth from the ground, solar tubes are placed in the pavement. Turbines obtain energy from the recycling of rainwater and windmills are a recurring element in the plan of the city. By spreading out small projects throughout the city, disturbance to the population will be limited. An innovative way of producing energy by retaining water that is raised by storms complements the energy network. ◀



A caring network

Vision on healthcare

One of the challenges in this design competition was to develop ideas for (the provision of) future healthcare and to present an original and daring vision on healthcare. In 2025 a new city of 160,000 inhabitants will arise in the IJsselmeer. Healthcare for this new city has to be developed from scratch. All basic healthcare facilities must be on hand, so people only need to leave the city for highly specialized clinical care. How did the competitors cope with this part of the assignment? What kind of innovations, new concepts or solutions did they come up with? Bearing in mind the changes in healthcare demands: changing lifestyles, increasing prosperity, aging population – all with the associated consequences.



Future healthcare: changes and challenges – Red Point

This chapter will focus on the variety of ideas for future healthcare. First an overall look at all the entries and the ideas that came up. Sometimes daring, exciting and extraordinary. More often building on solutions or concepts of today -but then in a more advanced, elaborated and efficient way.

Looking at all the ideas for healthcare and the provision of care that are exposed in this design competition -and more importantly, the vision on healthcare that underlies many of those ideas- one can distinguish three essential and interacting developments for future healthcare.

First, the decentralization of healthcare to a more personal scale, as an integral part of the city and daily life. Everyone seems to agree that large, complex hospitals and healthcare facilities are history. Decentralization of care will take different forms. In most cases decentralization will lead to independent (small-scaled) facilities or buildings, well spread over the city and often set

up and organized in combination with other (non-care) facilities. Decentralization often leads to differentiation of healthcare, and in a way also to concentration of knowledge and expertise: different levels of care (prevention, low-care, high-care), or for example care that's accustomed to specific client groups and needs.

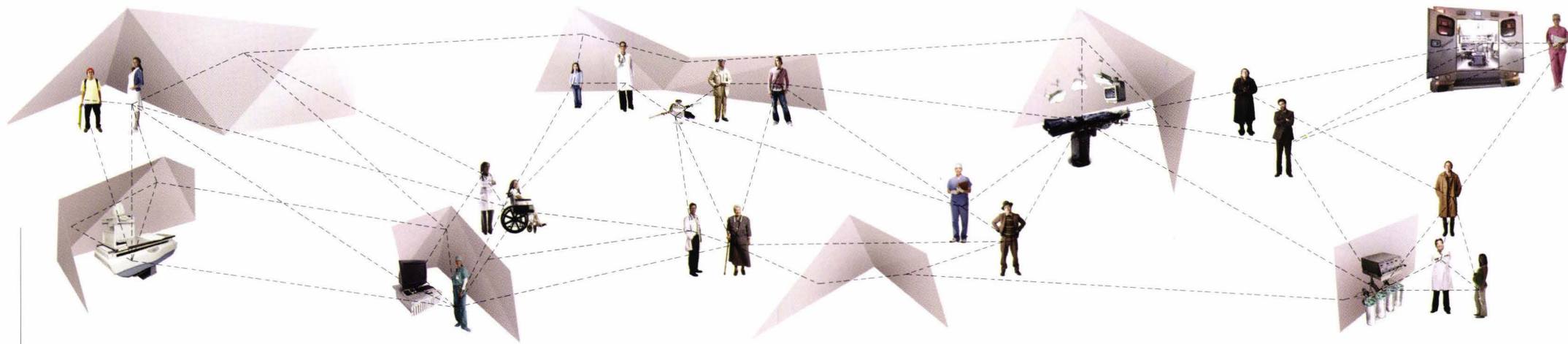
Second, there are the technological possibilities and solutions that are expected to be available in the future. The (medical) technology not only makes it possible to decentralize most forms of healthcare, it can be of use for communication, monitoring health, early warning and diagnoses, prevention and so on.

The third important development for future healthcare is the shift from care and cure to preventative healthcare and the promotion of healthy lifestyles. All this is supported by a well designed healthy city with all kinds of facilities that stimulate a healthy life (see in the previous chapter as well). The central

idea behind all this is that prevention of illness does not only save money and staff. It's much easier to preserve health than it is to repair.

Decentralization of healthcare

In most entries decentralization of healthcare is the leading principle. In 2025 giant hospitals and healthcare facilities will be history! Healthcare buildings are downsized to a more personal scale and transformed into facilities that are more integrated in the city and closely fit to people's daily lives, lifestyles and routines. This means a shift in the provision of care down to the lowest possible level, moving it as closely as possible to the patient's home situation and his or her way of life. By joining different parts of healthcare, only when strictly necessary, and taking the other components out, com-

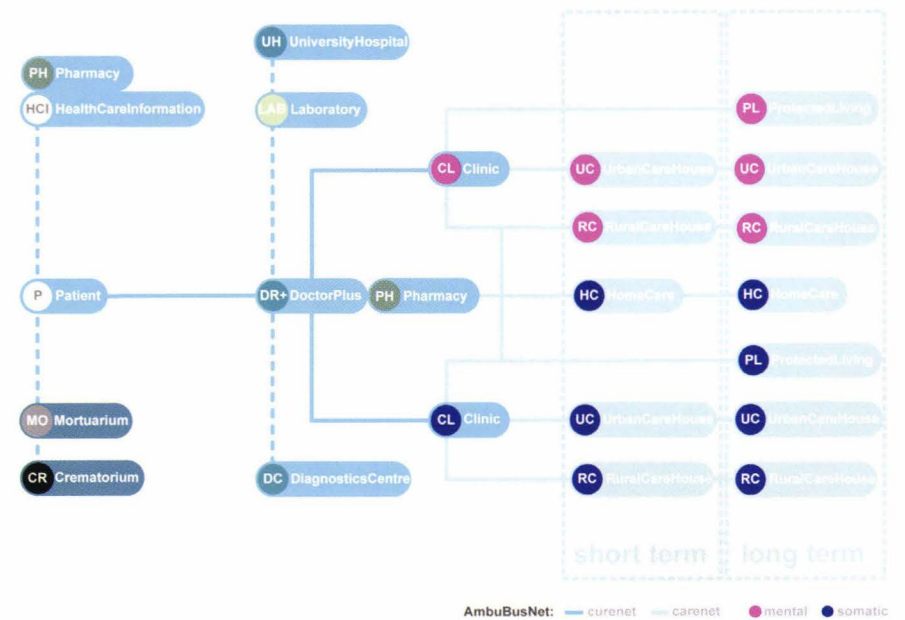


Future healthcare: a dynamic caring network – A caring network

Key arguments behind decentralized care

- In future healthcare the patient's perspective and his/her individual needs will be the leading perspective in the organization and provision of healthcare. This includes 'tailored care', lifestyle-oriented care, home-based care and services and care at local level.
- In order to keep up with the rapid changes in healthcare and demands, society needs a very flexible healthcare system that operates as a dynamic network of autonomous facilities and specialists. This also means flexible buildings and infrastructure instead of large monolith buildings.
- More and more health, healthy lifestyles and also the (health)care system itself, become a part of normal life, almost 'a way of life'. People also feel more responsible for their own health and act as well-informed

- customers. Healthcare is no longer separated from society, or put away in large healthcare bastions.
- Due to the shift from care and cure to preventative healthcare, healthy lifestyles and health promotion, the need for (intramural/clinical) healthcare will decrease. Large facilities can be downsized or transformed to multifunctional facilities with basic care, prevention, counselling, social care, welfare-facilities and so on.
- The quality, the service level and the efficiency of the healthcare can improve when decentralization is not just limited to patient-related facilities (for example recovery in hotel-like facilities). All kind of logistic services (laundry, food supply) for example can be provided by commercialized organisations in a more efficient way.

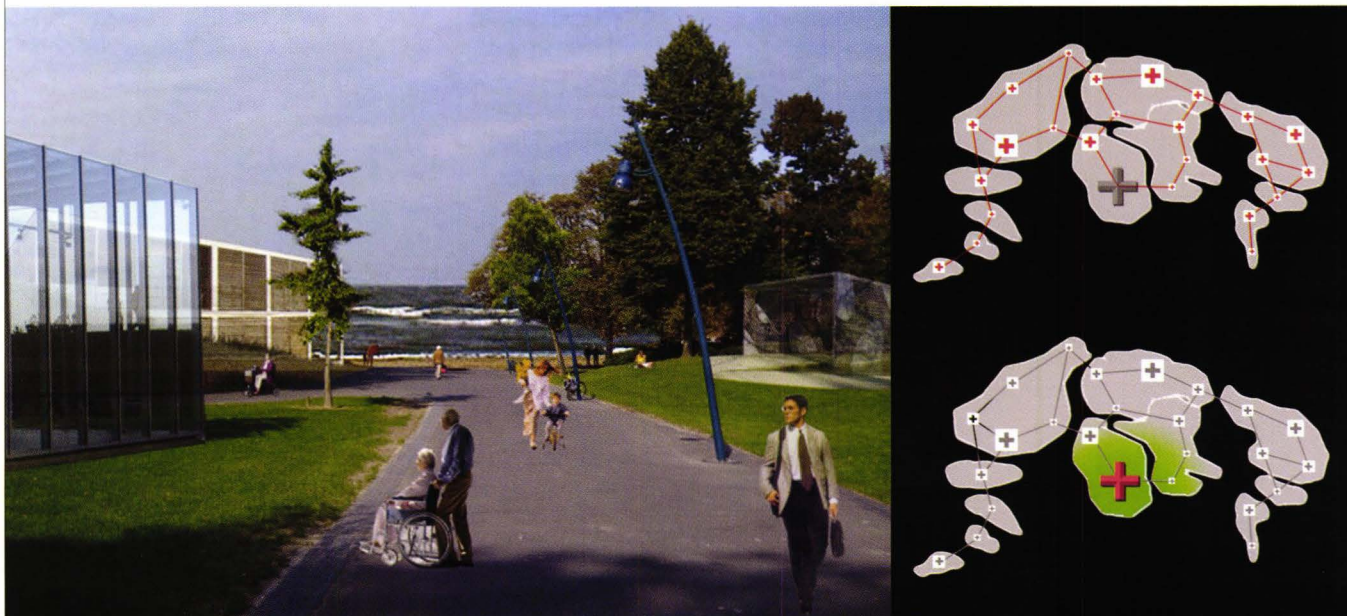


Big Bang

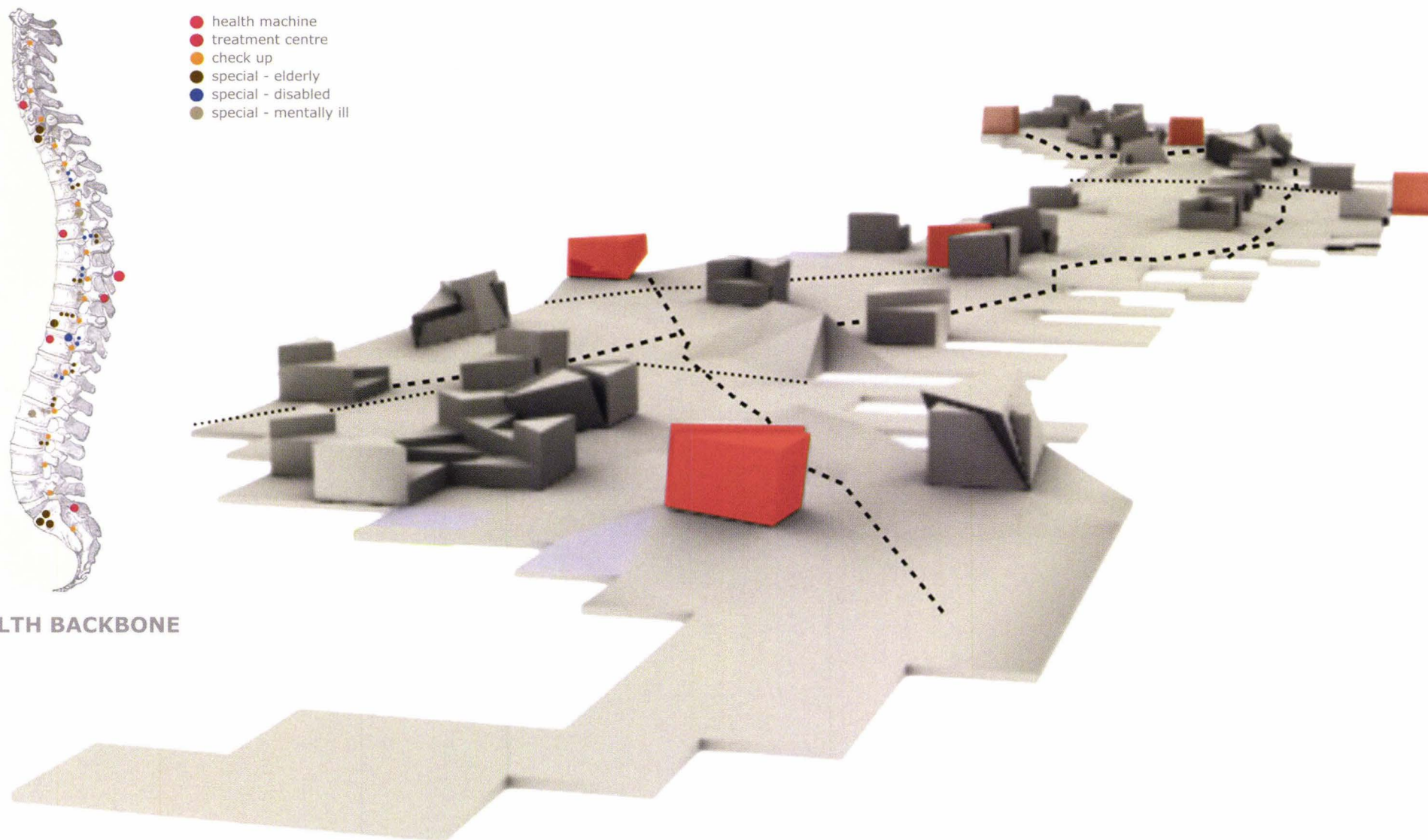
plexity can be drawn out of the system, so healthcare can better suit the needs of the individual. The key elements/arguments behind this far-reaching model of decentralized infrastructure can be summarized as shown in the box "Key arguments behind decentralized care". A variety of elements and examples for the decentralization of care are described below.

Levels of care

The competition shows a broad variety of ideas for the decentralization of healthcare. In many entries decentralization of the infrastructure starts off by dividing healthcare into different levels of care: prevention/low-care/high-care, cure/care, different target groups, and so on. In *Big Bang* for example, the large hospitals we know now, have exploded into a sprawl of individual clinics and healthcare facilities dedicated and accustomed to specific client groups and needs. The healthcare system is divided into



HealthCampus – Carefree 2025 Markerdam



HEALTH BACKBONE

LANDSCAPE - logistics promoting movement and well-being

MASM

clinical medical treatment (cure) and recovery (care). Patients only spend two days in a Clinic for medical treatment. The remaining days are spent either at home (home care) or in a Care House. Care Houses vary in type and shape, some are just for long or short stays and stress their nursing qualities, others are residential and offer apartments in a more or less luxurious living environment. Small-scaled living or protected living is often thematically grouped around Care Houses.

Blue Heart, *Big Bang* and several other entries expect healthcare organizations to split up into various segments, each with their own brand and/or product to serve clients according to their (segment-)specific needs and wishes. This can also mean extra care and service in a more luxurious environment, i.e. different facilities in different price ranges.

In *MASM* healthcare facilities are decentral-

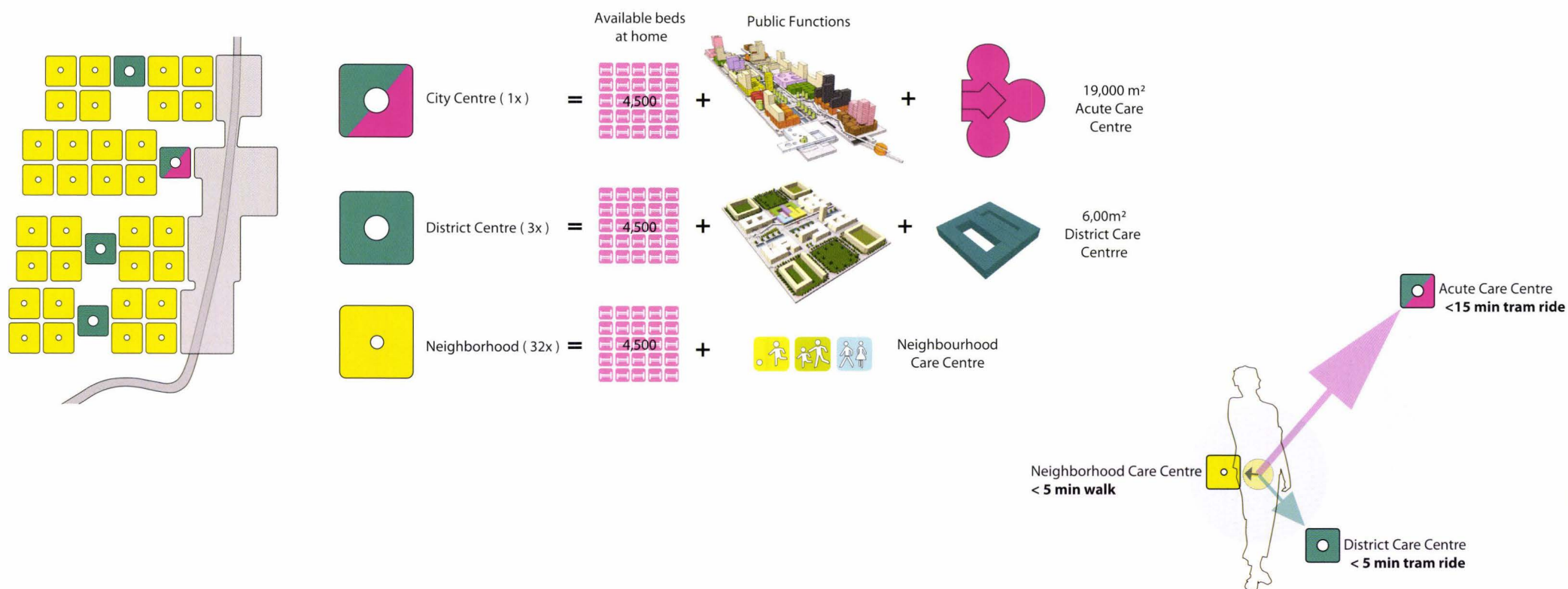
ized into four different healthcare buildings. These independent facilities are concentrated on an axis whereby an efficient system of healthcare takes shape. The different care buildings run through the city as a backbone. The Health Machine is the spot where only specialist treatments (like surgery) take place (high-tech environment). In so-called Treatment centres (each with their own specialism) recovery, care and treatment take place in a more pleasant, low-tech environment and on a human scale. At the base of the system there are buildings from where General Practitioner (GP), dentists and such run their business. There are also specialist centres for mental aid, care for physically disabled people and private clinics.

Carefree 2025 Markerdam also combines decentralization (independent buildings and facilities) on the one hand with concentration of healthcare on the other. The HealthCam-

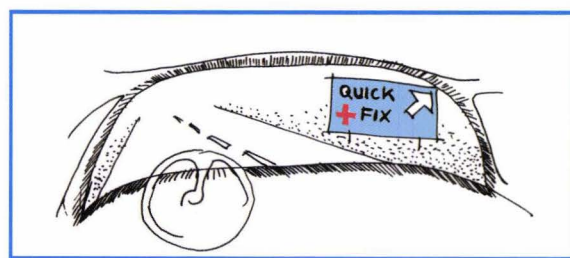
pus is situated in a green and friendly area nearby the centre and offers more specific and intensive treatment. All forms of healthcare and wellness are available. At campus level the various facilities have been decentralized to independent buildings. Buildings are situated closely together and can benefit from each other's staff and facilities. Combining healthcare with wellness and recreation will create a lively and friendly area that is not just meant for the sick people.

Healthcare 'planning'

Surprisingly, decentralization of care seems to implicate 'healthcare planning' as well. Almost like 'in the old days' of the Dutch healthcare system. Some entries present a very detailed vision on how integrated care (healthcare, social care and welfare) can be distributed over a future city. Often the central idea is that evenly distributed facilities, of all kind, are important to the health and well-being of the citizens. Easy access and



Healthcare fully integrated with the city's infrastructure (available, accessible and comprehensive care) – Hygiopolis



Zorg voor jouw leven

CURE2GO

Hypermoderne 'cure-on-the-go' punten aan de snelweg of infrastructurele knooppunten. Op vrijwel ieder moment kan je hier per direct terecht voor een tandarts, doktersconsult of poliklinische behandeling. De hotelkamers kunnen als rustruimte of tijdelijke werkplek worden gebruikt.



availability of care at the local level is essential. *Hygiopolis* for example offers a model of health and social care where each neighbourhood community (4,500 people) has access to an integrated health care, social and educational facility. This Neighbourhood facility is supported by 2-3 GPs and is combined with other primary care workers, community mental health, and counselling, all within a five-minute walk from home. Inpatient facilities are integrated alongside the neighbourhood centres in typically 8-10 bed houses. At the level of the district (9 neighbourhoods) there is a Wellness Hotel with a catchment population of 40,000 people. Wellness Hotels put all health, social and leisure needs within 15-20 minutes from home. At the city centre there's a significantly down-sized acute care facility for specialized hospital care.

Another example of detailed healthcare planning is *Fair Care - Care Fair*. The city of Elysiadam is organized in 6 districts, with

6 District Centres, a Central (acute care) Hospital (320 beds) and a Community Care Hospital (160 beds). The highest level of clinical care is provided by nearby university hospitals outside Elysiadam. Each District Centre forms a Mini-'Asclepieion', where healthcare services are combined with cultural, leisure and fitness activities, just like in ancient Greece. A District Centre also provides social care facilities, such as services for the elderly, family support, unemployment support. The Community Care Hospital (160 beds) is a special care hospital concentrating on the management of chronic diseases, geriatrics, rehabilitation and physiotherapy. Most admissions are planned and stays are limited to 30 days.

Healthcare integrated in our daily lives and routines

Several entries fully integrate healthcare in the daily lives and routines of people. In a way this is an extreme form of decentraliz-

ing care. To match the different lifestyles that exist within the society, variety of healthcare and choice is essential. According to *Zorg voor jouw leven* it should be easy to see a doctor or get help, at any time or place. And it should no longer disturb your plans for the day. Healthcare is put in the middle of society. What's special about the scheme is that the same healthcare is offered in many varieties to make a better match with the patient's needs. Are you always on the road? At the next exit you will find a CURE2GO point. Is the neighbourhood the centre of your life? You can rely on the Healthcare Centre in the area. With the mobile Surgery Unit one can have surgery in the vicinity of home, friends and family. The philosophy of the plan is to keep people as much as possible in their own living environment.

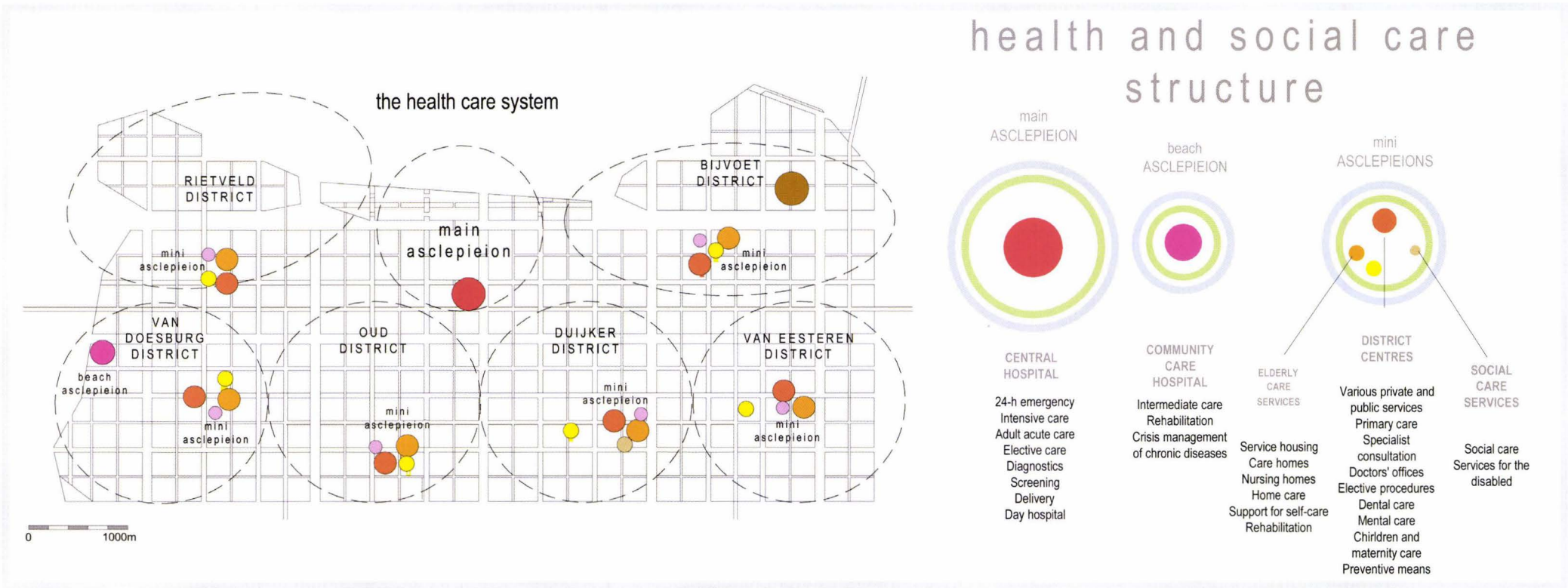
The opposite of integration of care in society and daily life is also presented in the competition. To break the daily routine



Concentration of knowledge and expertise on national level and deconcentration at regional or local level (satellite clinics and basic care). On national level hospital care is organized in Academic Centres (5 rather than 8), 80 Acute Hospitals (AH) and 112 Specialist Centres (SC). Acute Hospitals (200,000 citizens, 400 beds) deals with acute medical care (only medical oriented functions). The SC's (1-2 per 200,000 citizens) are organized around 7 themes (brain/sense, oncology, metabolism/aging, trauma/musculoskeletal conditions, circulation/ventilation, mother/child and psychiatry). SC's enable the concentration and broadening of knowledge, which results in a higher level of medical treatment. To avoid long travel distances, several satellite outpatient clinics are available on regional or local level. – Geheel en al



Mobile Surgery Unit – Zorg voor jouw leven



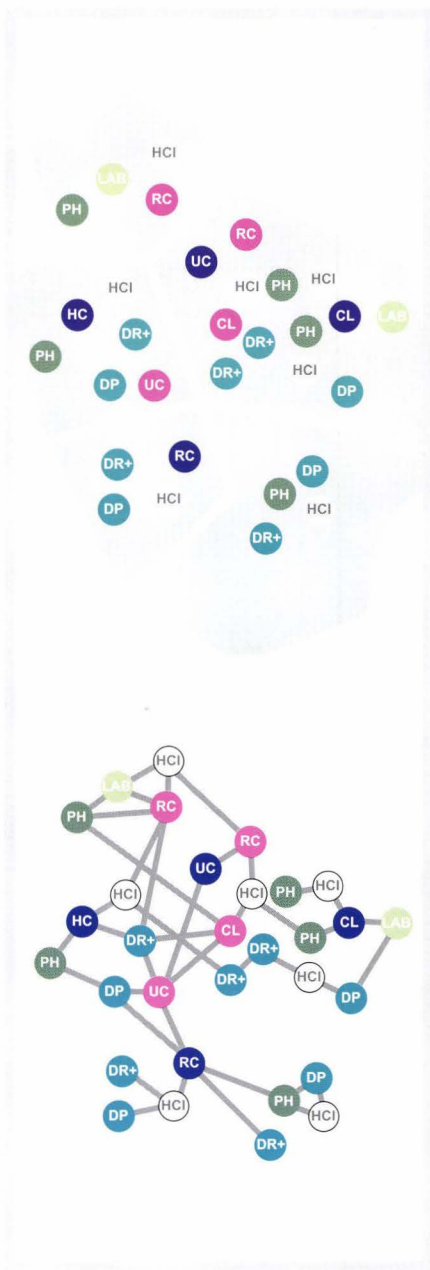


Another option for easy accessible care is a so-called CareStation (*Carefree 2025 Markerdam*). A concept for basic healthcare facilities in combination with urban mobility. CareStations provide for 'daily healthcare' such as GP, dentist, pharmacy, social work and a first aid post for simple procedures.

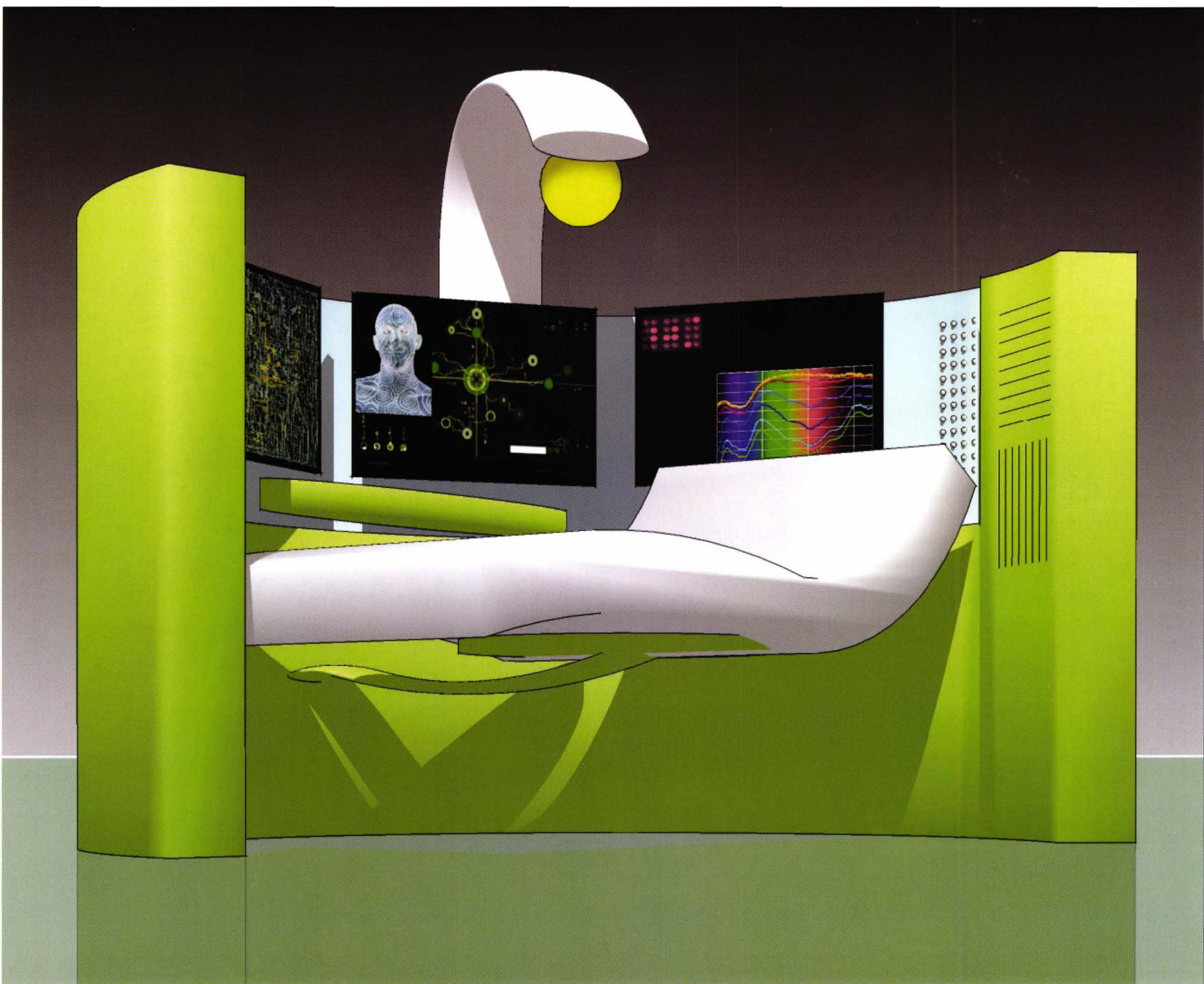
The flexible model of *CARE-4U* removes housing from the care environment. Instead, when necessary, care is injected into housing. In this way care becomes part of the organization of residential areas, mixing it with other functions. In this way the healthcare can respond better to the many different needs, wishes and lifestyles of care demanders. This will also provide the health sector with the necessary flexibility



bescherm
tegen dat wat
hen bedreigt.



From "Zipcode to GPS" – Big Bang



Home-Aid, a mobile unit that monitors a patient at home. Home-Aid comes fully equipped and helps a patient to recover at home – Care in motion

to respond to the ever-changing care needs in society. In *CIT-Y* it's the other way round. The FMF principle (Flexibility, Mobility and Freedom) gives people the opportunity to move at any desirable moment, in their own dwelling, to the desired social area, all according to their needs. The flexible dwellings can be connected and disconnected very simply. This plug-in structure also means that individual dwellings can be connected to for instance the dwelling of a family member (voluntary care), the main hospital, and so on. In this way people can be treated 'in their own environment'.

Social care & informal healthcare
zorgenLoos living presents Informal Health Care (IHC) as a solution for a variety of problems that the healthcare system is facing, like increasing healthcare demands, costs, shortage of medical staff and so on. IHC is a voluntary service in close cooperation with the existing healthcare system



Healthcare incorporated in daily life (work, shopping, etc.)

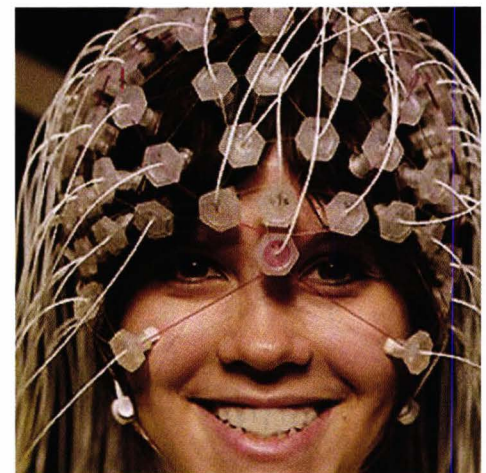
Care is injected into housing – CARE-4U



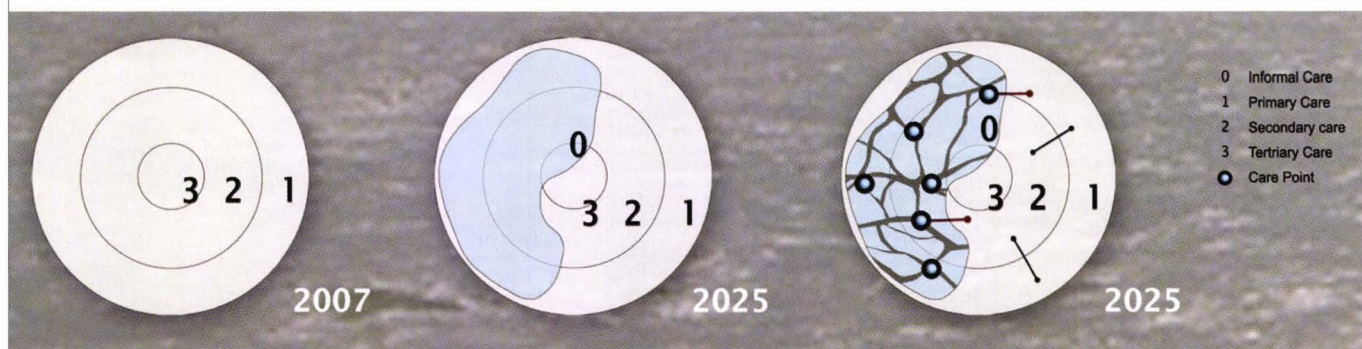
Waiting room in art gallery – We Care



Care boulevard – CIT-Y



Care in motion



Organization of healthcare – zorgeNLoos living

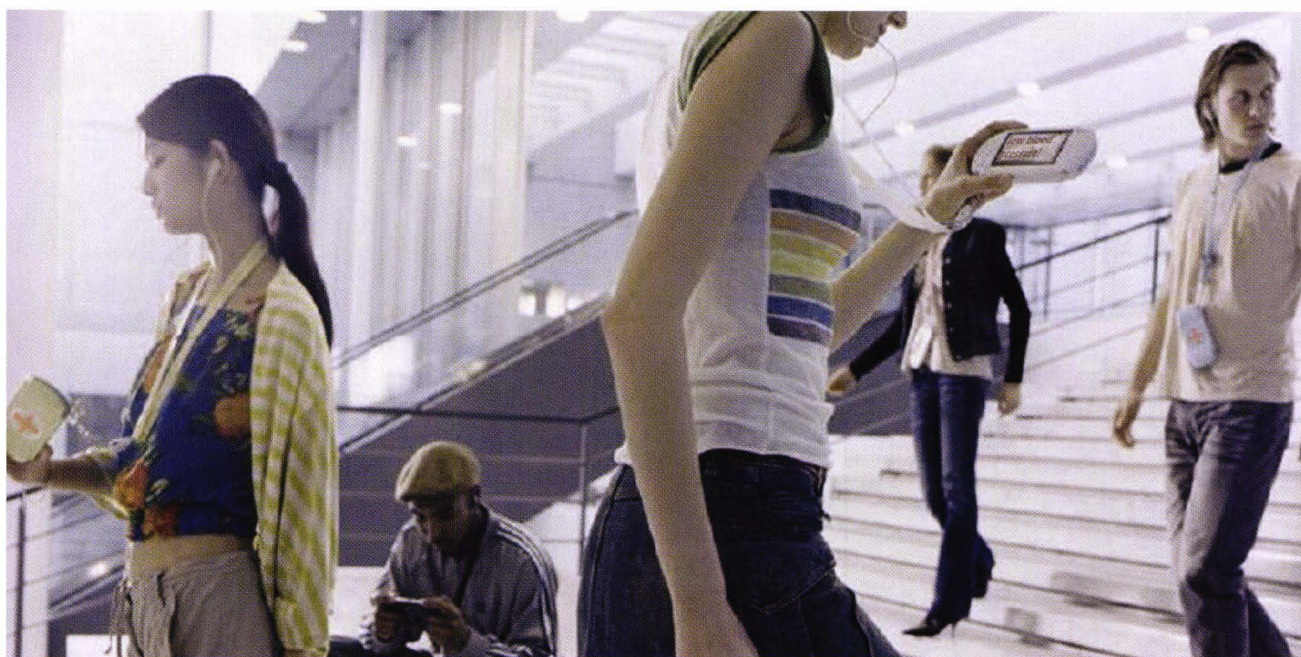
(primary, secondary and tertiary care). IHC enables delivery of care in the living environment of all people by volunteers. This is achieved by providing a Healthcare Network of so-called Care Points which affiliate approximately 500 people. Care Points offer personal chaperonage of patients. Care Points support people to organize assistance at home, monitor their situation and offer coaching to people who look after a family member who needs care. Information and education programmes on health (prevention etc.) are provided at the Care Points, integrating the know-how of health care professionals. The health dwelling (Care Points with beds) enable geriatric or general rehabilitation within the local community.

Healthcare integrated in 'normal' buildings

In the future (medical) technology will make it possible to deconcentrate most



Health to the People



Personal monitoring devices – A caring network



Health Channel – Health to the People

forms of healthcare. Even highly specialized care. In most entries healthcare facilities are combined with all kind of non-health or social facilities like shops, offices, schools, sport and recreation, wellness institutions, and so on.

CIT-Y suggest that general practitioners, doctors, specialists and nurses, and even surgery can be housed in regular office buildings. Recovery from surgery can take place in hotel-like accommodation. Physiotherapy, reactivation and rehabilitation are integrated in regular sports facilities. Healthcare facilities will no longer have 'the look and feel' of a traditional healthcare building. In that way healthcare naturally becomes part of our daily life. The concept of care boulevards, like we already know, will be elaborated in the future. *Networking islands* even suggest a healthcare model where healthcare can no longer be identified. It will form an integrated part of the

city's network and its presence can actually be felt. Doctors, surgeons, therapists and nurses will become part of the network, so that the boundaries of their working areas will be blurred.

By clustering the different facilities one can benefit from another. And since health businesses are integrated with or linked to other facilities, healthcare will be perceived as a normal part of every day life. For instance: the waiting room for a chiropractor could double as the first room in an art gallery. Here (*We Care*) the waiting experience is improved by the possibility to look at art, and the gallery gets a new platform to generate interest.

More about the consequences of 'normalizing healthcare' for the architectural design of buildings, to such an extent that healthcare becomes an ordinary part of life, is shown in the next chapter.

Technology

Most entries expect all kind of technological possibilities and solutions to be available in future healthcare, from diagnostics, treatment and recovery, to consultation and communication. The (medical) technology not only makes it possible to decentralize most forms of healthcare, It can also be of use for communication, monitoring health, early warning and diagnoses, prevention, e-health, e-consultation, virtual expert consultation, and so on. It's remarkable that (competitors assume that) monitoring health and collecting data from patients in electronic databases and records, or even from their DNA-profile, will be more socially accepted in the future than it is today. Ethical issues and the privacy of personal information seems to be of less importance than the advantages of having access to data. Even assessing one's own medical condition will be universal.

Urban Island

- healthy environment
- freedom of choice
- order
- work
- social life
- auto-free-zone
- distances edited for pedestrians
- public transport
- conviviality
- kinergetic
- dynamic atmosphere
- go loose
- community facilities
- fellowship / brotherhood
- allure



Rural Island

- healthy environment
- peace
- space
- freedom
- vastness
- clear water
- biodiversity / diverse bioculture
- wind water sun
- gardening
- bio-food
- re-energise / recovery
- mental and physical recreation / relaxation
- contact with nature
- living in nature
- movement

Marker islands, landscape for a healthy lifestyle



Zorg voor *jouw* leven

GEZOND@HOME

Met de e-dokter en de tele-zuster hoef je je huis niet meer uit voor **dagelijkse zorg of doktersbezoek**. Middels webcams en grote touchscreen schermen kan het digitale spreekuur worden bezocht en contact worden gehouden met zorgverleners, familie, vrienden en lotgenoten waar ook ter wereld.



Met pillenprinter of pillenpost en online zorginformatie voor zelfstudie en **selfcare**.



MASM

The entry called *Blue Heart* comes up with a so-called 'orbit-nano' probe that is inserted in the bloodstream and continually measures the client's health and vital signs. It sends data through to an electronic database in order to monitor illness and the effects of medicine, to make an early diagnose or to detect trends in patients health. It also serves as an early warning to enable medical intervention and prevention. In case of emergency the orbit-nano sends an alarm signal.

Zorg voor jouw leven presents a variety of communication technology: you can consult the doctor from within the privacy of your own house, the pill-man delivers pills as once upon a time the postman delivered post. Health information is available to the wider public and people become better informed and more aware.

In *Big Bang* all citizens have an EMR (Electronic Medical Record) to be created direct-

ly after birth. All health institutions are legally obliged to add all factual information on medical treatment and medication to the patient's record. The EMR is a patient-owned debit card-like pass protected by a PIN-code.

Prevention, healthy life, de-caring

Many entries expect a major shift in healthcare from care and cure to preventative healthcare and the promotion of healthy lifestyles. This transformation from a reactive into a preventive system is based on the concept of a 'healthy society'. And it's supported by a well designed 'healthy city' with all kinds of facilities that stimulate a healthy life and measures taken by the government or the local authorities: preventive campaigns, low-priced body check-ups, preventative healthcare free of charge, at-

tractive insurance policies and free use of public transport. The leading thought is that prevention and a healthy lifestyle saves money and staff and therefore should be stimulated. Besides that many participants expect a change in attitude of people towards their own health. In the future people will feel more responsible for their own health and a healthy lifestyle becomes more and more a natural way of life. <

Marker Islands

Landscape for a healthy lifestyle



CARE EVOLVES INTO TAKING CARE



BEING HEALTHY AND STAYING HEALTHY



FACILITATING VITALITY



MANAGING YOUR OWN HEALTH

Well Come City

2 | International Herald Tribune
Wednesday, June 27, 2007

Janine Zacharia
Letter from South Africa

Save up to 30% on
your health insurance
policy

Having an annual check-up can
save you up to 30% on your
health insurance policy. This
was decided today by the insur-
ance companies and the Minis-



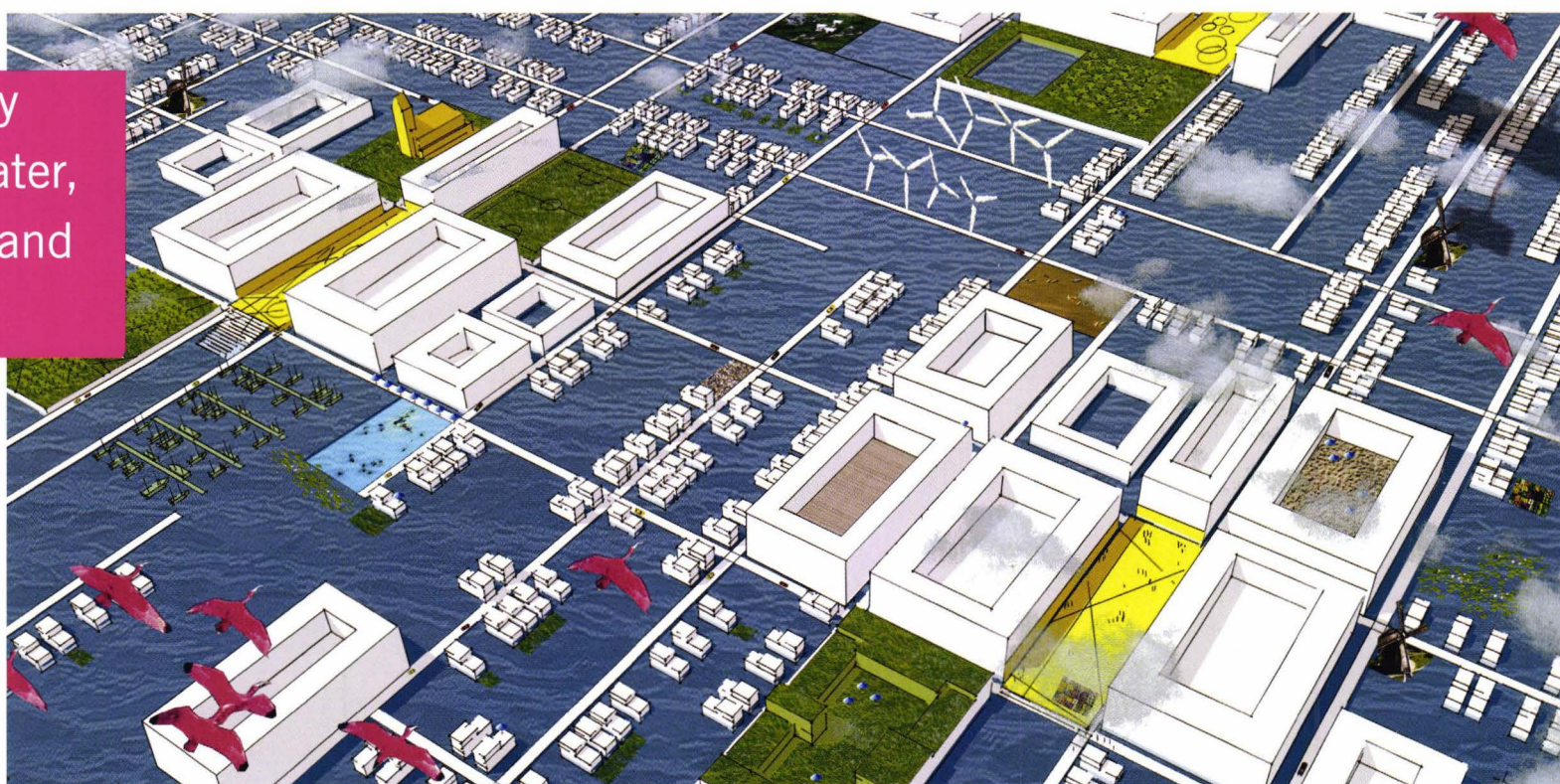
Care in motion

paved network: bicycles

waternetwork: canals

Carefree 2025 Markerdam

Extraordinary
quality of water,
view, space and
atmosphere

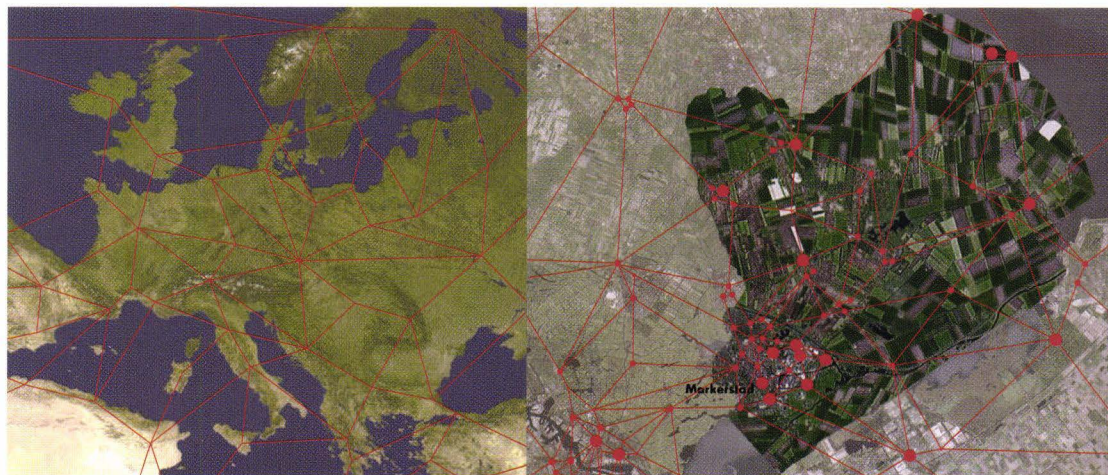


City without a Care

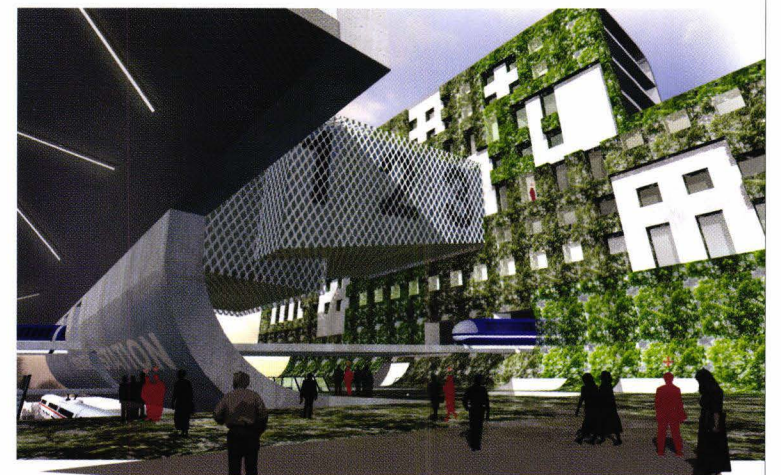


Future design of cities and healthcare assets

How is the vision on healthcare and the vision of the future translated into an urban design and a architectural design of a more in-depth part, listed in the programme of requirements of the competition? This chapter documents the entries which show interesting ideas in these various levels of design. The first part of this chapter, future design of cities, is an overview of all the urban plans and a short description of the most striking issues. The second part, future design of healthcare assets, contains various interesting aspects of the entries from a architectural point of view.



A caring network



Networking islands

Future design of cities

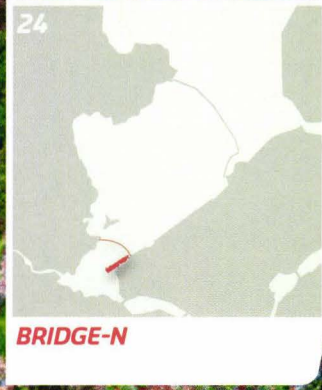
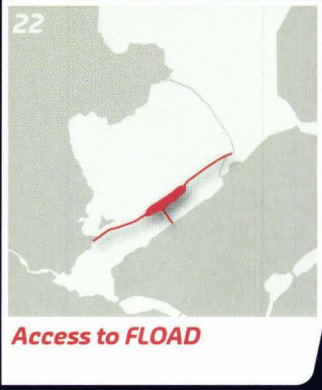
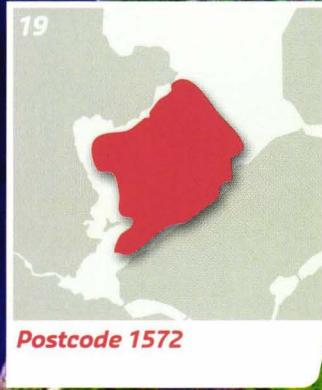
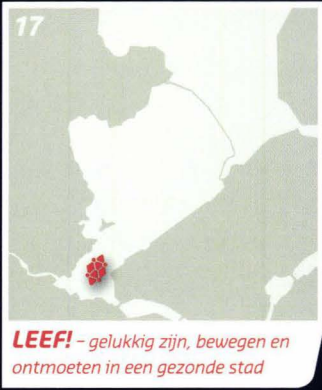
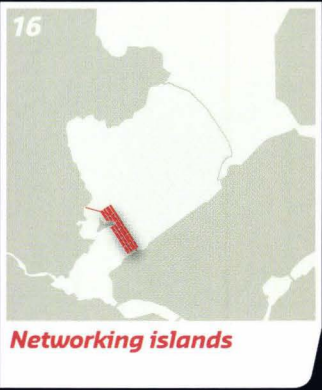
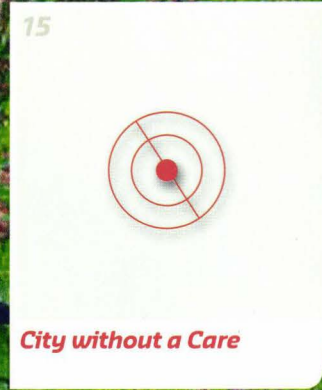
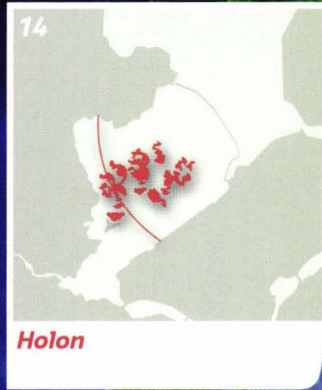
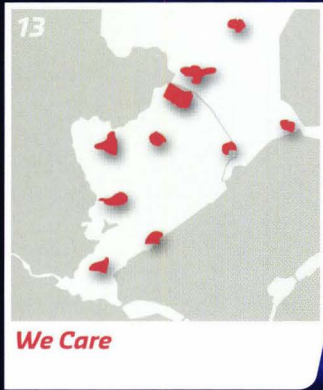
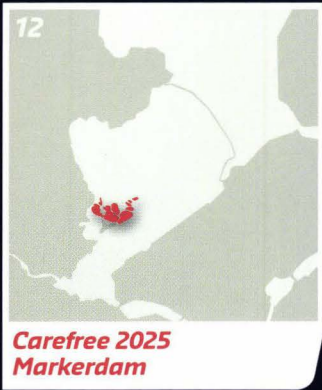
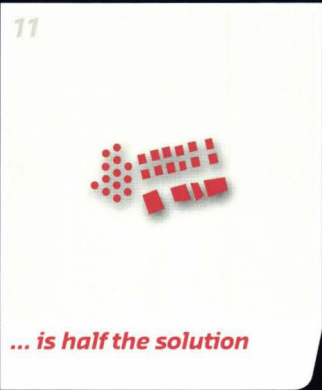
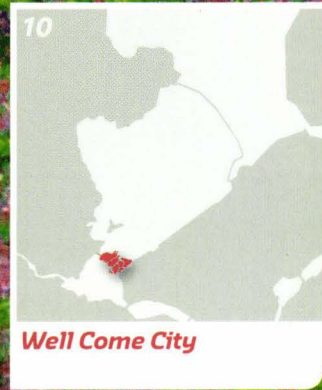
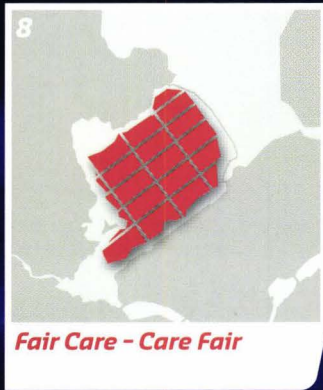
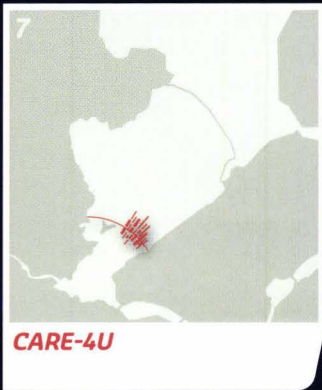
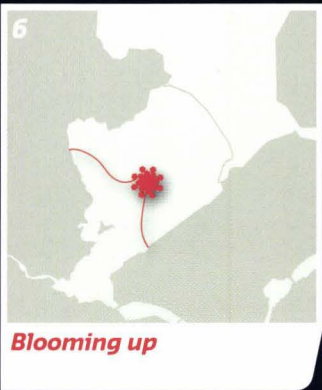
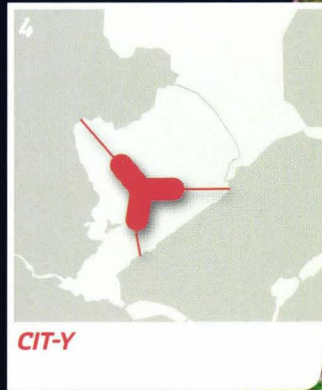
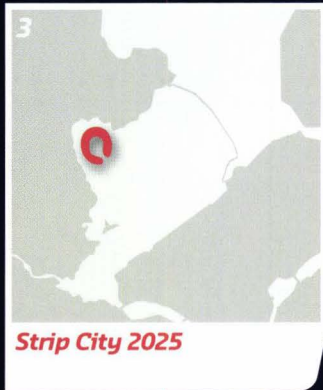
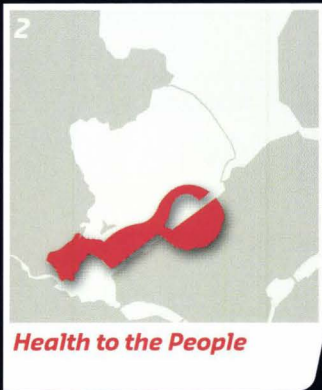
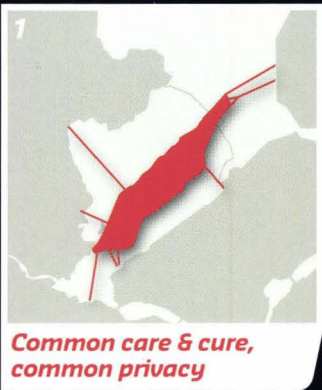
The urban plans vary in density, shape and positioning of the healthcare facilities for a city of 160,000 inhabitants, as shown in the overview urban planning of all entries on the next pages. The variety ranges from systematic grids, like Manhattan, positioned in the centre of Markermeer to spread out shapes, even presented as an icon. In *Common Care & Cure*, *Common Privacy* and in *Red Point* the layout of Manhattan is copied in the centre of the lake. The reference with Manhattan does not stop in *Common Care & Cure*, *Common Privacy* because the skyline has multiple high-rise buildings. A difference is the introduction of windmills for supplying energy for the new city. Not so literally, but also inspired by Manhattan is the urban plan of *Fair Care*, *Care Fair*, a systematic grid with a central park and crossing lines. In two other entries this theme is presented, but the island is smaller, so the

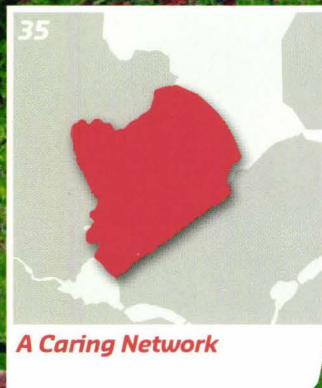
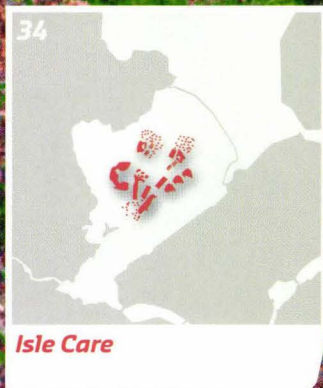
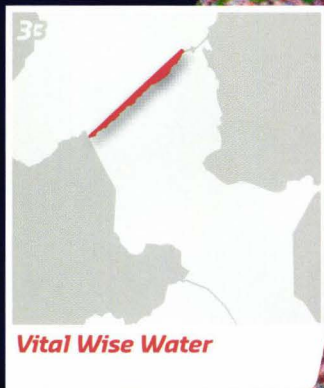
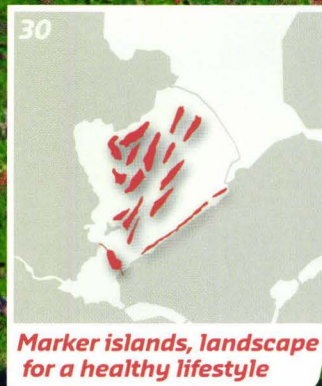
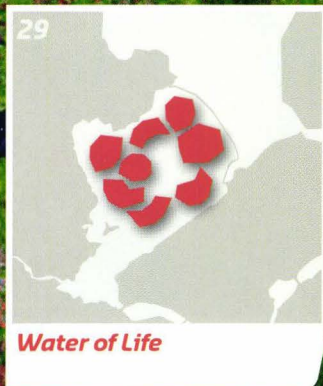
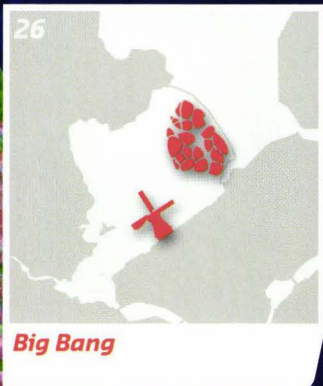
density varies. The purest example of an urban plan consisting of a spread out shape presented as an icon is *Big Bang*. The windmill is projected in the water like the artificial palms in Dubai.

Another interesting issue is the handling of reclamation, how much water is turned into land. The diversity of how the entries solve this issue is also visible in the overview. The infrastructural connection between Noord-Holland and Flevoland is leading in several entries for the position of the compact city. Sometimes the connection itself, a bridge, is the main structure for the accommodation of the facilities as shown in *BRIDGE-N*. But mostly the connection is meant for transportation, so the new compact city is only reachable from two sides. Luckily many entries suggest that transportation in 2025 is done by high-speed trains, watertaxis and even zeppelins, so there will be no car traffic jams in the future. The extreme opposite

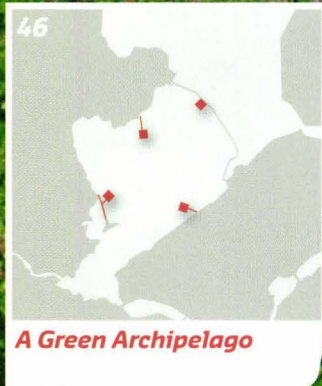
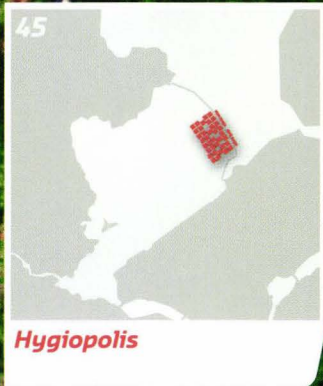
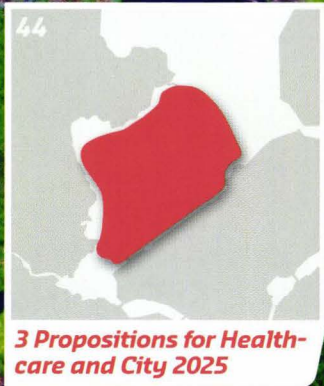
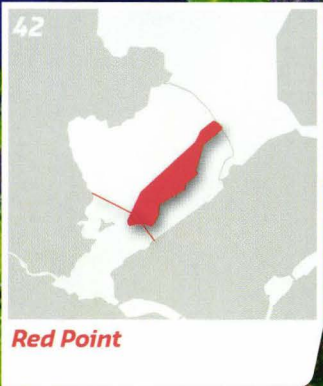
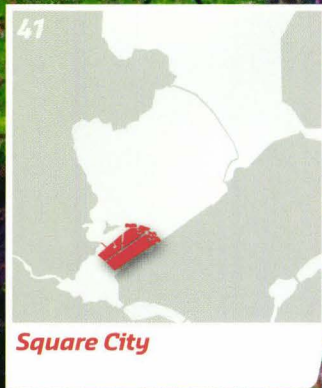
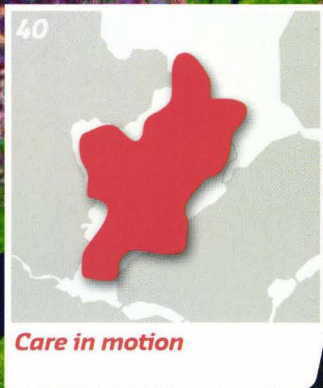
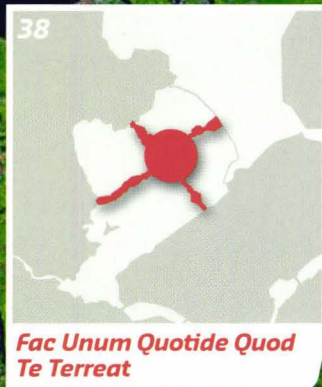
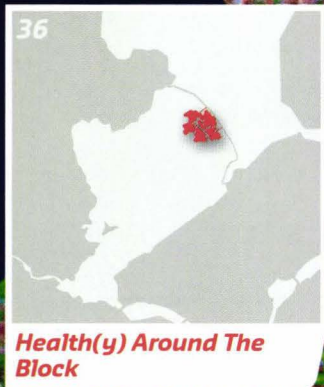
of this is that the whole Markermeer is resigned to land reclamation, which was the original intention in 1976. For fifty years the need for land has grown, so once again the Dutch overcome the struggle against the elements, according to several contributors. An entry which totally shows the opposite is *Take '25*, the Markermeer is still a lake and the facilities are spread across the whole of the Netherlands. The motive behind this idea is the disappearing of the separation between working hours and spare time. The weekly timetable is diverse because activities mix. This leads to a different use of facilities, so the reclamation of the Markermeer is not necessary.

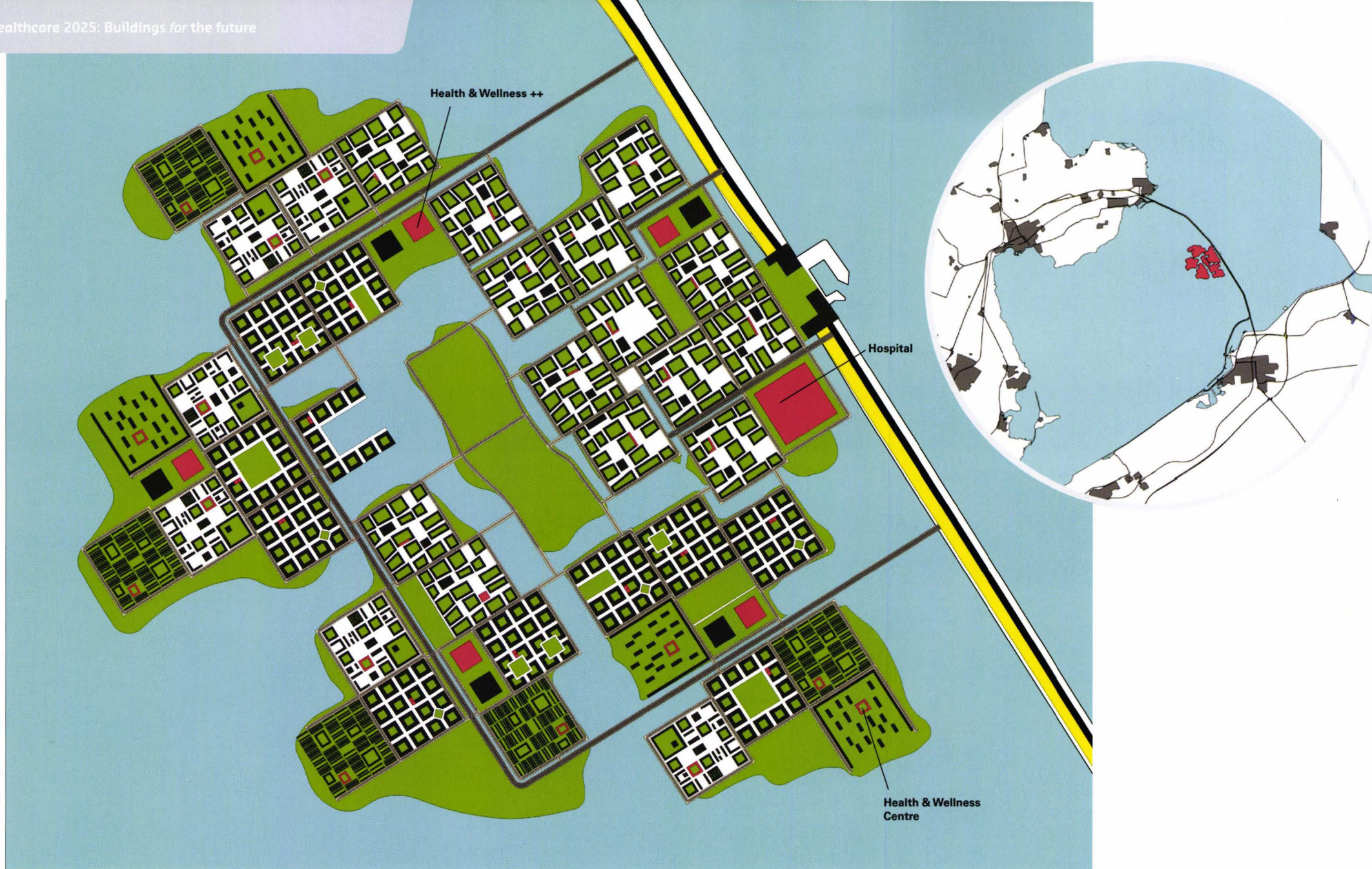
In the next part of this chapter more details can be found about design aspects of the entries.





**Overview
urban planning
of all entries**





Healtht(y) Around The Block

Future design of healthcare assets

City of Water

Water has been an issue in the Netherlands for ages and it will be in 2025. There is an eternal dilemma between transforming water into land for development and returning land to prevent flooding mainly near rivers due to heavy rainfall. In *CIT-Y* a solution for the increasing risk of flooding is contributed by creating a floating town that is able to move with the fluctuating water level. The same idea but on a smaller scale is presented in *Water of Life*. In addition to fixed shores and islands, there are also floating islands. These floating islands have been developed in the Netherlands and it is stated that they will be applied all over the world. So water management will still be an export product.

Just as today water is used as a selling point in several entries. Analogous to 'the

Green Heart', the nature zone between the four big cities in the Netherlands, the new city in *Blue Heart* consists of four separate wings which are located around a lake called 'the Blue Heart'. Water is named as the recurring theme across the whole development and gives a restful, healthy feel. *Healtht(y) Around The Block* gives even more power to water because it forms the backbone of the society, health and well-being and it evokes happy feelings and healthy behaviour like sports, relaxation, fun and amusement.

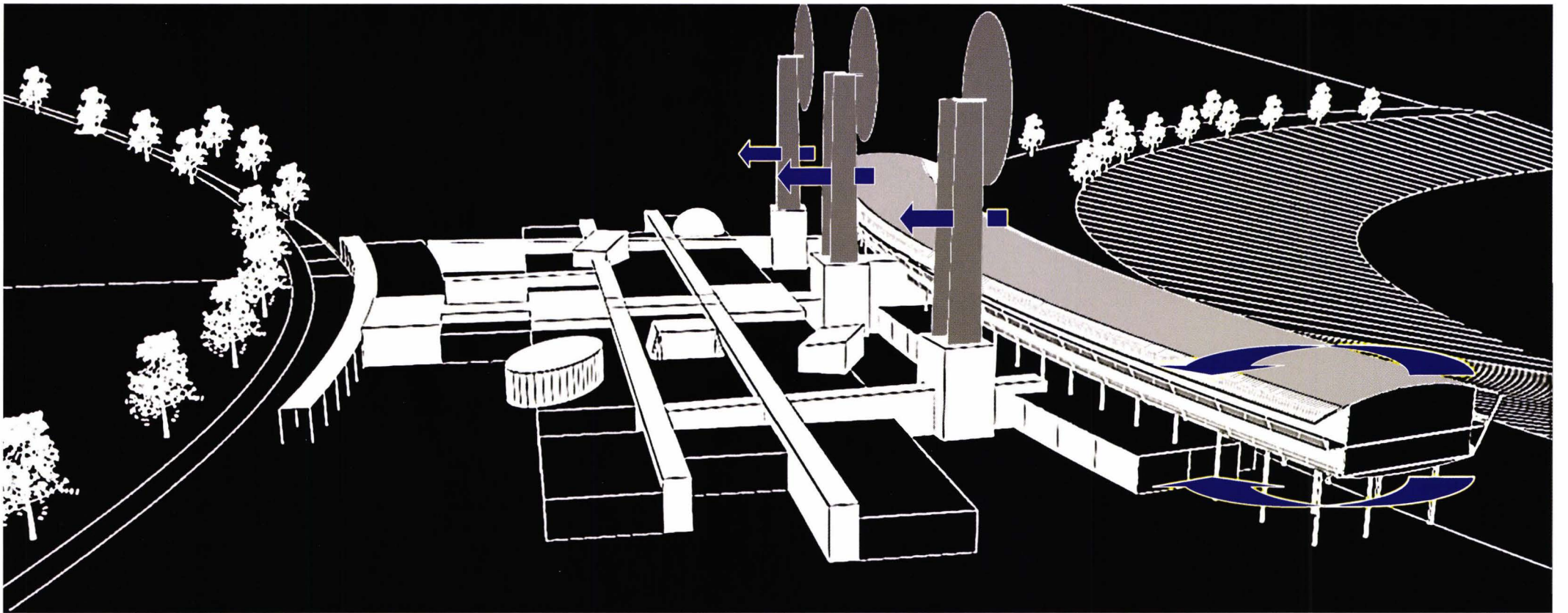
According to the designers of *Red Point* it will be hotter in 2025 and the best place to go when it is hot, is the beach. The beach is the stimulating factor for development and it is the place where residence, retail and recreation mix. They associate with the Florida of North-West Europe and refer to contemporary man-made city islands such as Miami Beach and Dubai which are fabu-

lous amalgamations of global commerce and shopping lifestyles.

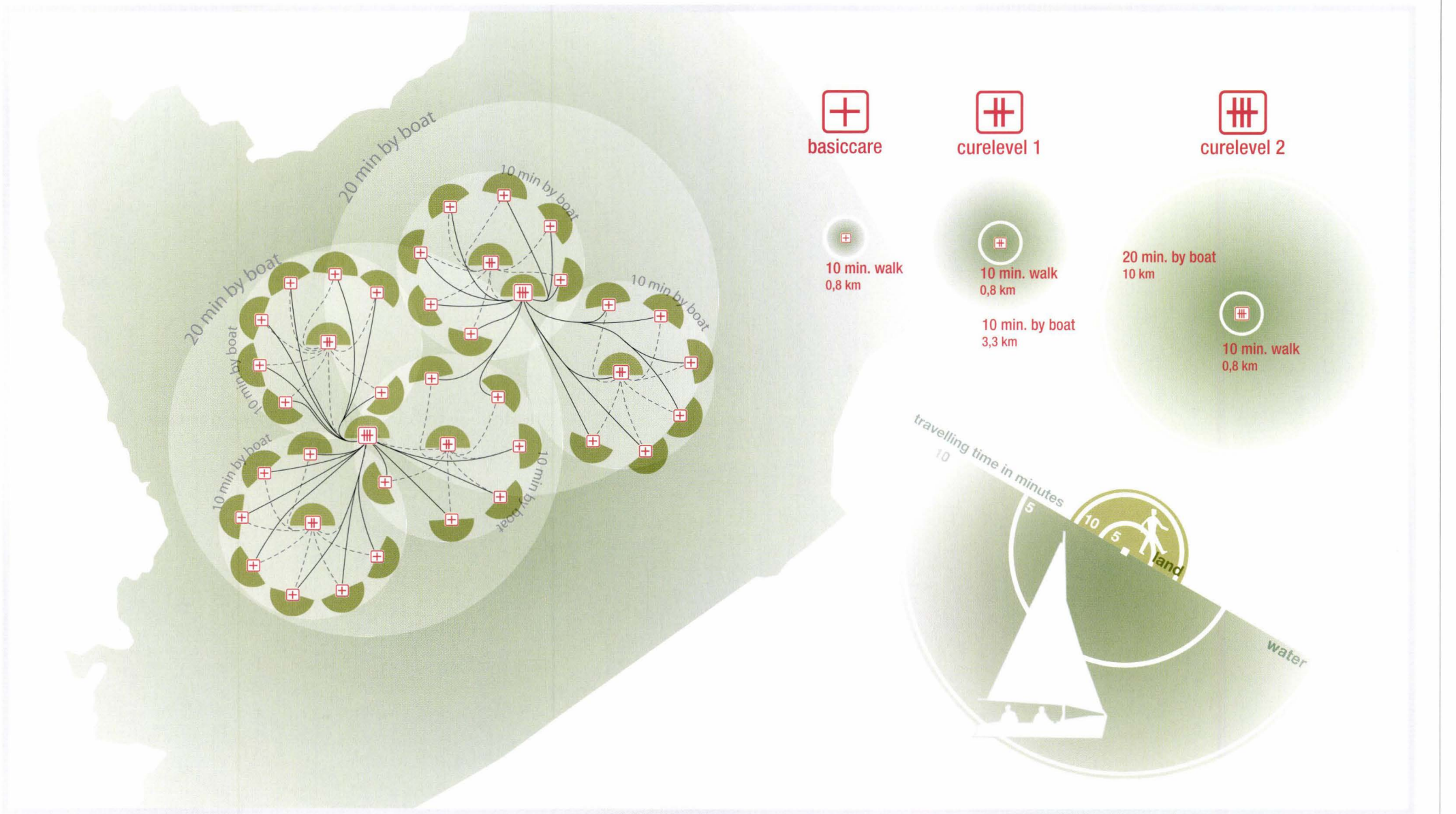
Water is also used as a means of transportation. Transport by water is faster than by land so you can live on your own island and still have full healthcare coverage, suggests *Isle Care*. In this entry the components needed in a city with 160,000 inhabitants are spread to their maximum, so the city has an apparently infinite differentiation of areas and freedom of settlement. More about this topic is mentioned in the paragraph on mobility.

Urban versus Rural

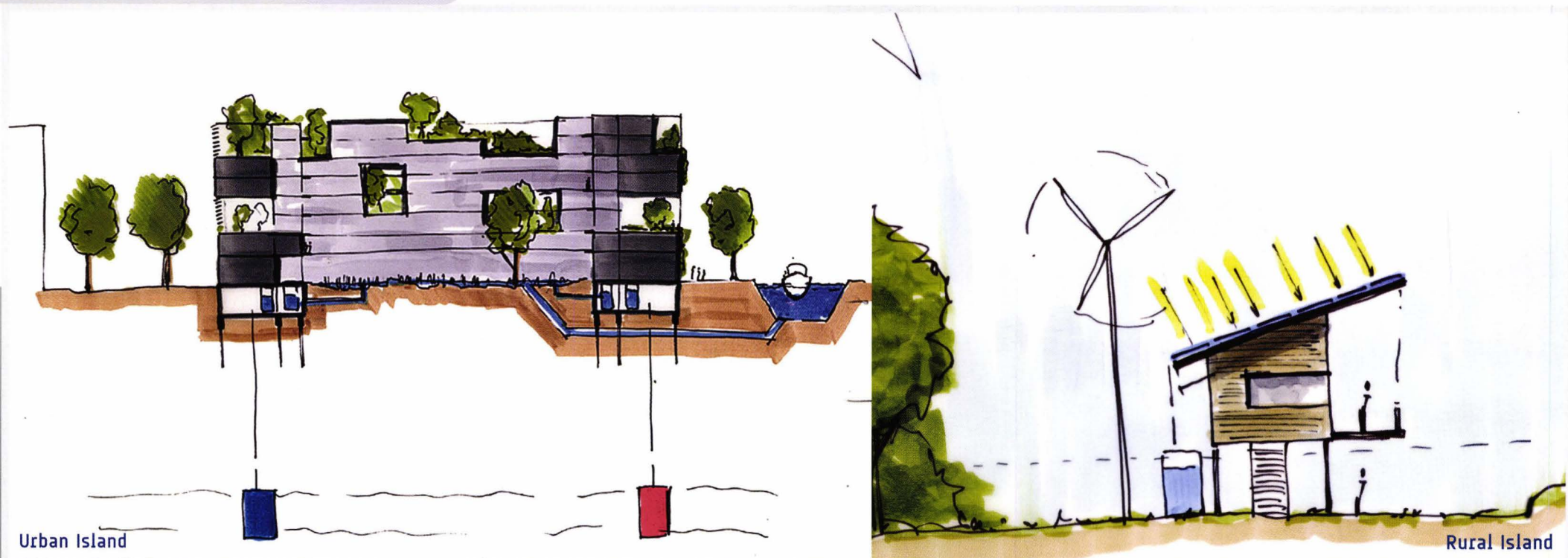
Sometimes the country of the Netherlands is seen as one urban area. Compared with other countries this may be true. Nevertheless, several participants in the competition create environments with different densities. Remarkable is the high amount of entries with high-rise buildings and compact cities. The approach to urban planning in



Red Point



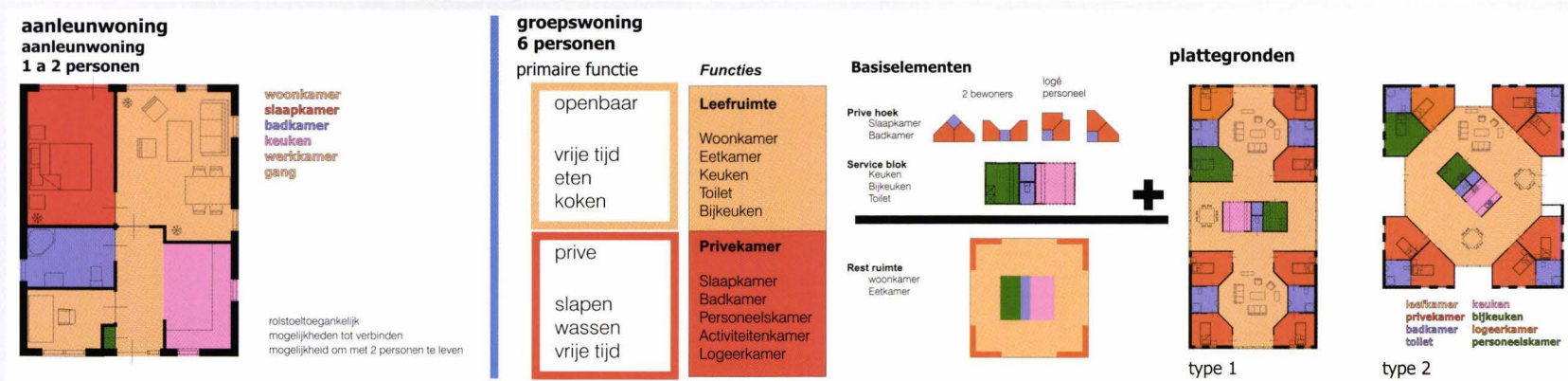
Isle Care



Urban Island

Rural Island

Marker islands, landscape for a healthy lifestyle



Square City

CARE-4U is the well-being of the inhabitants in their habitat comes first: from those with a traditional bourgeois, to a cosmopolitan to a new conservative lifestyle, everyone will find their place in the city. The participants structured the city based on these lifestyles into three distinct living environments: city centre, urban and suburban. In *Marker islands, landscape for a healthy lifestyle* a Scandinavian approach is the base for the urban planning. The statement is that in 2025 people will be able to afford a small apartment in the city and a house or second stay reachable in two hours by boat on a rural island in a very green and spacious environment.

Private versus Public

The issue of privacy and public area is noticeable in all entries but only a few participants use this as the main approach to their contribution. The manifestation of healthcare in these entries is no longer vis-

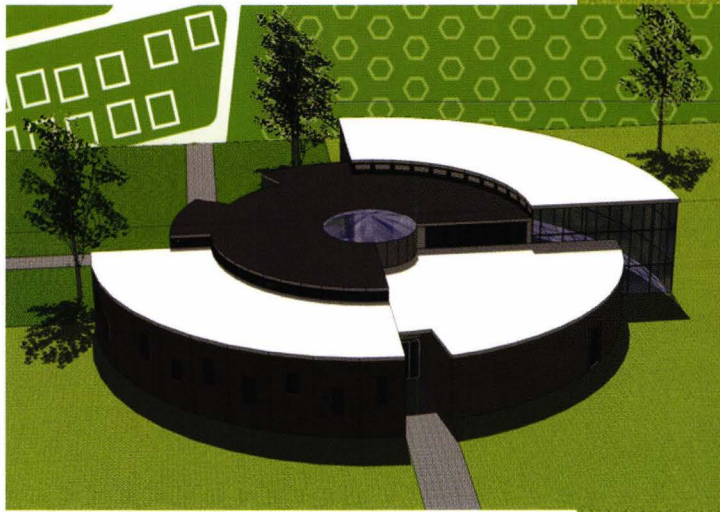
ible. Healthcare is integrated into the built environment of the living spaces. The border between private and public becomes diffused according to *Common Care & Cure*, *Common Privacy*. And the border between life at home, work and recreation has totally disappeared in *Take '25*. As a spacious approach the issue of privacy is used by the participants of *Square City* because people have changing needs for privacy and contact with others which results in a plan with a diversity of private and public places.

Healing Environment

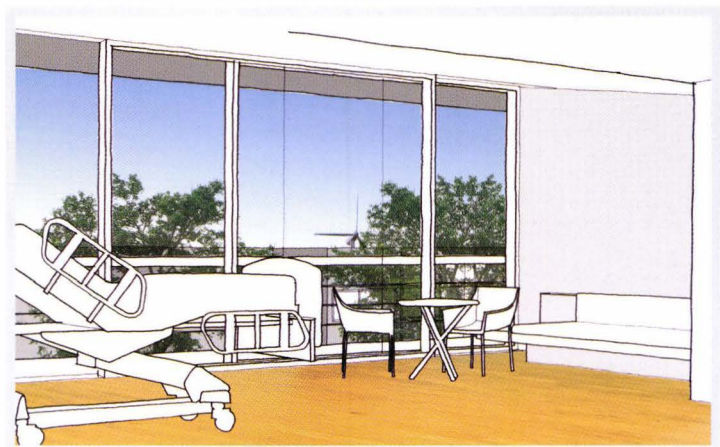
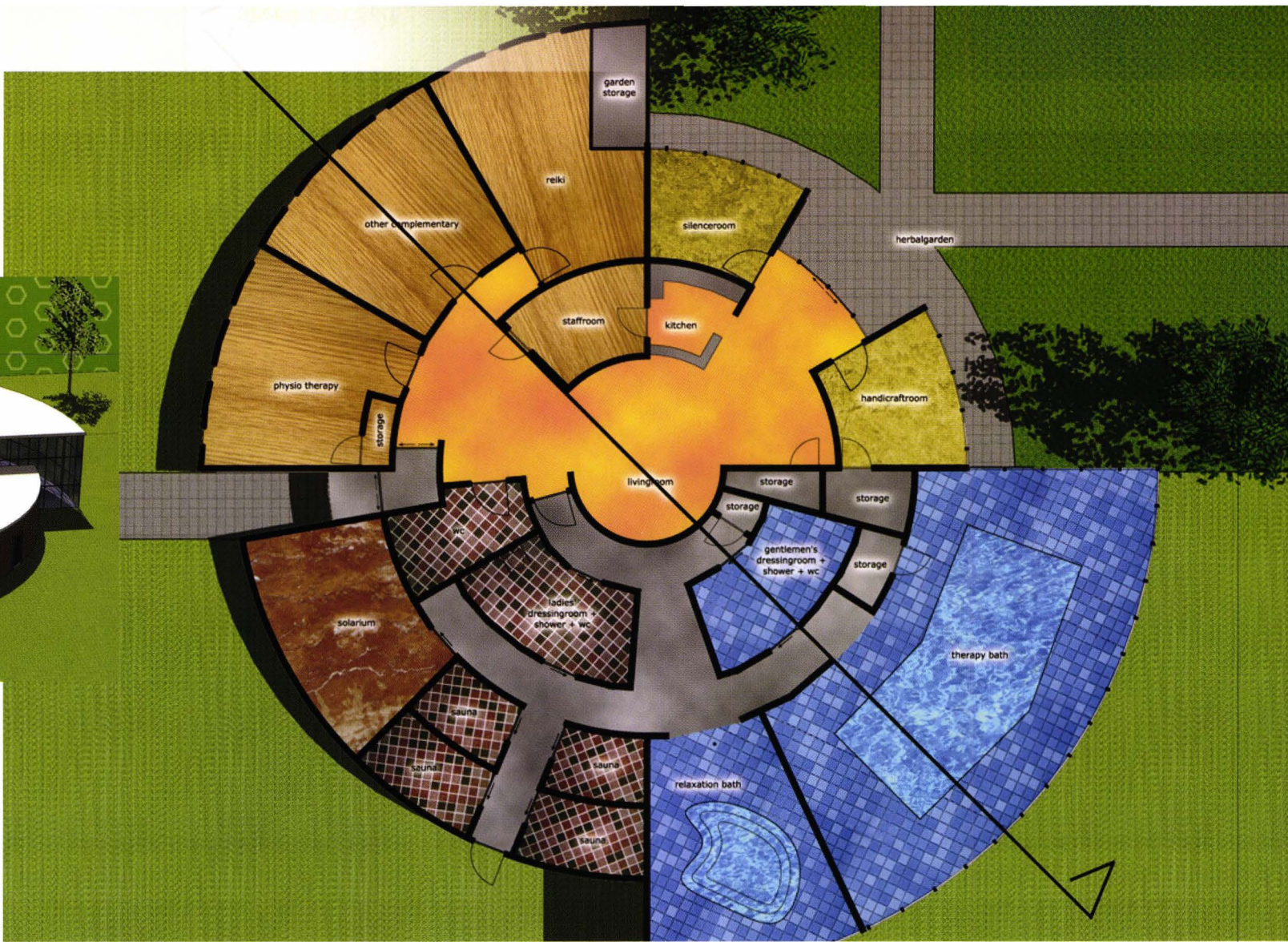
A current trend which will still be present in 2025, described by *Well Come City* and *...is half the solution*, is the connection between health and wellness. In the former the Consultancy Service Centre and Healthcare Service Centre are closely linked with wellness amenities for relaxation, healthy food, exercise, spirituality, social life, culture, art and leisure. All are situated in green spaces

along the areas of water. The latter entry created a Therapy & Health Resort, a new concept for prevention, wellness, care and cure.

Another main item of healing environment is daylight. Scientific international studies prove that daylight contributes to the healing process. In the design of the hospital in *3 Propositions for Healthcare and City 2025* courtyards enable daylight to enter all areas of the hospitals. Each department has windows from floor to ceiling on at least two sides for deep penetration of natural light, even in areas such as radiology and surgery. *Hygiopolis* uses the orbit of the sun for the orientation of the streets in the city. The regular grid is diagonally orientated to optimize sun penetration, particularly during the winter months, without overheating in the summer. Maximizing sunlight exposure reduces the enormous financial and social burden caused by depression, vitamin D deficiency (which contributes to heart dis-



...is half the solution



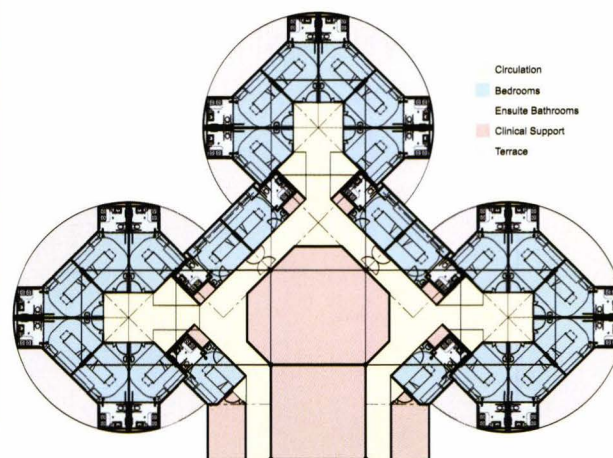
3 Propositions for Healthcare and City 2025



Hygiopolis



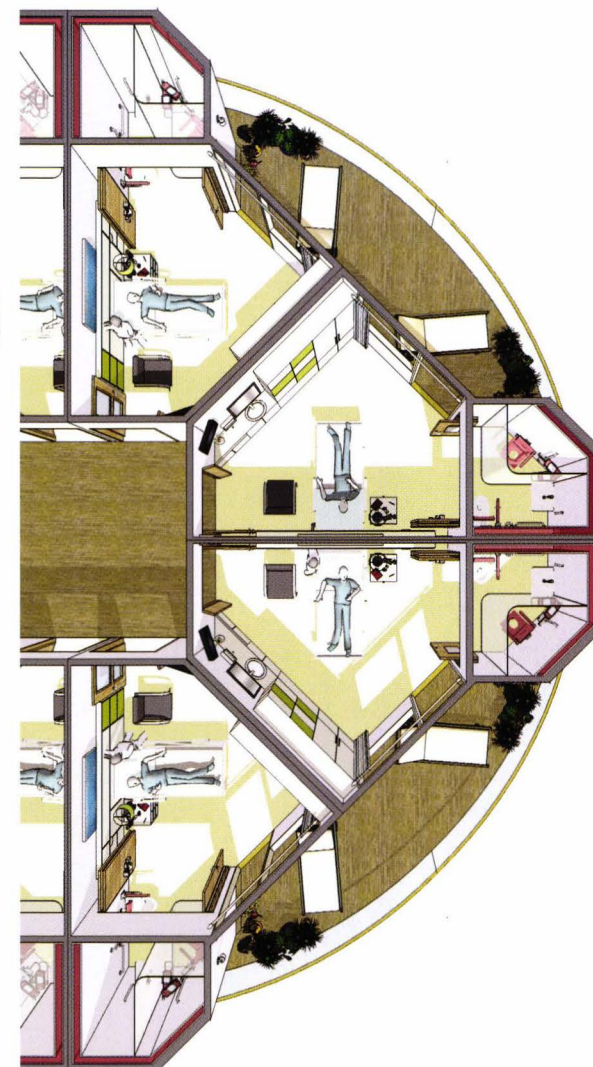
Well Come City



CLUSTER PLANS

Three eight-bed clusters form a generic nursing unit of 24 beds.

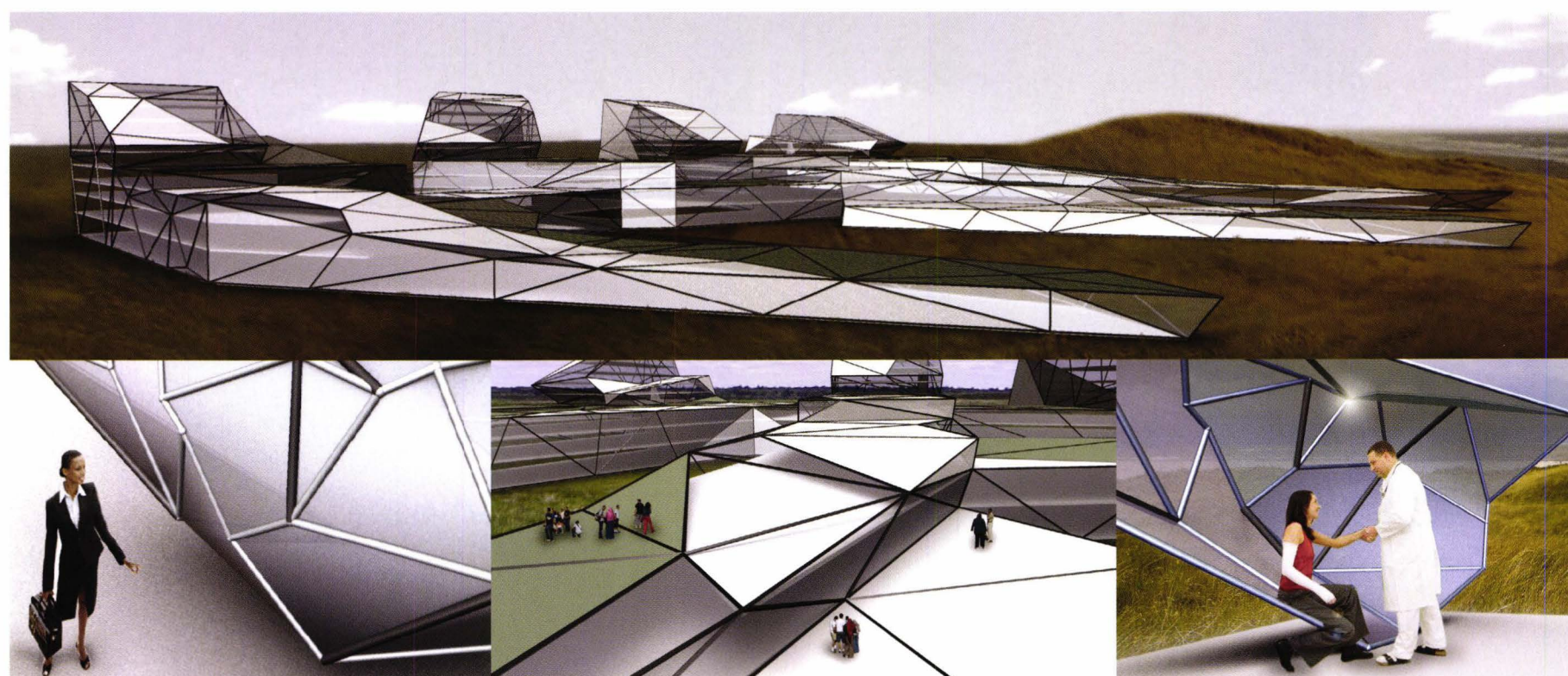
- All spaces will be served by full digital grid;
- 100% single rooms with compact ensuite and opening wall for fully assisted use;
- Any combination of 2, 3, 4 or even 6 multi-bedded rooms is possible;
- Configurations for Maternity, Daycase, Assessment and Critical Care are all possible;
- Consulting suites nad offices space can be configured flexibly;
- Balconies can be enclosed to maximise floor area or extend seasonal use.



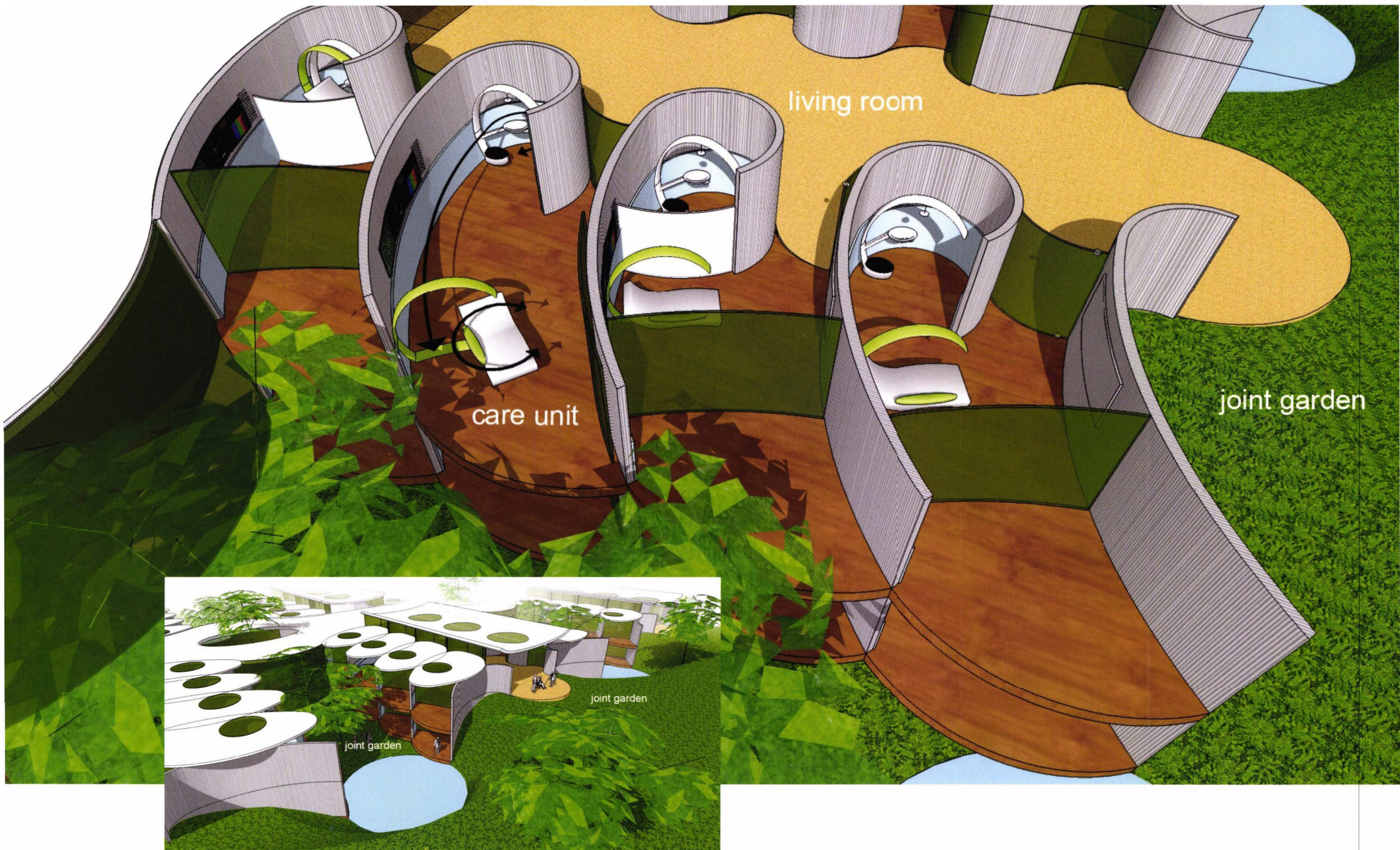
BEDROOM CLUSTER

8-bed cluster with nurse workstation and clinical support space, external ensuite pods and balconies.

Hygiopolis



A caring network



Care in motion

ease, diabetes and obesity), infectious disease and pain perception. This statement is supported by the fact that sunlight accelerates the recovery from illness. Another item that contributes to a healing environment is views of nature. *Care in motion* shows an organic setting with the possibility to interact with the outside gardens. The person living in the home can decide to open the room so the border between in and out fades away.

Form versus Function

In the history of architecture a constant discussion can be seen as to whether the form or the function should be leading in the architecture. When speaking about 'form follows function', it is believed that the form of a building is a result of functional programming. If the function of a building is defined by its form, then the prevailing opinion is 'function follows form'. This discussion is also noticeable in the competition. Contributed plans with a functional character over-

come plans with a strongly shaped form. Nevertheless, it shows that also in health-care assets the discussion is still very active.

One of the winners, *Fair Care - Care Fair*, gives a functional briefing of the hospital and the shape is a result of a sum of modular blocks sharing the same structural and mechanical system. The modular scheme makes it flexible and adaptable for future needs. A distinction is made between the required functional programme for the hospital and the auxiliary services which are located in a separate building, called the factory, connected to the hospital by a bridge at the third floor level. Transport of goods is done by automated vehicles with storage trolleys. All logistical and technical routings are concentrated on the third (interstitial) floor. All in all, a very functional design.

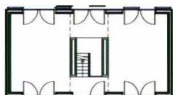
Another example where the vision 'form follows function' is applied as in the previ-

ous entry, is the layout of the general nursing department in *Hygiopolis*. The setting of one single bedroom is used in a block for the configuration of an eight-bed cluster. Three of these clusters form a general nursing unit of twenty-four beds. Each single bedroom has a private bathroom, an outside view, and a balcony, and can easily be watched by the nursery station. The result is a three-forked shape.

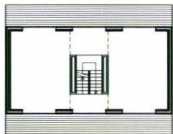
The vision 'function follows form' is most clearly presented by *A caring network*. The statement in this entry starts by stating that we have to accept that hospitals can no longer operate as fixed institutions. They have to effectively work as a complex network of fully autonomous facilities, specialists and patients. A network which can continuously change, evolve and adapt dynamically. Designing a building to accommodate such a dynamic network is simply impossible in a traditional way. However, new dig-



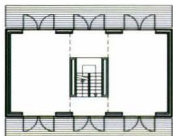
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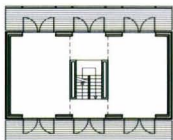
shutters



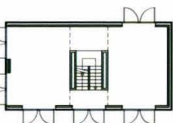
balcony



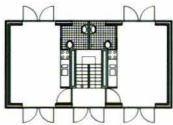
double doors



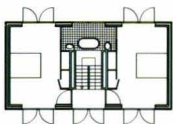
conservatory



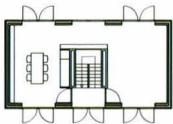
corner unit



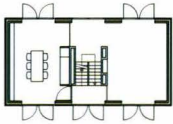
double unit



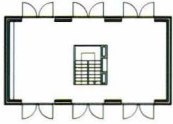
double bedroom



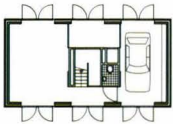
living+



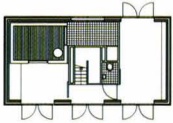
split level



fireplace



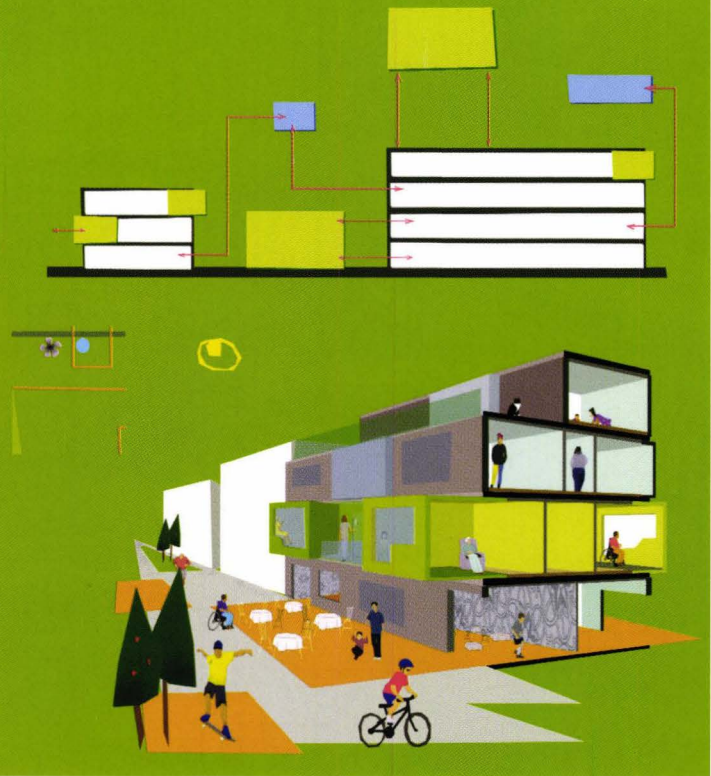
garage



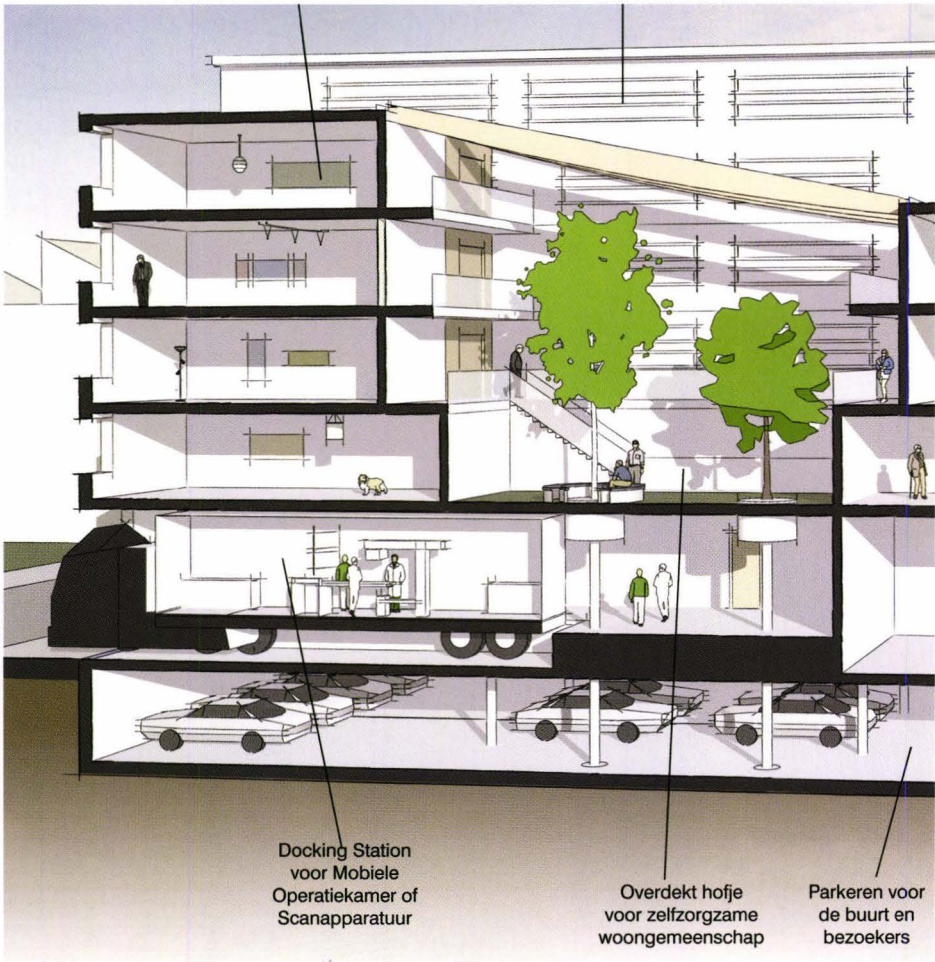
sauna

Flexibility

Expandable and disconnectable structures adaptable to changing requirements



Nobody is perfect



Docking Station
voor Mobile
Operatiekamer of
Scanapparatuur

Overdekt hofje
voor zelfzorgzame
woongemeenschap

Parkeren voor
de buurt en
bezoekers



Care for your Life



Bathroom unit,
Joep van Lieshout, 1993

From planning to 'Plug and Play'!

Operating theatres and other specific medical environments can be ordered as standard units and 'plugged in', decreasing the average time to anticipate change to 6 months.

Big Bang

ital design, manufacturing and interaction technologies allow to approach the design itself as dynamic network, without the need of constraining the entire system by a fixed organizational construct, nor by a definite building form. The elements of the building will now be themselves active parts of the dynamic hospital and social system.

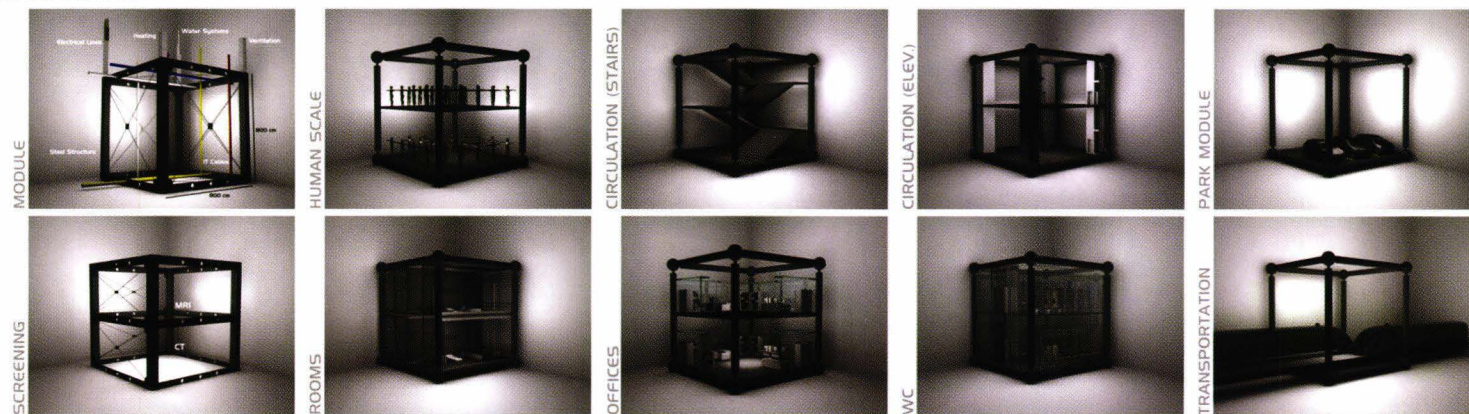
Adaptability

One way to face the insecurity of the future, is to develop flexible concepts which can adapt to changing needs. A distinction can be seen in the entries between two principles. The first principle is the developing of buildings which can be adapted. Examples of entries that apply this principle are described in this paragraph on Adaptability. The second principle is the concept of mobile units that can be attached to a fixed structure. The next paragraph on mobility contains examples of entries in which this principle is used.



CIT-Y

MODULHOS



29934

Strip City 2025 claims there is a growing need for flexible buildings which can be adapted as necessary. *Well Come City* elaborates on this statement by creating a schematic, architectural design with a prefabricated construction of columns with a large free span and prefabricated facades. A modular system is designed in 29934. With 8 x 8 meter dimensions of axis, “Modulhos” is produced as a system which can easily be adapted to evolutions of future building construction and spatial and technological developments.

Apart from a flexible structure there are competitors that show several floor plans within one framework. This is done for instance by *MEERmarken* and *Hygiopolis*. Several components form different compilations in *MEERmarken*. Designed to be adaptive and malleable throughout its lifetime, the “caring home” in *Hygiopolis* incorporates universal barrier-free design, to encourage mobility

and reduce the risk of accidents. All dwellings, whether in the higher density blocks or in the lower density row housing, meet these minimum space standards to enable “care at home” as the alternative to hospitalization. Patterns of work and life balance are catered for whether as a student, key-worker, elderly person or family, using a range of alternative floor plans and sizes.

Mobility

The second principle to cope with the insecurity of the future is the concept of mobile units that can be attached to a fixed structure. The following competitors are examples that apply this concept. First of all several entries, for example *CIT-Y*, *CARE-4U*, *Big Bang* and *Nobody is perfect*, show containers which can be fixed semi-permanently to a structure. The concept is like a plug-and-play system.

The other option in mobility is the use of moveable units such as trucks and even

boats. In *Care for your Life* a truck, the mobile Surgery Unit, drives into the complex next to the supermarket, kindergarten and sport centre. Operating boats can moor at a landing place in *Water of Life*. The last mentioned entries use mobility as a way to create a higher service level. Rather than the clients having to move to the healthcare, service is delivered at convenient places where people gather together. ◀



Water of Life

Common Care & Cure, Common Privacy

Introduction

There is an essential difference between accommodating and living. Accommodating is nothing else than placing people in a residence, where emotions and feelings have no value. On the other hand, living implies being at home, feeling secure and safe in a private environment.

People who depend on care & cure, experience care & cure as an infringement of their privacy, as if their self-esteem is replaced by care & cure. In a society where the border between privacy and public has become diffused within public space, the individual demands that his privacy be given high priority. This supposes high quality of care & cure and preservation of privacy at the same time.

Instead of defining care & cure as just the accommodation of people, care & cure must be defined as a way of life. Care & cure must be resumed within the complete concept of dwelling. Besides sleeping, washing and eating, care & cure is going to be a part of living. Care & cure hasn't the same meaning to everyone. Care & cure can be divided in five different levels, namely:

- People who are independent of care & cure, in other words who are healthy and able to live independently;
- People who live independently, but sometimes need care & cure outside their homes, for example a family doctor or a physiotherapist;
- People who live independently, but who are depending on volunteer aid, so who are getting help from others inside their dwelling;
- People who aren't able to live completely on their own, but function very well with guidance, for example in a home for the elderly, a sheltered accommodation or a home for the disabled;
- People who are depending fulltime on care & cure to live at all, for example a nursing home.

These five different levels can be read as five different levels of dwellings.

Metropolis

Instead of thinking in square metres of land, the land has become scarce anyway, we have to think in cubic metres of air in the future. This means that projects of social services must be rent or sold by cubic metre of building capacity. Besides a horizontal infrastructure, the city develops itself in a vertical way too. By integrating a public and private programme in a horizontal and vertical way, accessibility and multifunctionality will be approached as well as possible. Also the scarce land will be optimal in use. The city gets the character of a metropolis. This seems to be in conflict with the competition programme, where a large structure has been asked for with a small dwelling character. However the metropolis fulfils optimal need for privacy of the individual and guarantees therefore the small dwelling character. People can be more independent of others, because of the functions besides the dwellings, that complete their lives and are within reach. Because of the fact that all different levels of dwellings are part of the metropolis for care & cure, every citizen can be considered as a valuable individual. Even though care & cure are present the whole time, privacy will not be affected.

Common care & cure

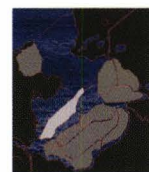
Within the metropolis for care & cure, there isn't only attention for integration of the five different care & cure levels. There are also functions included, to stay fit and healthy, physically and mentally. Because of the fact that the buildings are developed vertically, enough open space remains to expand outdoor activities. Besides green area outside, there is some inside area to create a good climate for life. Near the dwellings, inside gardens and parks are projected. The green space areas give a feeling of openness as well. For

common care & cure
common privacy

panel 1



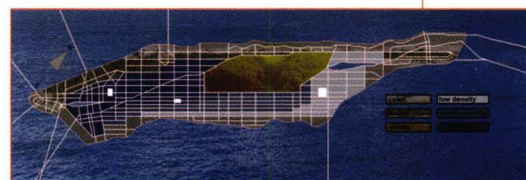
existing site



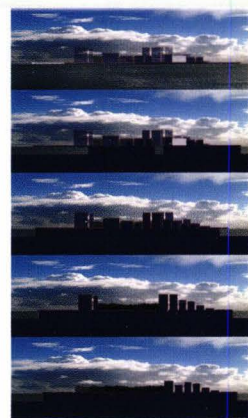
new site



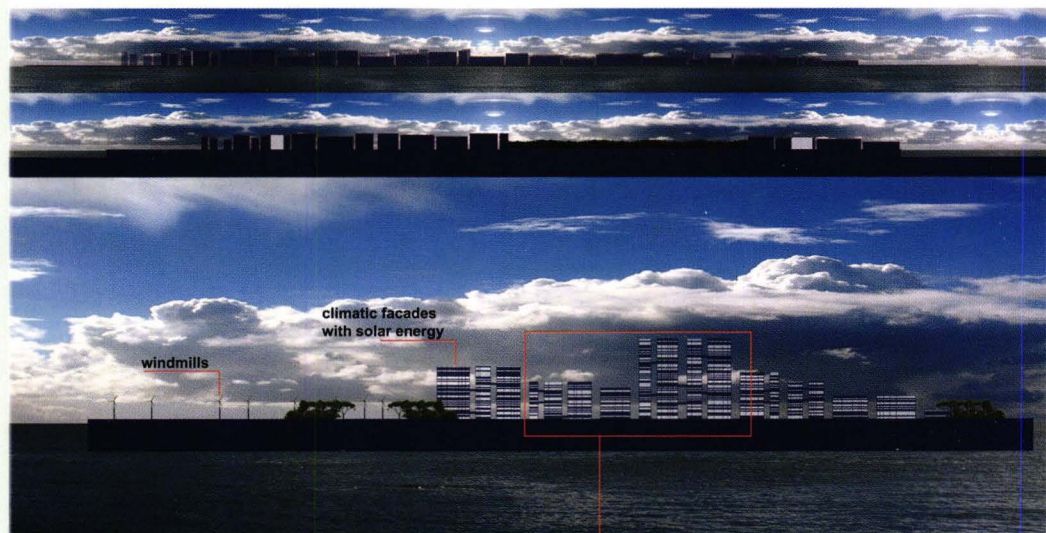
new metropolis



new metropolis for care & cure with building blocks, infrastructure and free area

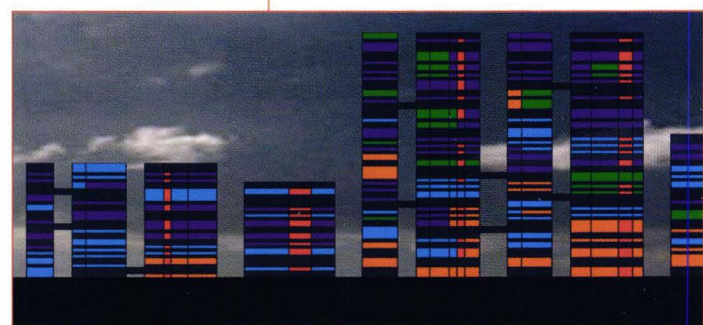


skyline and different sections



programme legend

- mobility
- care & cure
- dwelling
- park & plaza
- leisure, shops, food & drinks



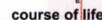
physical health purposes public indoor sports accommodations are included. For example swimming pools, fitness with or without coaching and saunas. Besides that, there is a programme for mental training and interests. For example people are able to attend courses and lectures in a auditorium or a library, to visit concerts, shows, cinemas and museums. By offering a large programme of care & cure next to the dwellings, the metropolis for care & cure becomes pleasant for all people depending on care & cure, both within and outside the dwelling. People at least have a choice. They can choose to be a part of public life,

because they live in the middle of it. Or they can choose to stay out of it.

Common privacy

Life within the metropolis of care & cure is completely focused on making individual choices. The metropolis is nothing but a mega structure of possibilities, which leaves a lot of free space for further interpretation and filling-in. Every individual has his own living environment. This can be an own bedroom or a complete house. As care & cure are always there, the different levels of dwelling can be interweaved. Outside no difference can be seen. This makes every person a valuable individual, with

panel 2



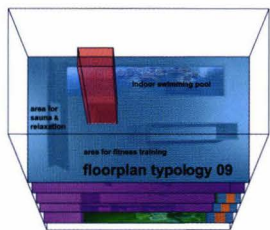
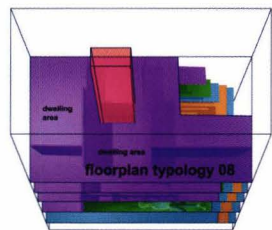
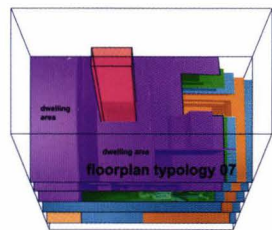
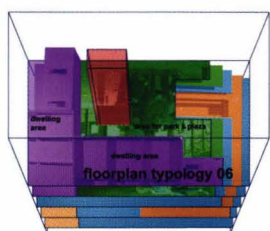
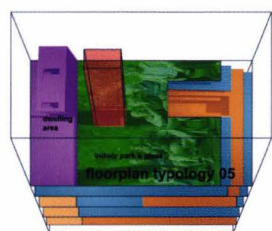
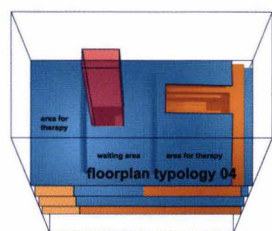
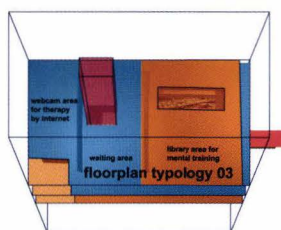
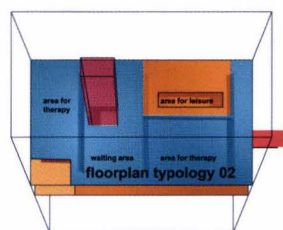
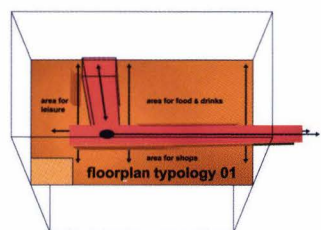
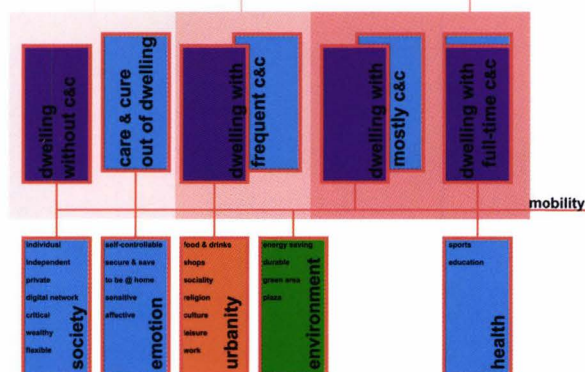
mobility

care & cure

dwelling

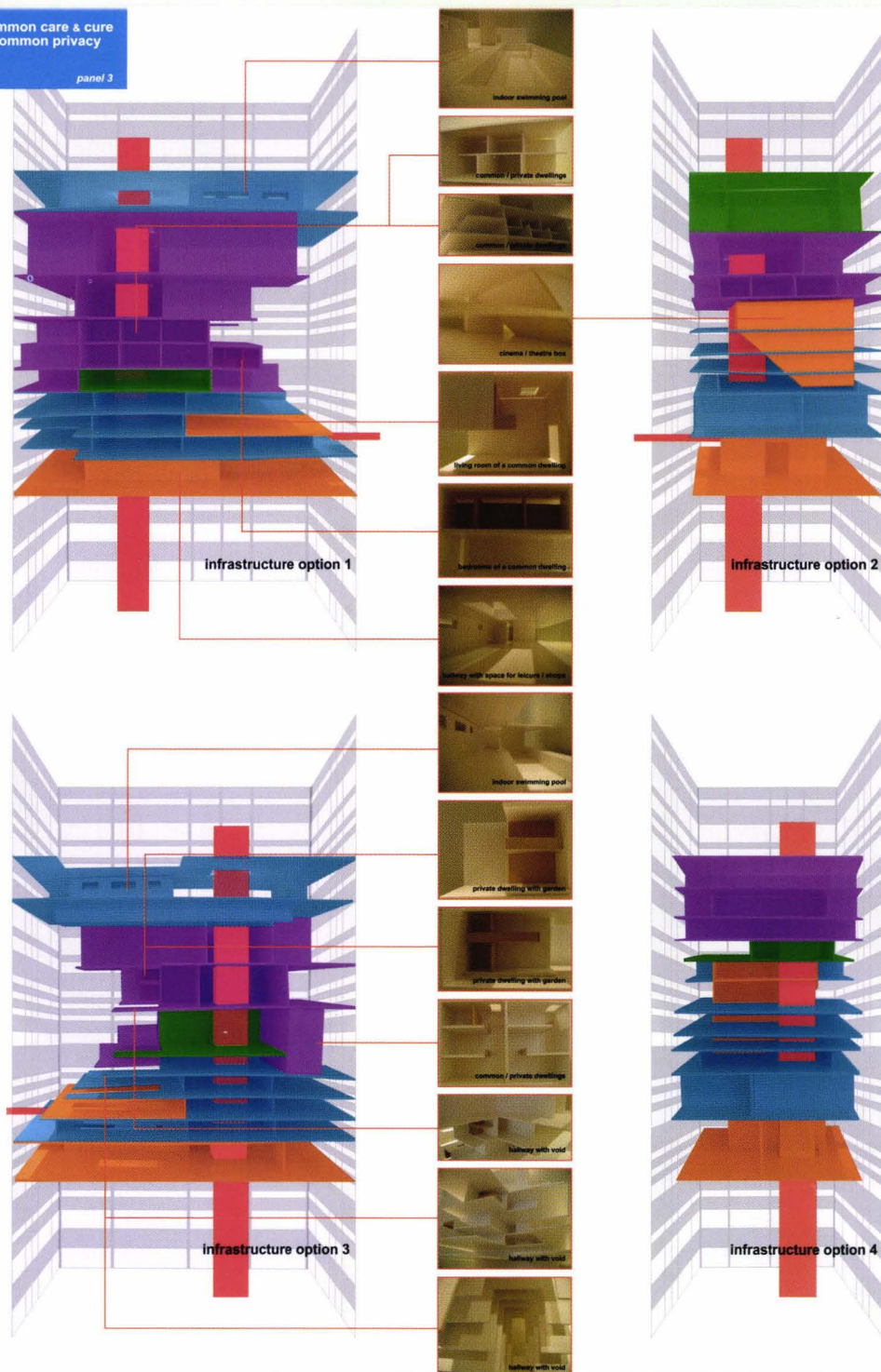
park & plaza

leisure, shops, food & drinks



his or her own identity. Because of the fact that all dwellings are interweaved, it is possible to choose to live in the same community for a lifetime. The older a person becomes, the more need there is to hold on to the same. Demented people forget their beloved ones over time, but always feel comfortable and safe until the last moment within their familiar environment.

panel 3



Motto: *Common Care & Cure,
Common Privacy*

Main designer: *Anouk Dolmans*

Firm: *Architectuur Studio 6041*

Health to the People

Health to the people and health for the people, the way to a more healthy society. Healthcare can be arranged from your home, in this way unnecessary visits become a thing of the past. Healthcare will be delivered to your door or is located close by. Healthcare service is a main factor, and to this end the city is designed.

The city is polycentric, divided in city districts, which adds vibrancy to the city. The city districts are spread over a long curled shape and are mutually connected by an electromagnetic transport system. Every city district has its own identity and provides basic healthcare. Basic healthcare is localized in the core of every city district, connected by the transport system. Besides basic healthcare every city district has its own healthcare specialization. These healthcare specializations are divided over the city districts which contribute to an interaction between them.

HealthChannel

HealthChannel is a healthcare channel at people's homes and work. This digital medium contains information about the human body, diseases and price-quality comparisons of the healthcare supply. This price-quality comparison will stimulate the mechanism of supply and demand, which will have a positive influence on healthcare. Besides information health channel contains patient files and as a result of that patient information is quicker to be found by healthcare specialists. Also, health channel takes on a large quantity of communication and control so that transport will decrease.

Home

Healthcare will be offered locally: literally at your doorstep. The healthcare specialist travels via the transport system to a district to give consultations. The advantage is for the healthcare customer, who doesn't have to travel and receives healthcare in a familiar environment. As a result of local care there will be less demand for special-

ized capacity, which will result in fewer costs. At cure it contains non-urgently aid, like diagnosis and consultations by a family doctor, with inclusion of small operations. For urgent help there's the ambulance. At care it contains non-permanent support and control, like rehabilitation and seniors who stay at home longer. At wellness it contains all local wellness, like home massage.

City District

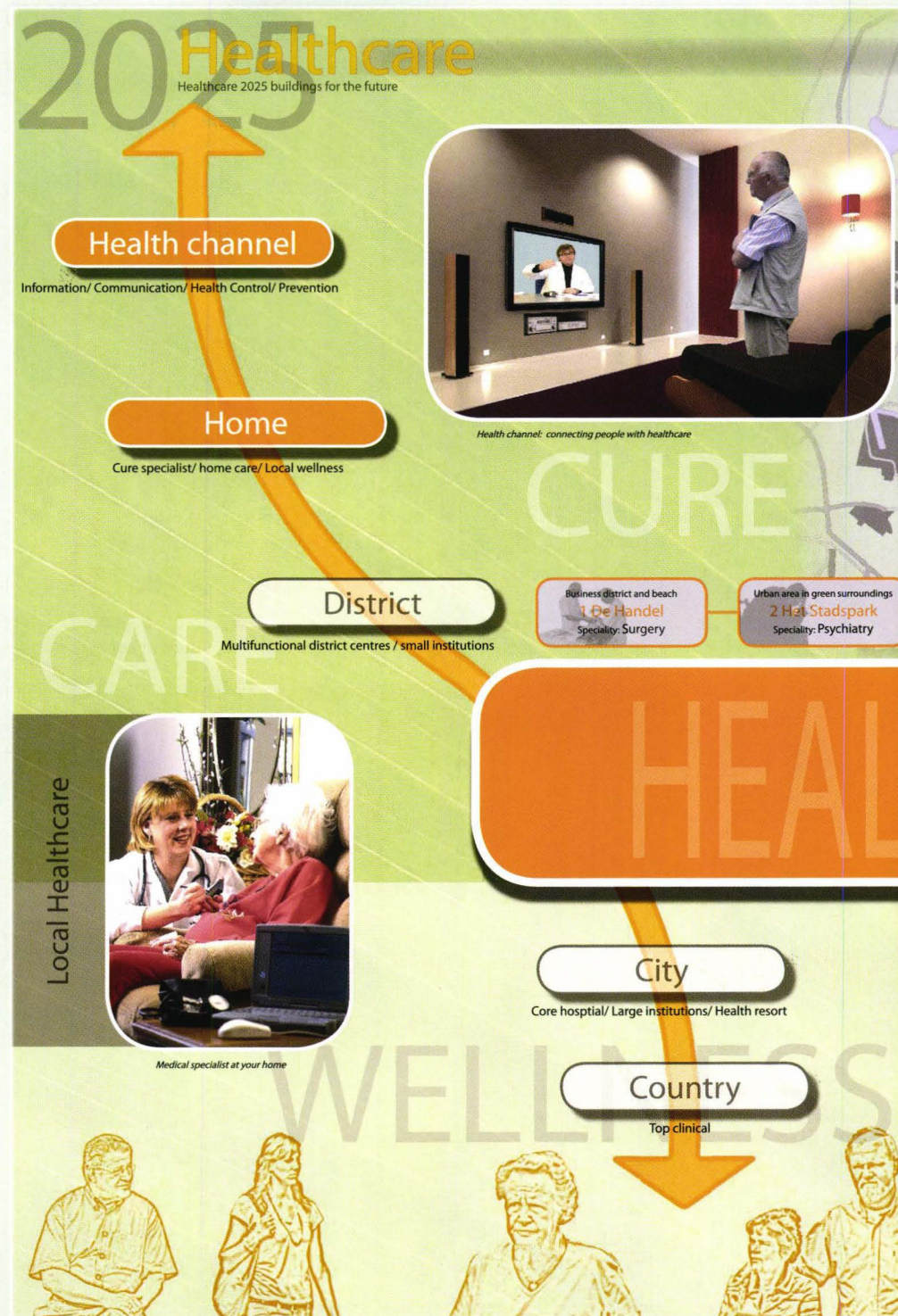
A City district contains in its core a multifunctional centre, which provides basic healthcare. These centres are an alternative for healthcare at home, namely healthcare in a specialized environment. Freedom of choice is important and therefore will the basic healthcare be offered to you by a multiple of health suppliers. As a result, people are going to choose healthcare only on the best price-quality comparison. Another factor is that not all health specialists have to be present at every centre: they can travel from one centre to the other during the day. Basic healthcare contains: at cure a pharmacy, family doctor, dentist, advice centre, midwife and physiotherapist, at care it contains for example an old people's home and at wellness it contains swimming, fitness and relaxation.

City and Country

Healthcare is organized at city or at national level. There is only one in a city or a country. Because of this specialists can use their medical equipment to an optimum, which lowers costs. It concerns specialized healthcare and healthcare which has to be physically connected to other healthcare. Some examples: a hospital, an oncology centre and a health resort.

The City

In Amsterdam and in Almere in the period 2010 - 2030 there will be a demand for 95,000 houses. The new city uses this by choosing the location in the south of the Markermeer with a motorway and a railroad as main transport.



As a result of the location, it will subdivide the Markermeer and the IJmeer, which will improve the water quality of the IJmeer. Right through the city there's a green strip, which connects the ecological areas of Flevoland and Noord-Holland.

The city is polycentric, divided in city districts, what adds vibrancy to all of them. As a result polycentricism originates city districts, which all have their own specialties. Every city district has a multifunctional centre with basic healthcare.

The unity in the city is provided by the transport system which connects all the

city districts very fast. The city districts are divided into round shaped quarters, with in the middle a station to the transport system. The quarters have a radius of 500 meters. As a result the whole quarter is within a five-minute walking distance from the station. As a result of this cars are unnecessary. They are forbidden within this radius, on the outside they are allowed. It also stimulates healthier means of transportation.

The city has eight city districts, which have besides basic healthcare also a healthcare specialization. These are the city districts from the south to the north:



1. De Handel: Plastic Surgery
2. Stadspark: Psychiatry
3. Den Haven: Brains and Senses
4. Zuidergroen: Hospital
5. Noordergroen: Child hospital
6. Waterrijk: Oncology
7. Groenendaal: Defence and Metabolism
8. Groenrust: Wellness and Cardio

Transport system

Bringing health to the people requires transport with high demands. As a result of the aging of technology, current transport networks are no longer the best solution. Therefore, a new transport system is developed. This new transport system consists of small vehicles on an

electromagnetic track and is useable for transportation of healthcare, cargo and persons. On a station vehicles are constantly ready to depart and can be used by everyone.

There are no special skills required to use the transport system. A person enters the place where he wants to go and the vehicle drives automatically to this place. As a result people can do useful things like reading or working.

On top of this, the vehicle makes no stops and therefore people don't need to transfer, which saves time. The fast connection creates possibilities for competition between the city districts

and physical detachment of specialized healthcare.

The new transportation system makes city districts and quarters into a city. To keep unity, the transport system is underground to combat pollution of the horizon and noise pollution.

Motto: *Health to the People*

Main designer: *Anton van Maaswal*

Firm: *TU/e - Heijmans Vastgoed*

Team members: *Matthijs Stoffels
Bastiaan ten Ham
Sander Willems*

Strip City 2025

The concept of "Healthcare 2025" has been based on aging, economic developments and the changing demand of healthcare. The healthcare principles are a continuously changing building process. These buildings do not meet demands anymore and cannot meet the speed of developments. There is a growing need for flexible buildings and housing that can be adapted to the requirements. To remove and add were necessary.

The new town is situated in a Healing Environment. This phenomenon can be integrated for any target group in the healthcare process of this town. This concept of healthcare close to home is a continuously repeated element in this town. Healthcare in high-rise buildings, in areas including many lakes, rivers and canals and other waterways, and in houses for people that need much care, all closely connected to the inhabitants of the town. In these cases healthcare should be offered as close to home as much as possible.

Only in case of emergency Healthcare centres should be involved. Healthcare principles which are in the same building including a surrounding that stimulates the healing process and healthcare for each other.

To support families in their needs for healthcare, but without losing their privacy. Being supportive of each other is an element that fits this context very well.

In view of the character of the area as a whole, our design vision does not feature pre-designed residences on pre-arranged plots, be it high or low-rise building.

Our catalogue is evidence to the fact that standard designs are now making room for contemporary architecture. This brings about area diversity relegating serial building to the past. The private residence is thus turned into a unique concept different from all surrounding living elements. A dynamic and coherent entity of man and his per-

sonal architecture is set in a natural and healthy environment.

Modern High-rise

The design "modern high-rise" is equally flexible with care facilities close to home. This building is constructed in three parts. One is a natural, communal garden bordered on two sides by a permanent centre. The centre features a roadway on each level. On the outside of the centre space can be realized for specific facilities. The steel construction allows a kind of change system in the rooms, enhancing the theme of flexibility. In the facilities rooms various health care and other functions can be taken up in the programme.

Disuse is not applicable here since the facilities rooms can be lifted from the steel construction, allowing an ever changing facade structure. The high-rise can be designed according to the needs of the user and business exploiters: living, healthcare, shops, etc.

The high-rise, however, despite all of the above, features living as its most essential element. In view of the term high-rise this is often regarded as a drawback for lifestyle comfort. In our design, however, we can relegate this notion to the past. This is underscored by the provisions in the permanent centre: the present and future streetscape can be viewed also from various points on higher levels. Apart from traditional passenger lifts the high-rise is supplied with various car lifts allowing the residents to park their car in front of the door on all floors. The streetscape in our design features modern galleries and has sidewalks, a street, lay-bys, and every front door has a private zebra crossing, guaranteeing safety and an overall structure of the streetscape. It ensures that the individual is central in the design, which in turn is expressed in the most important element of "living".

Water Dwellings

The design "water dwellings" has been set up in a flexible manner, so that residents may integrate their own plot. Cre-

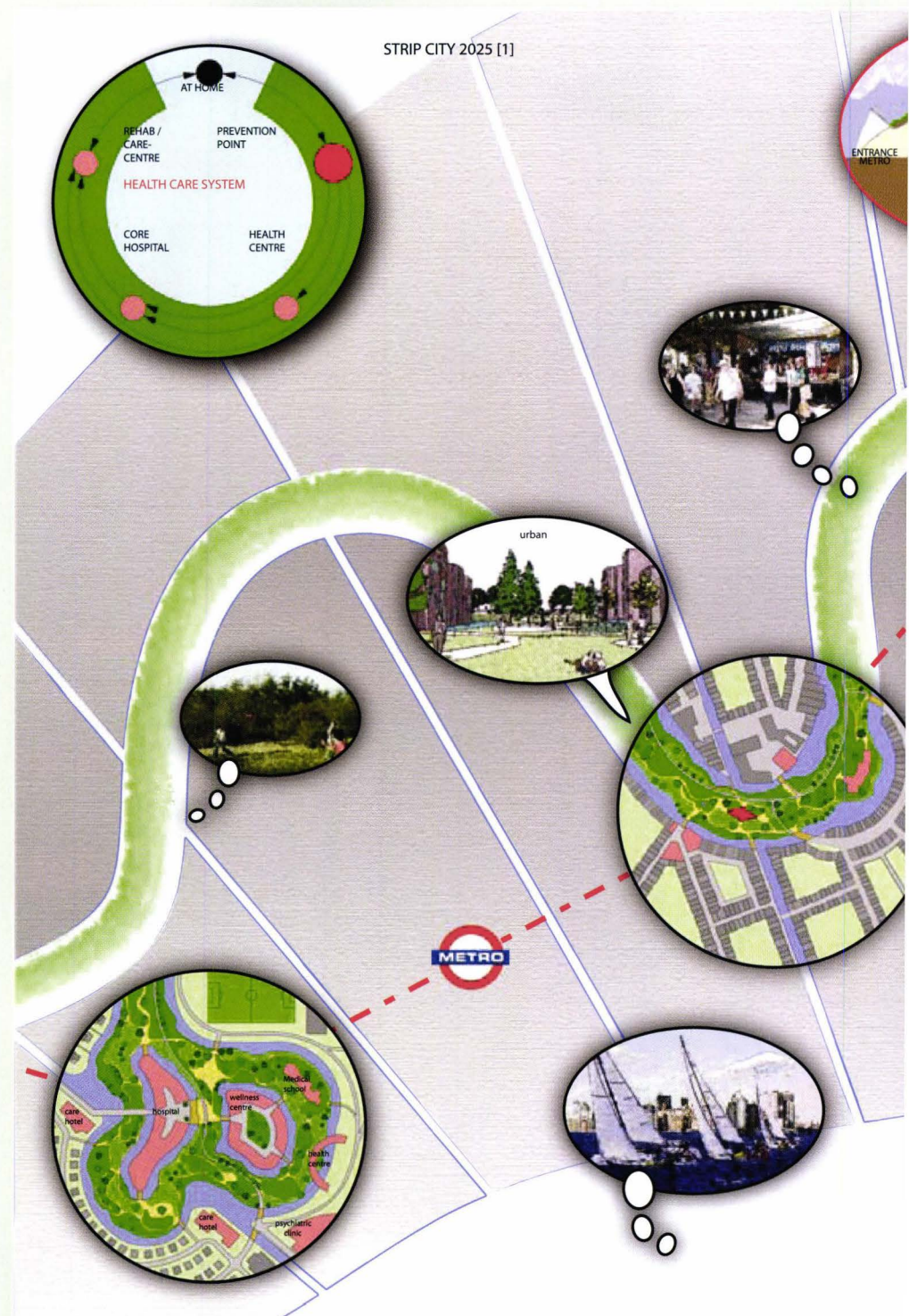
ating your own living environment for individual needs and requirements with different models and types provides the owner with a personal Healing Environment. This flexible approach allows any type of healthcare needed by the owners to be translated back to the privacy of the personal living environment. Another versatile feature is the flexibility to change the area to a new healthcare situation with restyled health and living requirements, should the present health provisions no longer meet the demands.

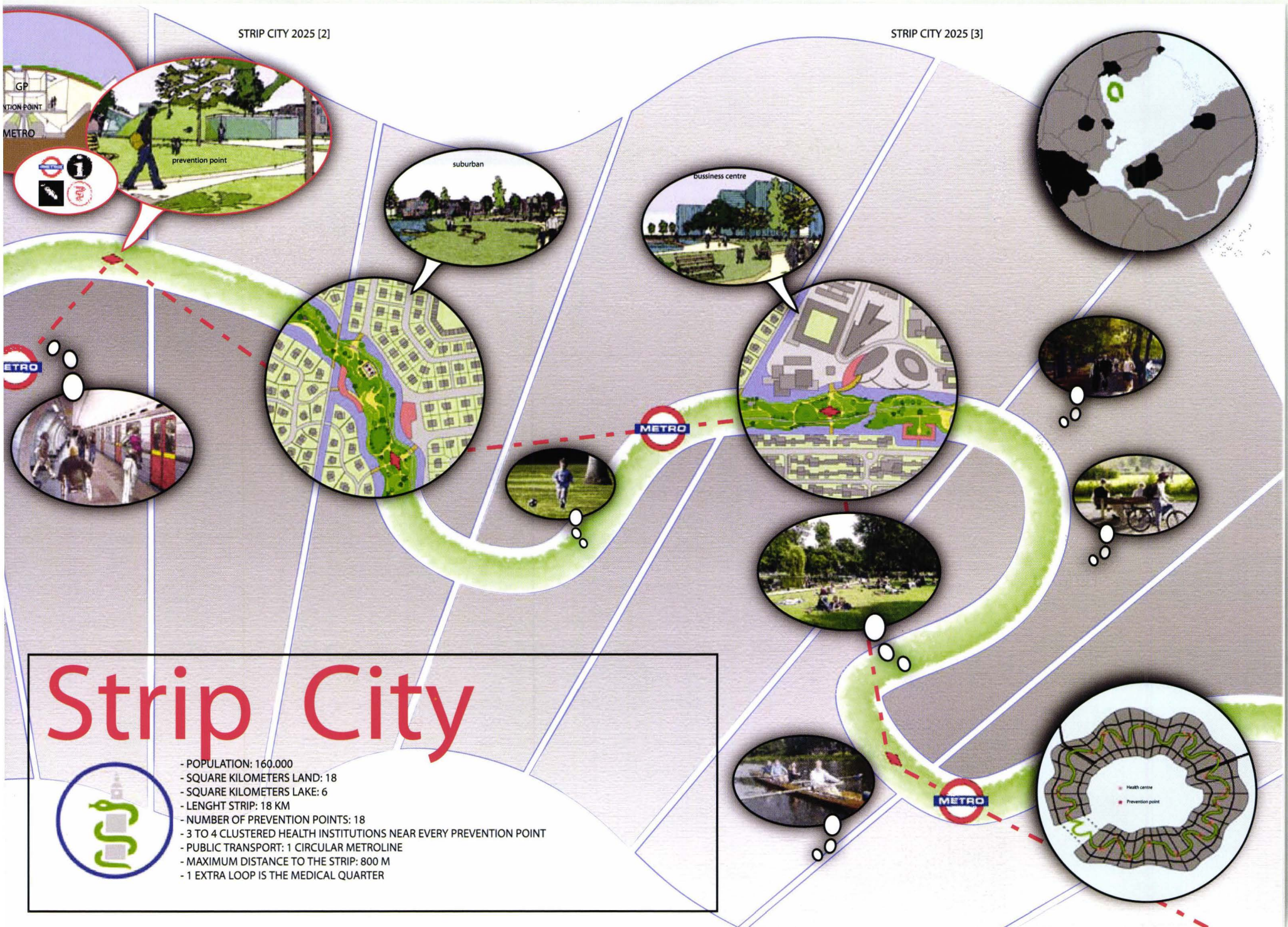
The living areas and the environment can be aligned to form the optimal com-

bination of plot and location by means of a catalogue system. These combinations create the Healing Environment which can be laid out to meet specific needs. Thus the final design is in the hands of the prospective inhabitants.

Various generation dwellings

The design "various generation dwellings" encompasses the word flexibility and is interwoven with the underlying principle of healthcare. But in this situation informal care is the keyword in the overriding theme of healthcare. The only permanent concept within the living quarters are the centrally located infor-





mal care towers. These towers can be restyled to individual wishes with different functions and possibilities reflecting the versatile programme. Numerous options apply such as the family living kitchen, care room, swimming pool, sports facilities etc. Every family have their own needs to look after each other with the support of the informal care facilities. The tower features sun regulating glass. A standard feature to the central hall is the care room.

This room is transportable with the so-called ambulance lorry and, in case of emergency, can be transported to the local Healthcare centres, or to the main healthcare centre in the centre of town.

Apartments or premises can be added to the informal care towers, e.g. an apartment or dwelling for the grandparents, family, young family or single people. The dwellings themselves can be grouped and regrouped by means of individual segments such that the individual needs and requirements are met at all times. This way of styling and restyling guarantees unique structures with unique combinations of informal care. Here, too, the final design is in the hands of the future residents.

Motto: Strip City 2025
Main designer: Thom Winters
Firm: TU/e - Heijmans Vastgoed
Team members: Maarten Goedhart
 Jitske Torenstra

CIT-Y

Healthcare 2025: A retrospective from 2125

A town of some 160,000 inhabitants was realized in the thirties of the 21st century in the area known previously as the Markerwaard. This town connected the then provinces of North-Holland, Flevoland and Utrecht. The increasing risk of flooding inspired the designers to develop a floating town that could move with the fluctuating water level.

Philosophy

Flexibility, Mobility and Freedom (FMF) formed the basis for the urban development plan. The FMF principle gave the opportunity to move at any desirable moment, in your own dwelling, to the desired social area, all according to need. This all took place in a car-free, green and bright environment where electric power was obtained from transformed windmills, fully-developed solar panels and generally acceptable nuclear power stations. The designers stated that in this new environment people would feel better, healthier and happier. The demand for care would thus be considerably reduced. Scientific research in the past century has meanwhile shown that they were right.

Town

The town consisted of over one hundred floating attractive islands of a diameter of 450 metres, divided into the categories: woodland, park, meadows, town and water. These were connected to the mainland by an underwater metro system, that was not only a means of transport for people, but also included a goods line. Due to the enormous development of the internet it was meanwhile very common to purchase goods through the computer and have them delivered. The total banishment of cars from the town resulted in several advantages. The area that was used for roads could now be used for open green spaces. The air became appreciably healthier. The money that the people would have had to pay monthly on car charges could now be used differently,

and this meant a great boost for the Dutch economy. The Dutch state managed the 'Daf island'. The old classical car was reinvigorated. Should anyone wish to make incidental use of a car on the mainland, a White Daf was available to the inhabitants at a reduced rate.

District

Each island was provided with a fixed plan with connecting points for the individual dwellings. These connecting points contained supply and drainage pipes for gas, water, electricity and digital cables. The dwellings could thus be connected and disconnected very simply. Each island had a central facility. The inhabitants could not only get their daily essentials there, but also go there for sports, care, culture, work, relaxation and entertainment, etc. Dwellings could also be connected to the central facility.

Dwelling

The new type of dwelling overcame the old emotional and financial problems of people who had to leave their own home. The new dwelling could easily be

extended in width or height via a plug-in system, according to requirements. The dwelling could also be reduced in size again and plugged in to one of the many established points on the island desired.

Care

The pressure on healthcare that was expected at the end of the 20th century due to aging, was overcome by the authorities becoming aware in good time that clear measures had to be taken in the care cycle of humanity. Preventative healthcare (from the fertilized egg) was available free of charge and the diagnostics based on the DNA profile became socially acceptable. At the same time millions were invested in the development of better medication for aids, Alzheimer's, cancer, psychological complaints etc. This resulted in people getting older, but more specifically healthier. There were also a number of changes regarding palliative care and voluntary euthanasia. Once people had reached an age of 120, it was generally accepted that free use could be made of voluntary euthanasia, and this became obligatory on reaching the age of 135.

The authorities encouraged free enterprise in care. Due to improved health it was possible to integrate prevention (for example check-ups while out shopping, Tele-care at home) and the limitless sector care and adaptable care concepts made, and remain in the own neighbourhood to a ripe old age.

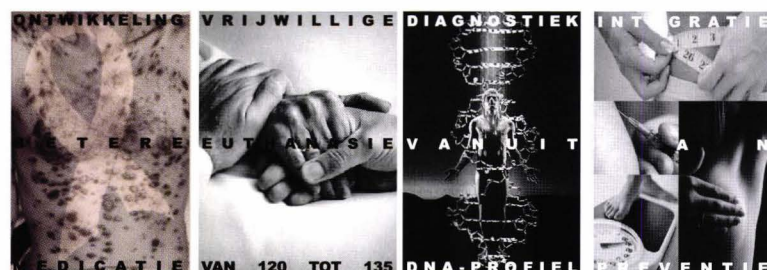
The flexible dwelling provided people with the possibility of taking the dwelling with them to the necessary care neighbourhood. When it was necessary people could also move into the main hospital on the 'central island' of the town. The main hospital was largely directed towards (relatively) complex medical intervention combined with high care. The number of beds was reduced to a minimum. The plug-in structure meant that individual dwellings could be connected to the main hospital; patients who wished to do so could then be treated "in their own environment". The (medical) technology made it possible to deconcentrate most curative care to the central facilities of the islands. The surgeries and studies of general practitioners, doctors, specialists and (specialist) nurses were housed in regu-

M I N D E R . Z O R G . D O O R . P R E T T I G . L E V E N .

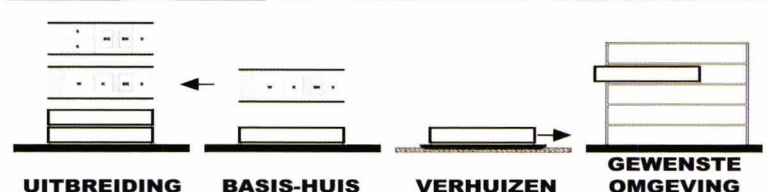
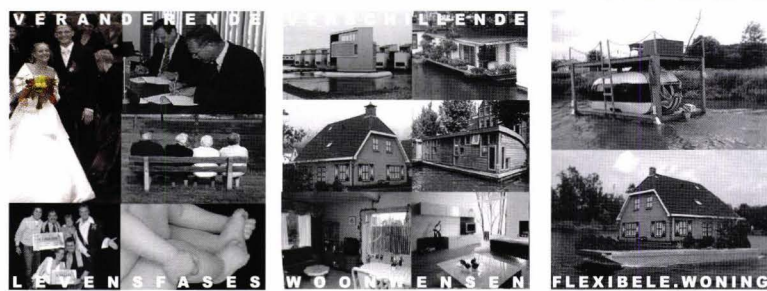
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W O N E N

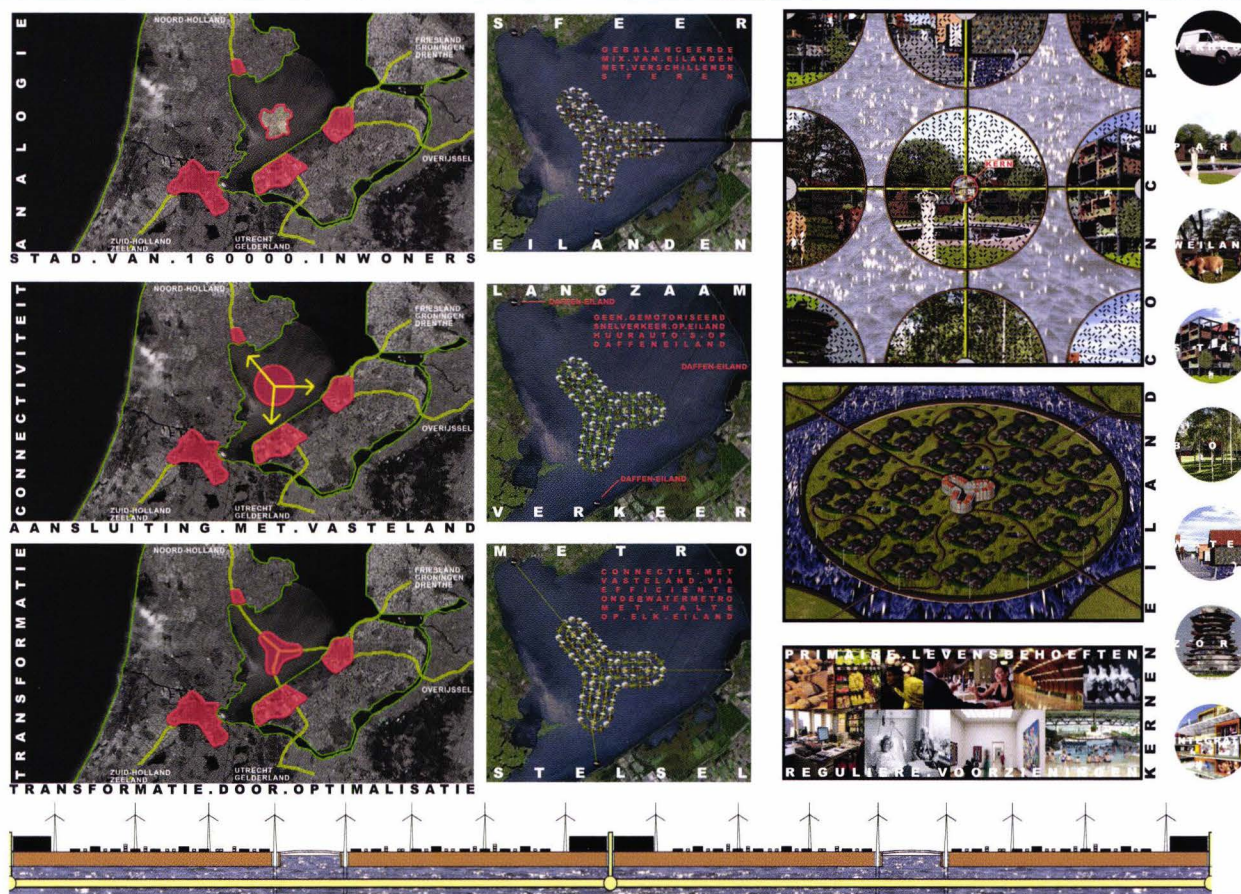


M O B I L I T E I T . F L E X I B I L I T E I T . V R I J H E I D

STAD.VAN.DE.TOEKOMST

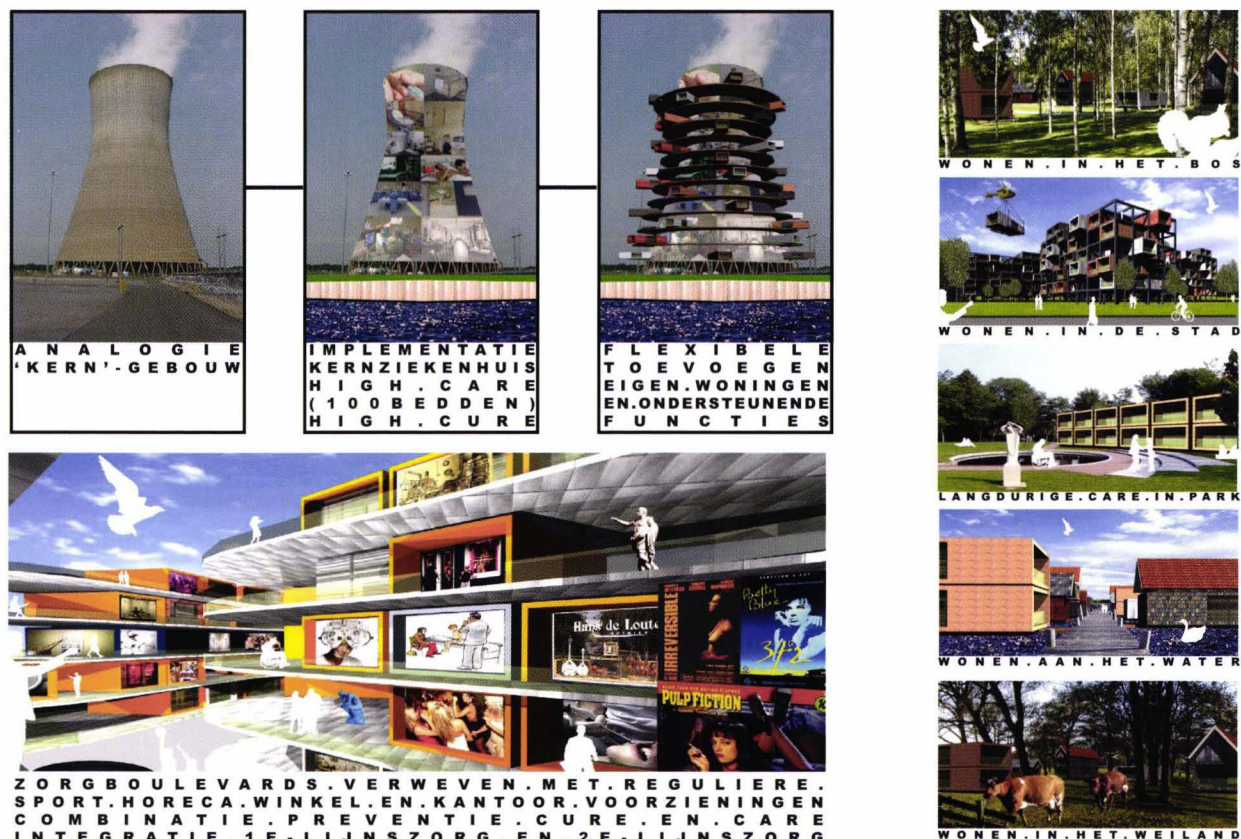
CIT-Y

EEN.FLEXIBELE.STAD.MET.DRIJVENDE.SFEEREILANDEN



DIE.VOORZIEN.IN.ALLE.DENKBARE.BEHOEFTEN

WAAR.MEN.KAN.VERHUIZEN.AL.NAAR.GELANG.DE.BEHOEFTE



ZODAT.MEN.ZICH.GEZONDER.EN.GELUKKIGER.ZAL.GAAN.VOELEN

lar office buildings as far as possible; recovery from small medical operations would be undertaken in hotel-like accommodation. Physiotherapy, reactivation and rehabilitation were carried out in normal sport facilities. Part-time treatment and outpatient clinics in the care made use of normal catering facilities. Cure, care and prevention were thus combined with shops and offices, and therefore naturally became part of daily life. 'Care boulevards' formed an integrated part of the main provisions. The demand for 'residential care' in institutions was considerably reduced. In case of a need for increased care the aged could decide to connect their own dwelling to a main facility or to the dwelling of a family member (voluntary aid).

It was necessary to provide 'asylum facilities' for a reduced group of those requesting care. The care facilities for these groups were concentrated on 'care islands'; an island of 60 residential places was planned for both mentally handicapped and psychiatric patients. The plan for such islands did not actually differ much from the other islands; the dwellings were small-scaled and the daily activities had the nature of a normal main facility.

Motto: CIT-Y

Main designer: Beltman architecten

Team members: J. Haverkate

B. Hebben

R. Smit

R. Goos

A. Millius

MASM

On land reclamation in the Markermeer, located northeast from Amsterdam, a new city is built. The city lies on the interface of land and water and benefits from their healthy natural qualities. All care facilities are concentrated on an axis whereby an efficient system of healthcare takes shape. The different care buildings form and influence the landscape that promotes movement and well-being. This landscape runs through the city as a backbone where the additional urban supplies and living and working areas are situated on the edges and incidentally also incorporate and interfere with the axis. The city accommodates not only all the necessary care supplies for the future, but is healthy itself too. For organization and spatial flexibility a modular grid existing of triangles and squares is introduced. The landscape of the care axis is formed because this grid can easily be distorted in height. The grid accommodates sloping planes, buildings and infrastructure. Shrink and growth can be regulated with this modular system by simply adding or removing volume within the limits of the grid. Also on the building scale this principle is carried out. Healthcare is transformed from a reactive into a preventive system based on a healthy society.

Organization

People desire tailored care. For this reason it is important to leave the institutional character of healthcare and to opt for a more social system which, moreover, functions logistically and economically more efficiently and reacts to future energy shortage. By joining different parts of healthcare only if strictly necessary and taking the other components apart, complexity can be drawn out of healthcare and the offer of care can fit the needs of the individual better. In the new city four types of healthcare buildings exist. They vary from 80% technique and 20% human scale with 100% functionality to 20% technique and 80% human scale with greater importance for social aspects. The 'health machine' is the spot where only special-

ist treatments such as surgery take place in a clinical and logistical very efficient high-tech environment. In special clinics, treatment centres, recovery, care and treatment take place. Here people who have been treated in the health machine meet with people who can be helped with a less acute treatment. These clinics have a more pleasant, low-tech, character and show human scale. The different clinics each have their own specialty. There are, among others, centres of heart and veins diseases, neurology or cancer. To support the content specialist commercial businesses are added. Hotel companies run the beds. In relation with these clinics there are centres in which teams of specialists subject patients to a number of examinations by which, thanks to direct exchange of knowledge, diagnoses can be made much faster, in relation to the little efficient present day system, and appropriate treatment can be prescribed immediately. At the base of the care attribution the collection of buildings from where general practitioners, dentists, opticians, acupuncturists and such do their business still exists. Beside these,

specialist centres exist for mental aid, care for physically disabled people and private clinics. Also elderly care is interwoven with the structure. In the proximity of general practitioner practices and specialist clinics the most care dependent people of the future, the elderly, are housed. Those living areas are organized in a way that they can easily be occupied by less care dependent people at the time the demographic aging decreases.

Wetland

Climate changes ask for some interventions. The land reclamation is cut loose from the existing shore and it will consist of 50% water. By creating canals through the city the area of surface water increases and the distribution of abundant rainfall gets easier. Also a sudden rising of the water level can be better coped with. Overflow areas for water storage are planted with forest. This way a healthy production of oxygen and wood becomes guaranteed. The care axis is located on the border of the new land and the water. Supply of cool air over the water and the qualities of the green areas meet at that spot.

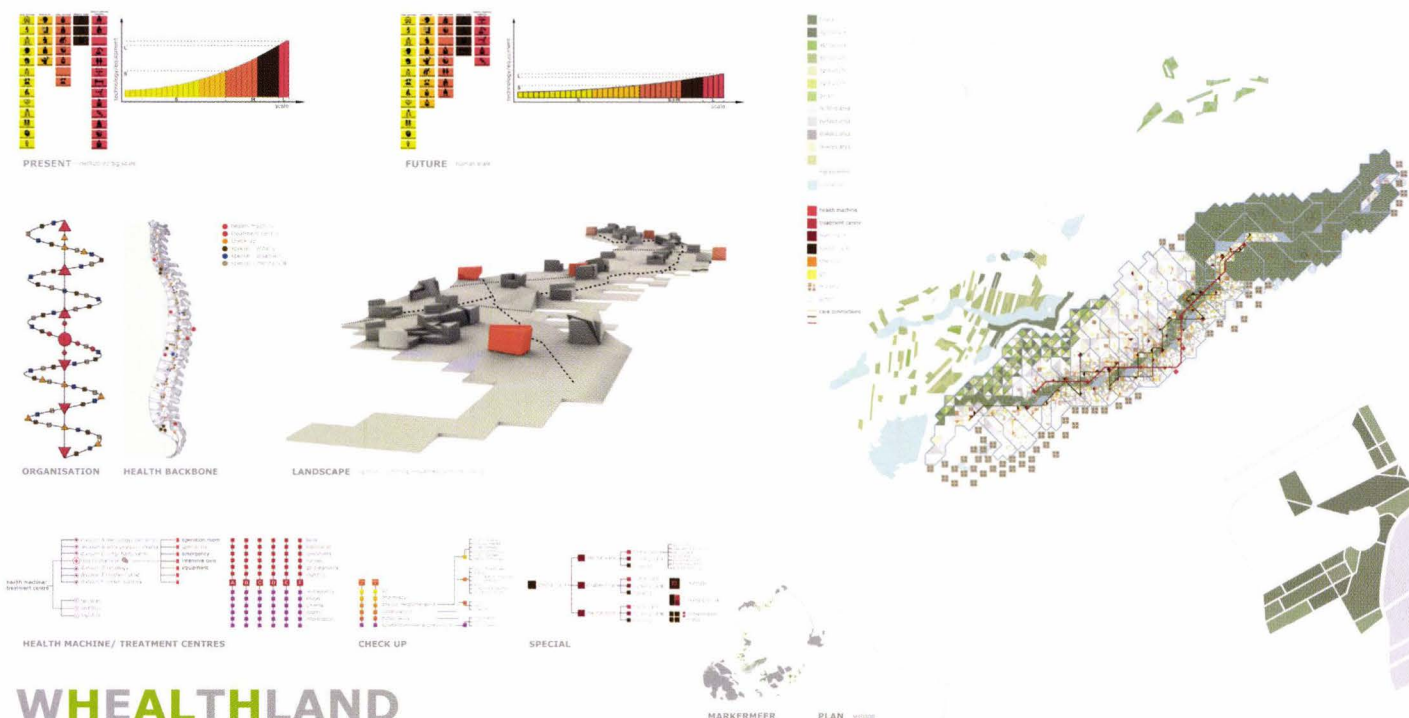
Healthy building

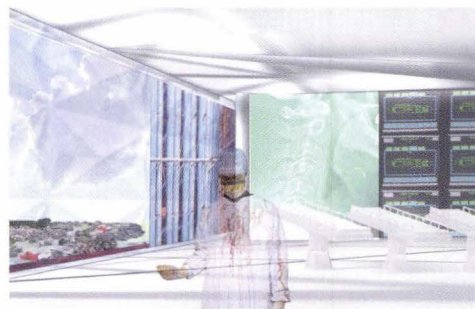
Intelligent building systems must contribute to a healthy city. Use of alternative energy sources, such as wind, solar and hydro energy, storage of warmth in earth layers, storage of rainfall and reduction of CO₂ emission are keywords.

Infrastructure

The city is ordered pleasantly for cyclists and pedestrians and has a public transport system. To limit the total CO₂ emission of the new city the car traffic will also be pushed back. The health machine must be optimally accessible and therefore gets a direct connection to the infrastructure network. The remaining care supplies, however, are accessible by car based on the importance of the specific facility. Cars are parked at the border of the backbone in centrally situated terminals.

A city arises that can accommodate the future care effortlessly and that offers a healthy and attractive atmosphere to its citizens.





HEALTH MACHINE 05/06



CHECK UP CENTER 05/06



SPECIAL DWELLING 05/06

MASM 3

Motto: MASM
Main designer: Stefan de Bever
Firm: De Bever Architecten
Team members: Marcel van Dijk
Angela van Berlo
Gosia Stolarewicz

Blooming up

Healthcare in 2025

– a contemporary social contract

We see healthcare as the sum of all formal and informal ways of care, from doing the shopping for the old lady next door to spiritual support in difficult times to specialist clinical treatments. In 2025, individualization will have left a spiritual vacuum which will ask to be filled with a new kind of social contract. Older and younger generations will have realized that they need each other for healthy and fulfilled lives. In an ideal city, healthcare functions as follows:

XS Hortus conclusus

250 inhabitants

Medical, social or household support are available at home where needed, creating formal and informal networks. A new kind of concierge could function as a link between informal and formal care.

S Neighbourhood

1,800 inhabitants

General practitioners have been replaced by more communicative medical coaches who operate on a neighbourhood level and focus on the regular and comprehensive prevention of illness; these Daily Care Centres can also manage and tailor to individual nursing needs, and discuss dietary and exercise issues.

M District

10,000 inhabitants

Healthy Life Centres on district level integrate specialist care and versatile health-related services – such as wellness, sports, cultural and spiritual activities. A mobile care-brigade and doctors can visit the different secluded gardens for more specialized care.

L City

160,000 inhabitants

The specialized clinic of the healthy city is situated in the green central park, within a neighbourhood which is predominantly focused on care-related functions;

XL Highly specialized care

Will be available on a European level.

The ideal healthy city

– green and compact

The city is set up in the heart of the Markermeer as a compact cluster of sixteen islands around a green Central Park. Each island consists of six neighbourhoods grouped around a central one. Each neighbourhood has got a clear identity, sufficient facilities and spacious housing. The urban prototype of our scheme is the secluded garden, a spacious, comfortable and contemporary variation on the urban block.

Infrastructure and public space

We are assuming that car-traffic will co-exist with more innovative and environmentally friendly means of transport, both on land and water. Nonetheless we are aiming to limit motorized traffic to the inner rings of the neighbourhoods, thus reserving the waterfront and central squares for slow traffic.

The main circulation of the city takes place on a circular boulevard which features a custom designed 'circle line' train, connecting all parts of the city. Shuttles take off into the different neighbourhoods. Since the city is compact, everything can be reached within walking or cycling distance.

The long waterfront and central squares of each 'flower' offer plenty of quality space for pedestrians. This creates safe and communicative public space which stimulates easy contact, social participation and physical activity.

Green space, leisure and culture

The healthy city provides a variety of green and leisure space.

The waterfront is designed as an urban promenade, with marinas, beaches, restaurants and nightlife as attractive features in the bays.

The triangular spaces between the circular sub-islands are reserved for extensive local green areas and water buffers. They can be designed as eco-zone, water buffers or neighbourhood parks to retreat and rest. The neighbourhood



squares form their urban counterparts with shops and public facilities.

The green central park offers space for leisure facilities, biological agriculture and energy supplies. With cultural and other public buildings around it, it offers plenty of possibilities to regenerate physically, mentally and spiritually.

Critical notes

Since personal data of the individual will be increasingly processed digitally, it is crucial that coding systems be developed to protect the data from abuse, be it by criminal individuals or by governments. Healthcare must remain accessible to the weakest members of society,

since "the measure of a civilization is how we treat the weak, the dependant, the helpless and the ill."

Architectural design of the living environment

Our scheme is based on the idea that different age groups need to live in close proximity to each other, to create a diverse and stimulating living environment. Multi-age buildings can nourish social cohesion, and stimulate more 'informal' ways of care thus helping to prevent alienation and lifestyle related illnesses.

The architecture of those secluded gardens is representative and flexible, thus

CARE-4U

The study by design Care-4U is first and foremost about well-being of inhabitants in their own habitat. Based on lifestyles a city has been designed that suits the wishes of various social groups. In addition, inhabitants' various life-attitudes towards care can be distinguished into four segments. We see this segmentation as the new starting point for the care sector: care facilitates inhabitants' well-being and is offered in their own habitat.

Well-being

Every individual is unique in developing consciously or unconsciously a personal lifestyle in its life-course, expressed in behaviour. This behaviour is visible, measurable even. In its depth this behaviour is related to the individual's attitude to life: his/her attitudes, norms and values. What is fundamentally important to this person? When does (s)he feel good? What values motivate him/her? And can the built environment, the city and its organisation of care challenge him/her to realise these values?

Care-4U responds to the challenge to identify these various lifestyles, uses these as a starting point and translates them into a design for a city at the Markermeer in 2025. Giving place and space to people's various lifestyles is the motivating principle of this design. The well-being of the inhabitants in their habitat comes first: from those with a traditional bourgeois, to a cosmopolitan to a new conservatist lifestyle¹⁾, everyone will find their place in this city. We structured the city based on these lifestyles into three distinct living environments: city centre, urban and suburban. The city's lay-out consists of various strips of islands centred around the island of Pampus. The water's presence presents a quality beneficial to well-being and is the foundation underneath the urban planning of the design. The urban planning model does not present

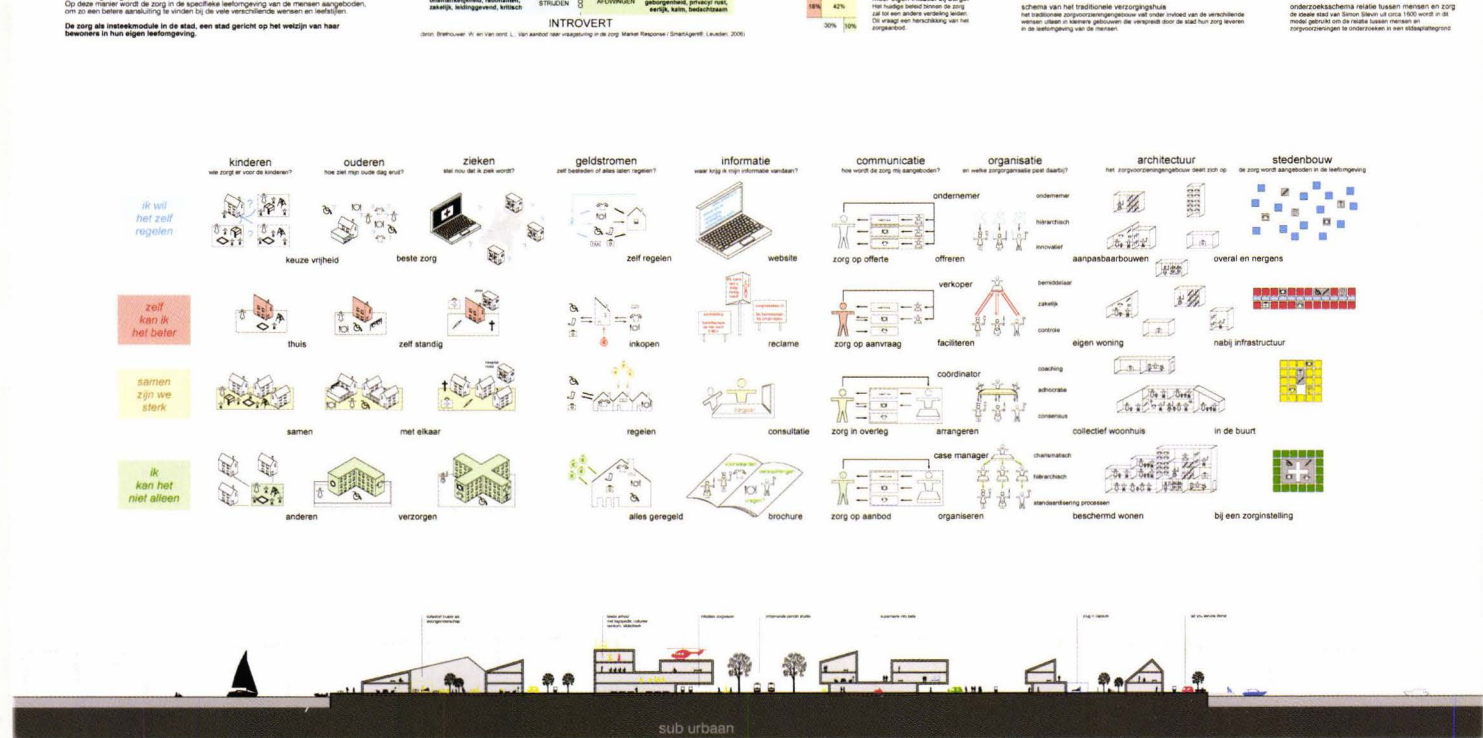
Care-4U

Het welzijn van haar bewoners in hun eigen leefomgeving staat voorop in het ontwerp van de moderne stad. Op basis van leefwijzen is een stad vorm gegeven die aansluit bij de woonwensen van de verschillende groepen in de maatschappij. De traditionele burgerij, de kosmopoliet en de nieuwe conservatist iedereen heeft er een plek. De stad is opgebouwd uit verschillende stedelijke contexten van hoogstedelijk en urban tot sub-urban. Het aanbod van de zorg faciliteert het welzijn van de mensen en wordt in de eigen leefomgeving aangeboden.

In de moderne stad wordt de zorg aangeboden op basis van de behoeften: daarbij wordt uitgegaan van een verdeling van de samenleving in 4 segmenten zoals dit in 2006 is onderzocht door SmartAgent in opdracht van ZonMW. De segmenten verschillen alle over de wijze waarop mensen reageren op de situatie waarin de zorg nodig hebben. In de vorm van een study by design: pri in het kader van deze oproep de consequenties van deze segmentatie voor architectuur en stedenbouw uitgewerkt.

De segmentatie van de zorgvraag heeft ook consequenties voor de wijze waarop mensen hun zorg regelen. Het onderzoek naar de leefomgeving van de ouderenzorg en hoe zij met deze omgaan. Daarnaast betekent dit ook dat de zorg de verschillende wijzen wordt aangeboden: de organisatiestructuur en communicatie met de klant wordt bepaald. Het is een architectuur en stedenbouw is het de bestaande by design? of te weten dat de opbouw niet ligt in een ideale zorgbouw, maar in de flexibiliteit en diversiteit van het zorgaanbod. Voor het vanguard in de zorgsector betekent dit dat er een differentiatie van gebouwen plaats vindt. De traditionele zorgorganisaties splitsen zich op in verschillende delen met een eigen merk en/of product. Het is een in de gekoppeld van de zorggebouwen en de faciliterende dienstverlening. Hierdoor krijgt de zorgsector de flexibiliteit om in te spelen op de voorvondende wisselende behoeften uit de maatschappij. Stedenbouwkundig betekent dit dat de zorgvoorzieningen als inductiemodule overal in de stad strategisch geïntegreerd worden.

De zorg als inductiemodule in de stad, een stad gericht op het welzijn van haar bewoners in hun eigen leefomgeving.



a final state, but provides a spatial structure that can respond to changes in lifestyles and urban transformations.

A city focused on well-being, health and low energy consumption does not have room for cars in their present form. The city can be accessed via a high speed light-rail connecting Amsterdam, Schiphol, Almere and the future city. We designed an unmanned trolley-bus system that guarantees the internal mobility in the city and provides a high-quality public transportation network. This PT system and the size of the islands challenges the inhabitants to keep moving, which will increase their well-being. Water-taxis enable travel between the islands.

Care

Yet the design has more to offer. Lifestyles are expressed in behaviour. Consequently, Care-4U aims to answer the question: how do people behave when they need care, and what norms and values are part of that? Do they behave independently or dependently? Do they seek informal help within their personal

networks? Are they active care-seekers or care-avoiders? How do they prevent developing care-needs? Do they want to manage this themselves, do they want others to manage this, do they want to organize this themselves or do they deny that they (ever) need care from others?

To tackle these questions we used the ZonMW research on demand-driven care²⁾. This research uses the SmartAgent® model as a tool. This model uncovers behaviour and the values behind it by distinguishing extravert, introvert, ego-oriented and group-oriented care-demanders. Care demanders are distinguished into four segments: red, yellow, green and blue.

Based on this model, Care-4U studies the consequences of these changes in the care sector for the entire life-course but also for national policies, care organisations, technology, the economy and the process of scale increase and

decrease. Moreover, we compared the housing, finances and real estate of this new approach to care with the SmartAgent model.

Noteworthy in the ZonMW research is that the majority of care provision (estimated at 91%) is organized from the perspective of only one segment (the green), with founding values like security, privacy, quiet, calm and caution. This means that care facilitators primarily offer 'green' care. Although the history of care institution development in the Netherlands explains this lack of variety in care supply, it responds to the needs and wishes of only 29% of the Dutch. Thus, citizens must adapt. The scenario for the future suggests that the situation will be different in 2025. Care organizations will adapt to the specific needs of the citizens and split up in various segments, each with its own brand and/or product to serve clients according to their (segment-)specific needs and wishes.

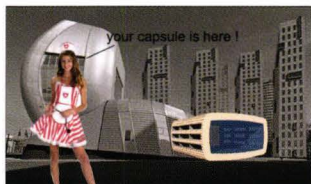
Regarding architecture and urban planning this means that the solution must not be sought in one ideal care-building

1) Source: Research bureau Motivaction, Amsterdam, de Volkskrant 23-06-07

2) Source: Van aanbod naar vraagsturing in de zorg, ZonMW, SmartAgent, Leusden 2006.



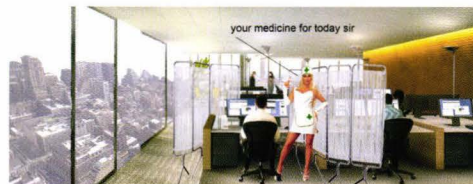
healing life environment



thuiszorg sub-urban



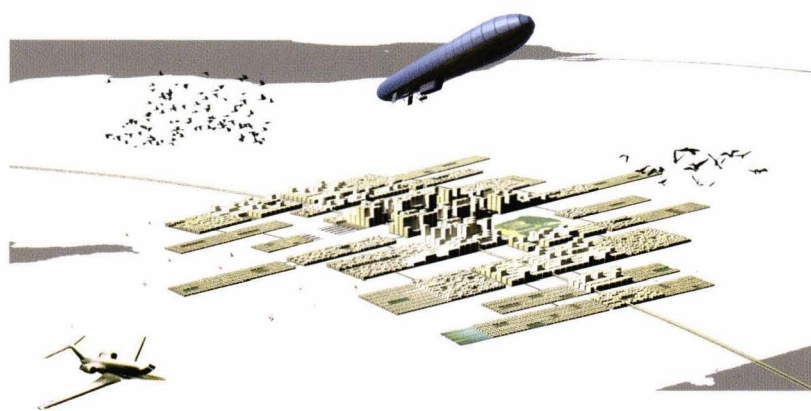
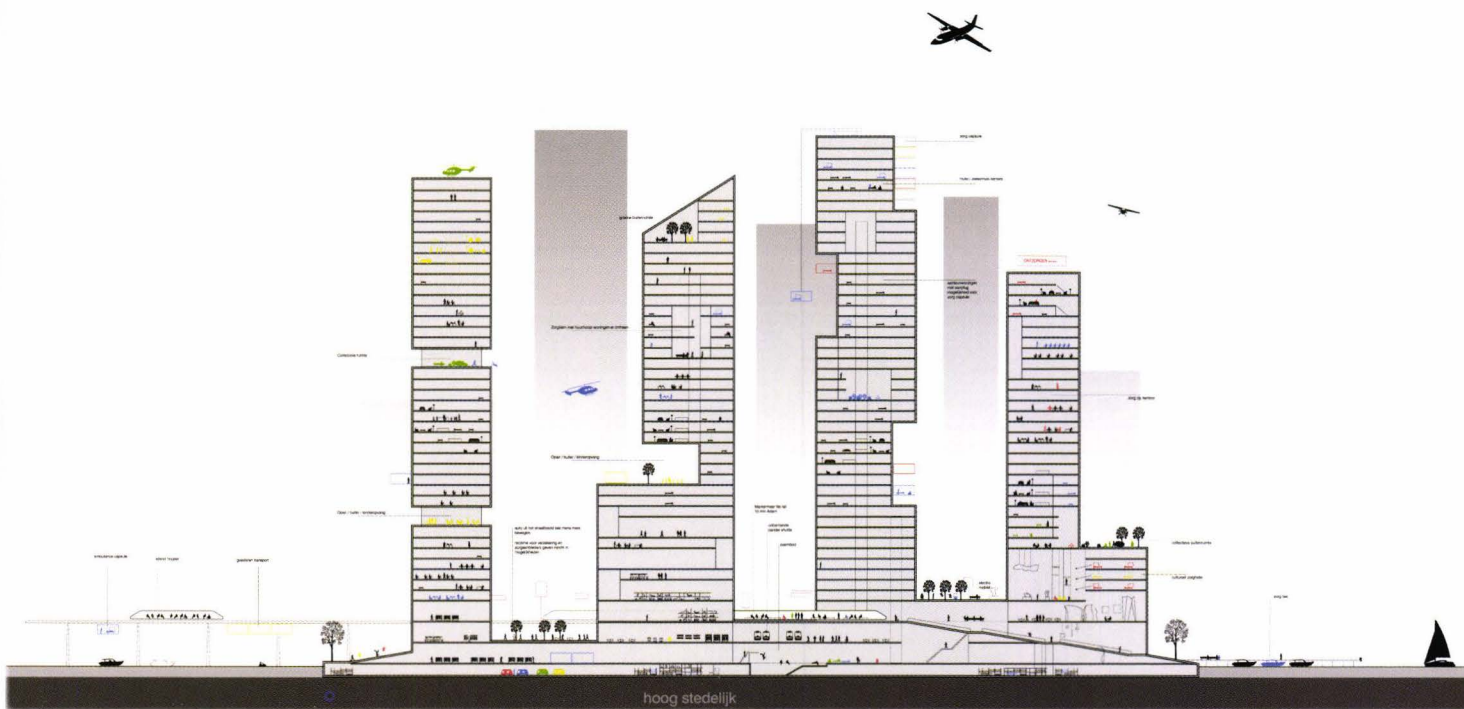
thuiszorg hoog stedelijk



zorg op het werk



zorg overal bereikbaar



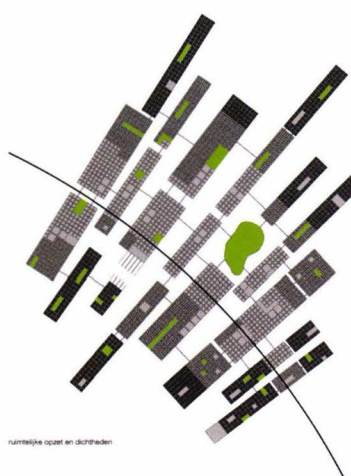
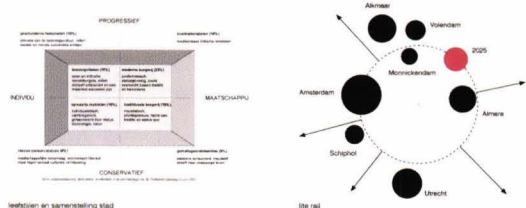
De stad is vanuit de verschillende leefstijlen opgezet en uitgewerkt in een drietal woonwijken: 'hoog stedelijk (centrum)', 'sub-urban' en 'suburbain'. De mix of meer de uitbreidende vormen van elke toekomstige stad. In al deze omgevingen is de zorg gezien als een van de faciliteiten die binnen dit milieu participeren. 'Onderzogen' is een belangrijk thema het van de stad waarbij elementen als 'healing environment' een belangrijke rol spelen. De aanwezigheid van het water heeft een kwaliteit die het ontwerp ten goede komt en is de stedenbouwkundige drager van het ontwerp.

De verbeelding bestaat uit verschillende stedelijke podiums die vanuit Pampus zijn opgezet. Het stedenbouwkundige model laat geen eindbeeld zien maar geeft een ruimtelijke structuur die toekomstige veranderingen in leefstijlen en stedelijke transformaties eenvoudig op kan nemen.

In een gezonde en op minder energie verbruik gerichte stad is geen plek voor de auto in zijn huidige vorm. De stad is ontworpen door een licht rail die in een cirkelvorm Amsterdam, Schiphol, Almere en de toekomstige stad met een hoge snelheid aan elkaar verbindt. In de 'nieuwe stad' is een ondergrondse trolley bus systeem ontworpen die als een hoogwaardig openbaar vervoersnetwerk de mobiliteit waarborgt. Door dit OV systeem en de aanwezigheid van de stedenbouwkundige drager worden de wonaars uitgedaagd in beweging te blijven dat tegengaat aan het verlies. Tussen de standen is vrij verkeer mogelijk via de waterloop.

Vanuit de zorg gezien wordt er gewerkt dat de mens in zijn eigen leefomgeving zorg moet kunnen ontvangen. Daarom zal de zorg strategisch moeten worden ingegedijt in de verschillende stedelijke wijkdelen. Hiervoor worden 3 nieuwe modellen opgezet: het koppelen van specifieke diensten van meerdere te zijn: zorgvoorzieningen met openbare programma's (fitness, baden, zwembad, fitness) en het model flexibel aanbieden van de zorg.

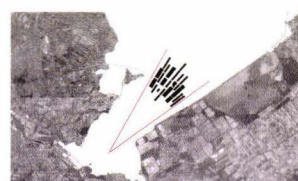
De zorg wordt daarmee niet buiten de samenleving geplaatst, maar is zelf volwaardig deel van de maatschappij.



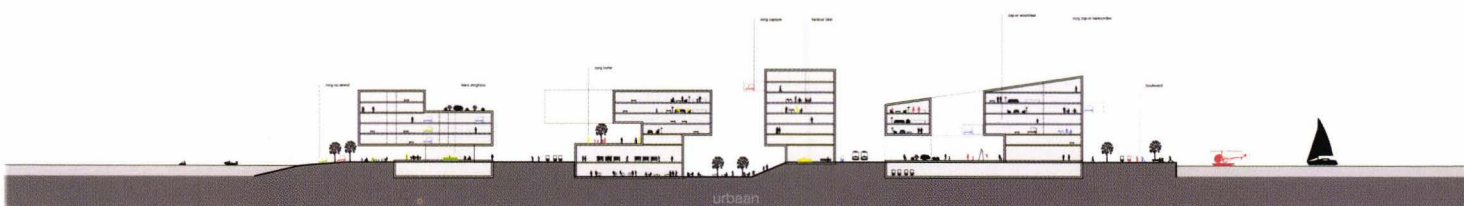
ruimtelijke opzet en dichtheden



openbaar vervoerssysteem in de stad



nieuwe podiums gericht vanuit Pampus



but instead in the flexibility and diversity of care-supply. For the real estate in the care sector this means that differentiation should take place. Housing must be separated from care facilities and care services. This will provide the care sector with the necessary flexibility to respond to the ever-changing care needs in society. In terms of urban planning this involves strategic positioning of care-facilitating modules throughout the city.

Habitat, living environment, residential environment

The flexible model of Care-4U removes housing from the care environment. Instead, when necessary, care is injected into housing. In this way care becomes part of the organization of residential areas, mixing it with other functions. Our design understands the concept of care also includes prevention and 'de-caring'. The care program is connected with all kinds of other facilities that increase the mental and physical health of residents, such as sport facilities, schools and community centres. Naturally the composition of the residential population determines what kind of care is offered within the urban context. Care-4U connects this composition to individual well-being by means of lifestyles. In this way, care can be offered to residents within their specific habitat/residential environment, in order to respond better to their many different needs, wishes and lifestyles.

Motto: CARE-4U

Main designer: Johan van der Zwart

Firm: TU-Delft

Team members: Jaap van der Zwart

Remko Remijnse

Rocco Reukema

Hans Teerds

Fair Care - Care Fair

Modern Asclepieions - More Human Care

In ancient Greece the State provided an activity centre with cultural and sporting facilities. The sick and the elderly stayed in this healing complex enjoying maybe their last days in a human and inspiring environment. This concept can be modernized and adapted to the requirements of a future city. The result, compared with the situation today, will be a more human and stimulating health care environment with no loss in care quality.

The new city of Elysiadam and its concept for health and social services

The city of 160,000 inhabitants is organised in six districts, each with a population of 27,000 inhabitants with a district centre where public activities are concentrated. An efficient public transport network, sustainable housing design principles etc. will save energy, bicycle and pedestrian routes will dominate, the dependence on gasoline will decrease and the health of the citizens will improve.

The service system consists of open care services organized in six District Centres, a Central (Acute Care) Hospital and a Community Care Hospital. The system will serve the city inhabitants but the Central Hospital can also serve a larger population being planned for easy expansion. Highest level clinical care is provided by nearby university hospitals in Amsterdam and Utrecht. Healthcare service provision is based on care pathway principles. The secure and confidential information network integrates the entire system into one entity.

The "Main Asclepieion" is formed in the city centre by locating the Central Hospital and elderly care homes near key public buildings, theatres and galleries. At the "Beach Asclepieion" the Community Care Hospital forms part of the leisure facilities, sports fields, swimming pools and other venues where also open air civic and cultural events are organised.

Open social and health care in district centres - a net of 'mini-Asclepieions'

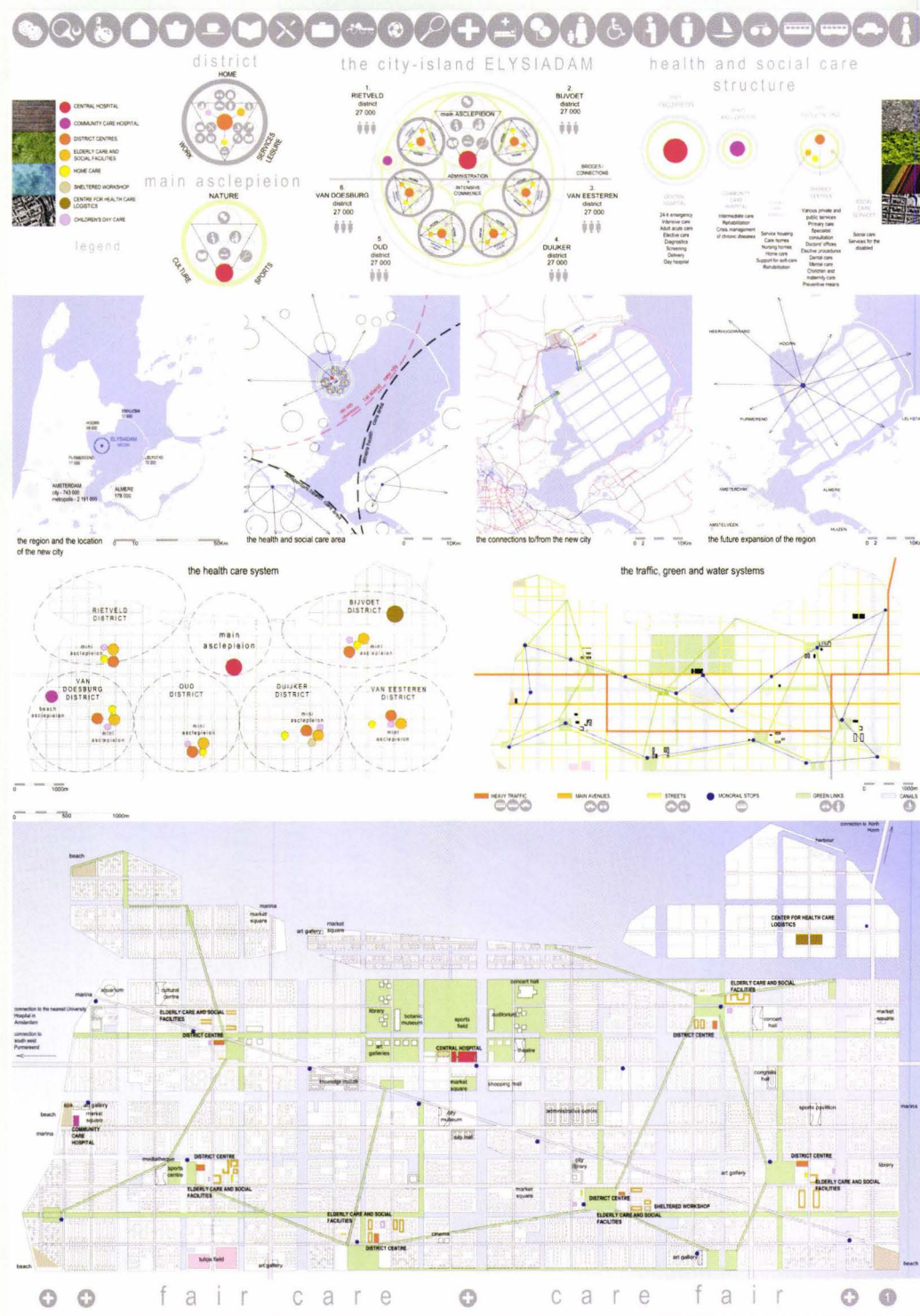
Each District Centre forms a "Mini-Asclepieion". The health care services are combined in district centres with cultural, leisure and fitness activities. Outpatient programmes vary greatly from minor acute services, mental health services, dentistry, family counselling, child and juvenile psychiatry, to special care centres for management of chronic diseases such as diabetes or chronic heart disease. A network of various public and private care providers form different service profiles and serve inhabitants across the district borders. The District Centre also provides the necessary social care facilities (elderly services, family support, drug abusers, immigration, unemployment support etc.) all connected to the "Mini-Asclepieion". The Netherlands has 32 health care workers/1000 inhabitants, of which 14 work in open care (OECD 2006). The total floor area needed for this is approx. 100000 m², corresponding to 15000 - 18000 m² in each centre. Activities may be placed:

- in a special health care building,
- as part of a larger commercial complex
- distributed in separate buildings in a district centre.

The total amount of mentally disabled is about 1% of the population, 0.4 % are severely disabled requiring institutional service. The rest live in sheltered housing and attend sheltered workshops provided in 2-3 different locations.

Elderly care centres and health centres with multifunctional services

There is a need for an integrated elderly care concept with housing alternatives ranging from owned or rented flats, group homes for people with dementia to service and nursing homes, including terminal care, for 200-600 clients in each. The facilities, that will be built step-by-step, provide space for clubs, choirs, drama etc. for the elderly thus creating an active community. This



requires extensive lobby areas with catering, hairdressers and other such services. Doctors' consultation facilities are also integrated. Rehabilitation services for the elderly are provided by the district centres. The required swimming pools are integrated into the community by providing public access. Home care is provided by connecting patients to care programmes. District home care units can be located in the district centres or the elderly care centres.

Community Care (rehabilitation) Hospital

The Community Care Hospital is a special care hospital concentrating on the

management of chronic diseases, geriatrics, rehabilitation and physiotherapy. The hospital admits acute problems of patients with pre-set diagnoses. Most admissions are, however, planned. The stay in this hospital is limited to 30 days. The size of the hospital is based on the principle of one bed/1000 inhabitants, corresponding to a 160-bed hospital.

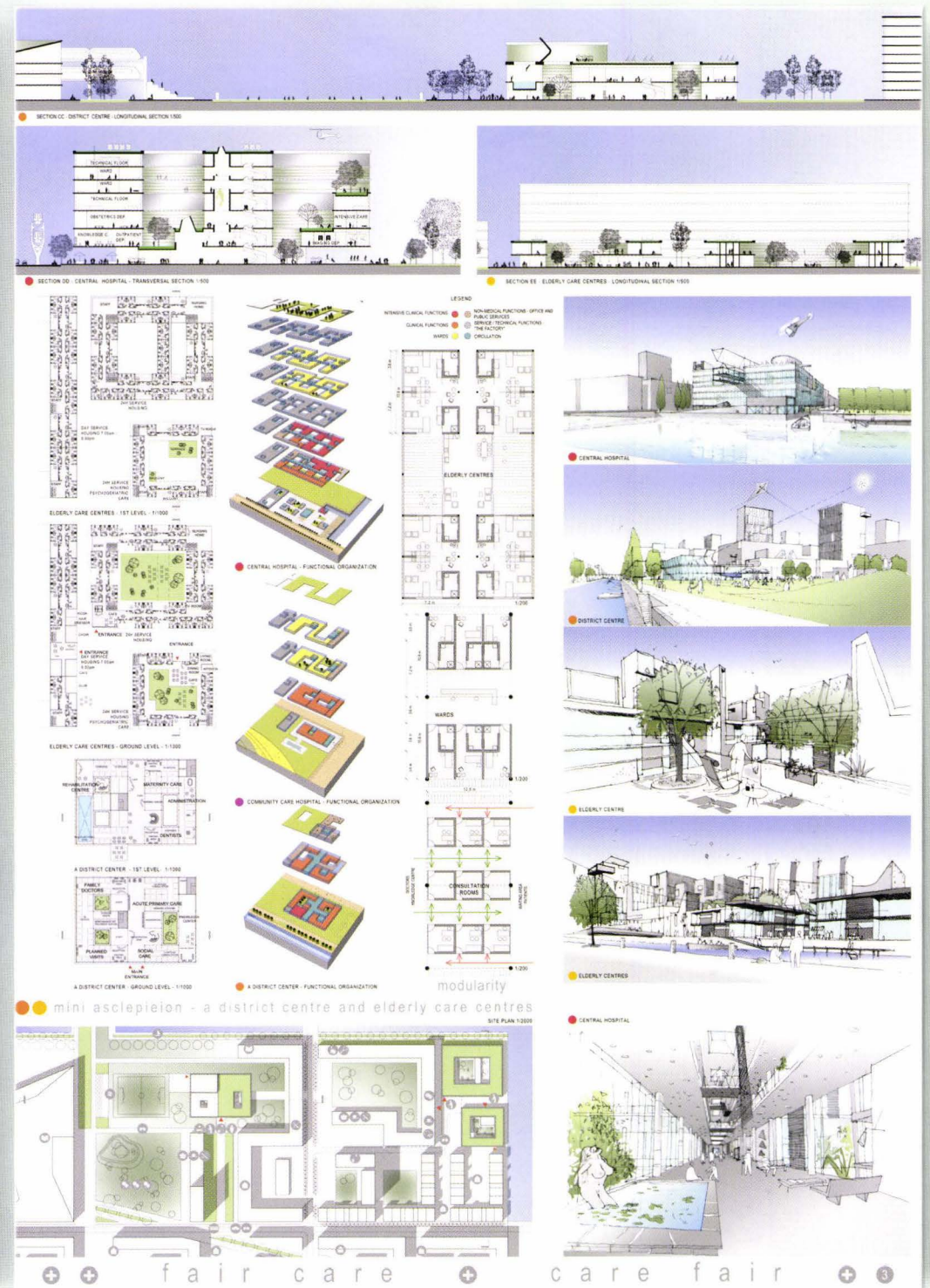
Central Hospital

Acute and elective care for all inhabitants is provided by a 320 bed (2 beds/1000 inhabitants), 50000 m² Central Hospital. The hospital runs 24-h emergency, general acute and regional care programmes. Its central location makes it



possible to organize emergency services within 40 minutes maximum travel time. The hospital includes all major medical specialities and auxiliary diagnostic services such as laboratories, and radiology for screening services. The intake of patients through emergency will increase to roughly 70%, while the share of elective patients correspondingly decreases. The emergency with triage guides the patients to main clinical pathways: trauma, acute abdomen, cardiac and stroke. Information technology has a major impact on hospital layout, logistics and process efficiency. Present image communication solutions will improve the

efficiency by decentralizing imaging devices on patients' routes, such as CT for stroke patients and bone imaging in the shock room, while all reporting is centralized in a radiological knowledge centre. The ground floor of the hospital is part of normal city life, containing restaurants, galleries and shops. The canals, parks, cultural and sports activities are located around the site. The acute hospital and its surroundings form the "Main Asclepieion" of the city. The hospital buildings are divided into modular blocks sharing the same structural and mechanical system. This will make them extremely flexible and



adaptable for future needs. Options for expansion are shown on the site plan. Auxiliary services are located in a separate building, "the factory," which is connected to the hospital through a service bridge at third floor level. Automated vehicles with storage trolleys form the basis of the logistic chain thus eliminating most fixed storage areas. All logistical and technical routings and equipment is concentrated on the third (interstitial) floor. The number of vertical shafts and suspended ceilings is minimized.

Motto: Fair Care - Care Fair
Main designer: Henu Kjisik
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Team members: Trevor Harris
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 Erkki Vauramo
 Antti Autio
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 Urpo Alanko
 Hannu Louna
 Taru Niskanen
 Anni Reinikainen

Markerwerf

What would the ideal town look like? Picture a city that invites a healthy way of life, a sense of community and individual self-esteem. A city where human needs, ambitions and values are perfectly met by architectural design.

The rich natural resources of Markermeer form an inspiring site for this challenging thought. We already know that such supportive architectural design should be more than a desire. In 2025, the number of Dutch people of 65 years and older will have doubled. We shouldn't ignore the need for healthy living accommodations as costs of chronic illness, mobility problems and pollution threaten to overshadow life in the near future. Nor should we underestimate the importance of providing supportive care for the disabled so they may thrive rather than merely survive. This links to a traditional Dutch value of inclusive community - which was lost and found in recent history - representing an essence of human well-being.

The ideal 2025 town would support excellent quality of life for all and at the same time reduce the need for professional health care, mobility and fossil energy. This was the central goal in designing the piled town of Markerwerf, formed as a half open string of connected islands in the Markermeer. A sustainable city that cares featuring 5 leading design principles:

- Respect for local nature and building culture,
- Healthy living environment for all with easy points of reference and contact,
- Inspiring, sustainable, adaptive architecture,
- Cost effective full-scale facilities for economic and social development,
- Minimal impact on Markermeer water drainage capacity.

Many Markerwerf residents will live alone with a wish to have easy access to community life and to facilities for recreational and/or sports activities. "Personal electronics" and the internet pro-



vide a variety of ways to meet others. Long distance travel by car has become impractical and expensive. As a result of new technologies many residents in 2025 will work and educate themselves at home or in flexible offices nearby. The need to leave home is greatly reduced as food, goods and information can be electronically ordered and delivered by means of "driverless" supply systems. Public transportation will prosper, as it does in major cities. We see safe electronic movers for people and goods robotically travelling from address to address routed over central points for easy transfer to kitty-cornered and long distance connections.

Portrait of a water town for 160,000 inhabitants

The town concept involves a dense high-rise 4 area city centre set out from the middle of the Houtribdijk with three main split transport levels. The long distance underground level contains railway stations and a 4-lane motorway to connect Markerwerf to Lelystad, Enkhuizen and Amsterdam. The surface level is meant for local traffic and car parks. The

upper level is mainly for pedestrians. Many linked squares here accommodate terraces, shops and pubs, places where people easily meet. Toward the city limits, buildings become progressively lower in twelve connected, less dense island areas each of which has a striking visible identity, accentuated by a few high-rise landmark buildings. People movers, boats and upper surface level roads allow safe connection of area centres and city centre. Water is a major economic resource in Markerwerf and the abundance of waterfronts enhances this greatly. Water and wind driven power plants sited in the Markermeer, harbour facilities, lodgings for tourists and water sports firms offer work to many residents. Another significant part of the workforce is employed in healthcare, home care and community service organizations.

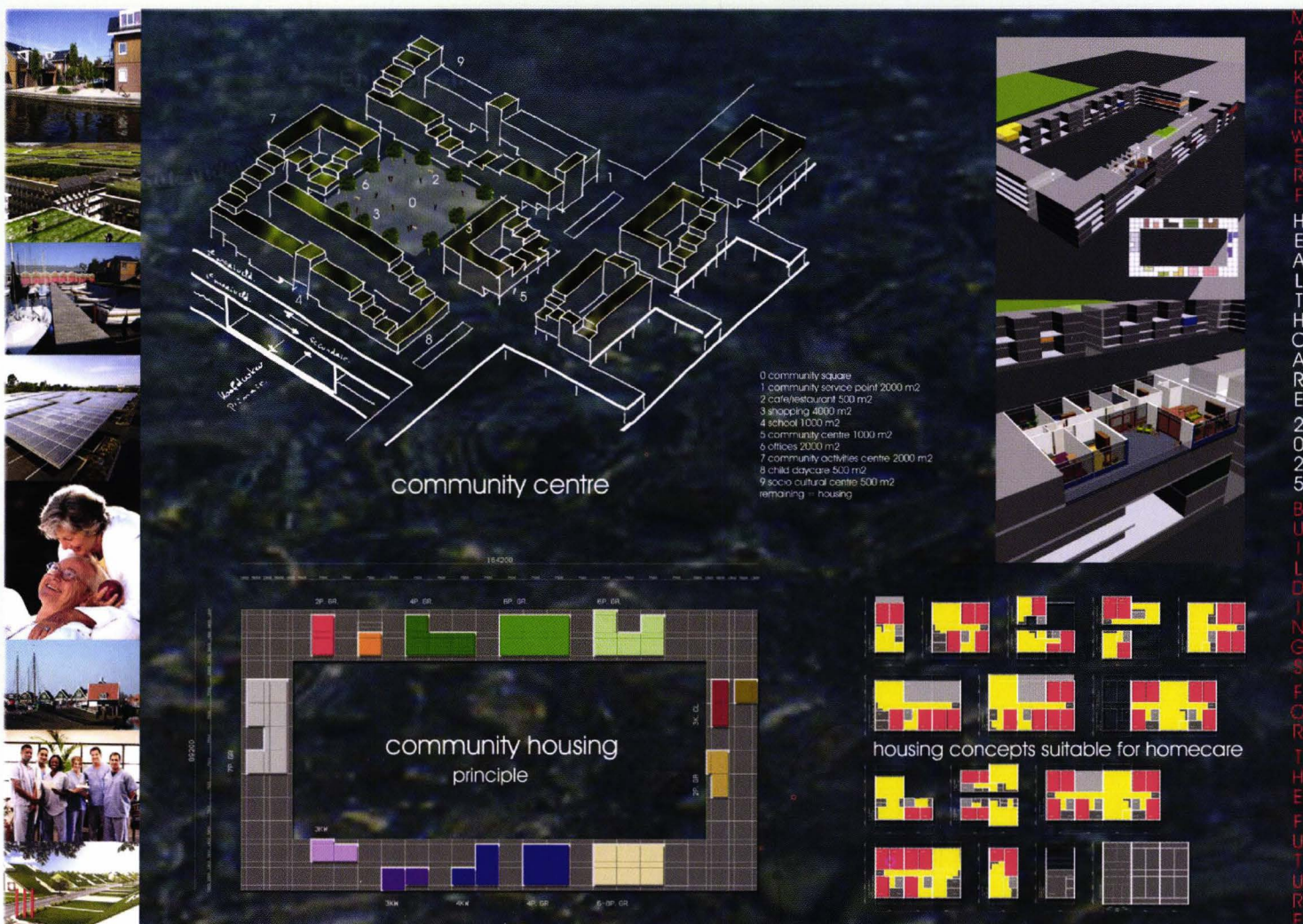
Floating office buildings, sports fields, harbours, restaurants, playgrounds, theatres and group homes can be moved and positioned to answer area demands on a flexible basis, taking advantage of the surrounding water in a unique way.

Healthcare; care for health

Individual ability to lead meaningful community life comes first in Markerwerf healthcare policy. More than earlier generations the 2025 elderly know the vital meaning of primary networks when ill. Professional care is centrally located in the healthcare centres on every island including family doctors, pharmacist, dentist, physiotherapists, welfare work, infant welfare, and social cultural work. Small-scale integrated support units for home care outreach programmes and living quarter meeting centres are conveniently located in each zone. ICT-monitoring centres allow effective home treatment. Individualized home care programs (special shops) provide medical and practical services (400 clts.) on every island. In addition to 4 area crèches and 18 area sports clubs we foresee small, disease oriented treatment clinics located in town centre shopping malls. All protected care living is offered in socially integrated non-stigmatizing units, which are linkable in various ways while keeping their economic value over time. Group home capacity for 48 handicapped and a 20-room assisted living



facility are realized in this way. On four islands we see an ambulance post, obstetrics practice, psychiatric polyclinic, nursing hotel (50 clts.) and central facilities for home care, (elderly) welfare and public assistance organizations. The 400-bed city hospital and 200-bed rehabilitation clinic offer specialized treatment, functioning as nation wide expert centres. Municipal care coordination centre completes city facilities. Unobtrusive city-wide aids in public space stimulate an independent outlook on life for people with impairments. Ergonomic design visually confirms the houses are meant for all. Non-regular area plan and distinct neighbourhood design helps residents to find their way around. There's a marked diversity in dwelling types; apartments and roof gardens prevail in all centres, while family houses with gardens and waterfront group homes are found on island areas away from the centres. Along the extensive waterfronts there are plenty of opportunities to engage in sport and recreational activity or to simply enjoy what the environs have to offer. When approaching old age it's comforting to live where one can easily be looked after. Markerwerf citizens live, work and play in their hometown. The Markerwerf island structure provides nearby activities and essential facilities for all ages, creating a close-knit community with inclusiveness towards all.



Motto: Markerwerf
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 Messnig & Partners
Team members: A.G.H. Verweij
 D.H. Messnig
 C. Oudshoorn
 R. Snoep
 M. Oxener
 M. Noordzij
 K. Blonk
 J. Geenen

Well Come City

'Investing in health above all means investing in stable social conditions and a secure existence, but also in a healthy environment, healthy products and a sufficiently accessible provision of care.' (A sober look at healthy behaviour, SCP 2007).

The Netherlands in the post-information era

The Netherlands continues to be a 'transport country' par excellence. Agriculture and heavy industry will continue to decline in importance, while tourism, education, science, the knowledge industry and services will have the upper hand. Because of the self-evident communication possibilities, e-working and e-learning at home are growing enormously. This leads to a greater freedom with regard to organizing daily schedules and a different way of relating to the members of the family. As a result the importance of the home and its direct environment is increasing. The home provides privacy and comfort; the surrounding area provides opportunities for daily outdoor activities and social contacts. On the other hand, life expectancy has increased and lifestyles have become more dynamic as a result of growing welfare and well-being. In 2025 the aging population will reach a peak. At the same time there will be four generations who are active, healthy and working, and therefore independent for a longer time.

Focusing on prevention and vitality

In 2025 care will no longer be an umbrella term. Care will be translated into health in a broad sense: how to be and remain healthy, while at the same time leading an agreeable life. Citizens will no longer focus on individual moments of cure and care, but on constant prevention and well-being, i.e., on vitality. This imposes demands on the spatial environment which coordinates functions, focusing on both on prevention and wellness. This means that first-line care and hospitalization will disappear, cure and care become seamlessly integrated,

in communal amenities but also in daily living, working, shopping and recreation.

The central role of the citizen

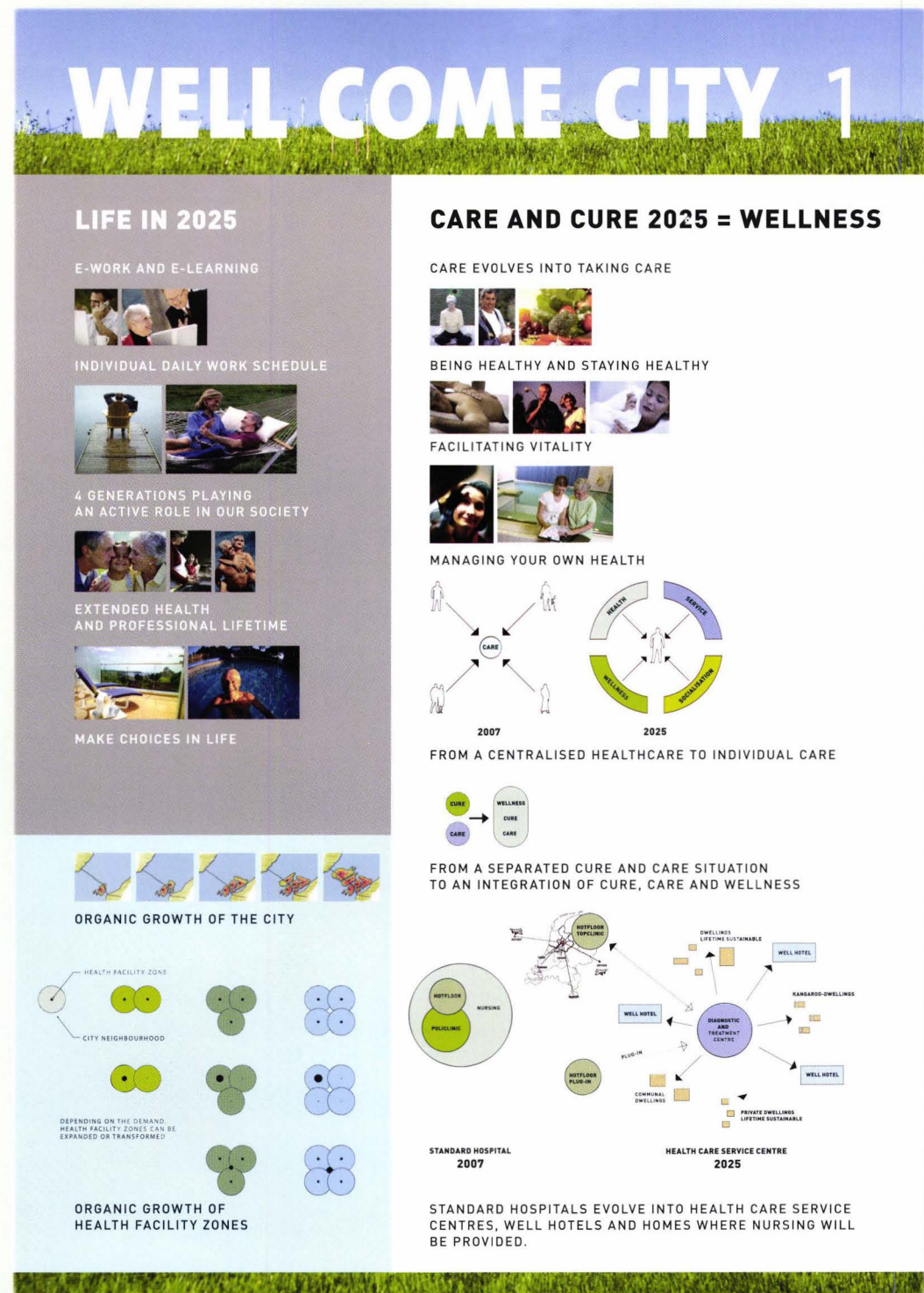
Citizens take responsibility for their own health and for the satisfactory functioning of the domestic and social environment. If desired, one can draw up a personal health plan with a health coach. To achieve the health requirements, people can turn to a central point which is in direct contact with all the local and regional health providers.

Changes in health funding

Great changes are taking place in health funding. The current AWBZ will no longer exist in 2025. This general insurance will be replaced by local health councils. The citizens themselves, as well as the elected councillors, will have a direct voice in these. It will then be possible to act and focus on individuals. In addition to the existing basic insurance for everyone, there will be a great increase in the possibilities of taking out extra insurance, depending on the medical and personal financial possibilities. Therefore people who need care can choose how to organize the care, and will fund it themselves. They buy the care they need from competing organizations of their choice, and normally receive this care at home. For the severely disabled, psychiatric clients and the elderly suffering from dementia, the city will make small scaled housing available. There's also the possibility of kangaroo housing. In these kangaroo houses children can look after their parents, with or without additional services.

Buildings for the future

The developments of medical science and technical aids have a big influence on the scope, nature and spread of the amenities that are built. By 2025 the miniaturization of technical aids will have progressed so the healthcare provider can come to the user, even for standard surgical operations. A specific



architectural solution will only have to be found for a hot floor and for the polyclinics grouped around it. The DTC (Diagnosis-Treatment Combination) will be translated into a permanent building supplemented with moveable amenities like a plug in operating theatre. Special beds will only be needed in case of serious operations. Normally people will go straight home, or if necessary, stay for a few days in a Well-Tel.

An organic city of islands with 160,000 inhabitants in the Markermeer

It is better to use a gradually growing city as a starting point, in which

the healthcare provisions can follow the constantly changing demand. The starting points for the city's development and the building plans are: large areas of water, sustainability, flexibility, neutrality in terms of energy, no CO₂ emissions, integrated domotics for communication, monitoring and consulting, a fine sequence of well defined public, collective and private areas in which social, cultural and recreational life can come into their own. Shaping a city of islands creates the 'natural' possibility of organic growth. To promote health, the whole city is free of private cars. It is surrounded by water. This can be integrated in the city on every level of scale

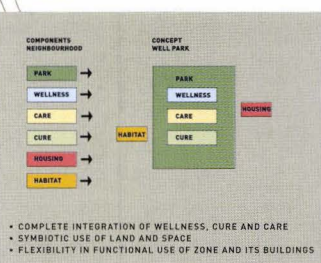
WELL COME CITY 2



COMPONENTS WELL PARK

WELLNESS RELAXATION HEALTHY FOOD EXERCISE SPIRITUALITY SOCIAL LIFE CULTURE LEISURE	SPA, THERMEA BIOLOGICAL RESTAURANTS FITNESS MEDITATION CENTRE COMMUNITY CENTRE THEATRE, GALLERY CINEMA
CARE ADVISING, HEALTH COACH PRIMARY CARE HOME SERVICES SECURITY PREVENTION THERAPY COMMUNICATION DAY CARE CENTRE SOCIAL WORK	CONSULTANCY SERVICE CENTRE
CURE DIAGNOSTICS TREATMENT HEALTHCARE NURSING	HEALTHCARE SERVICE CENTRE WELL TELL DWELLINGS

SHOPS



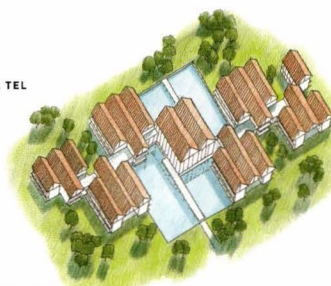
THERMEA



CONSULTANCY CENTRE

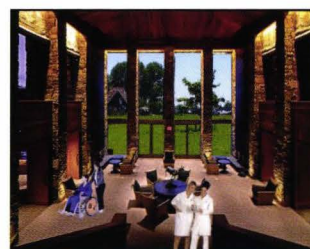
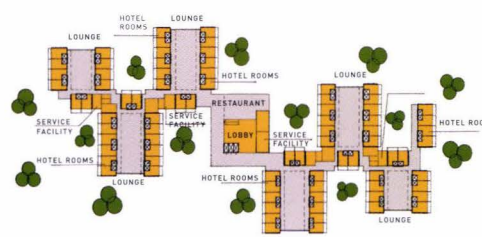
WELL COME CITY 3

WELL TEL

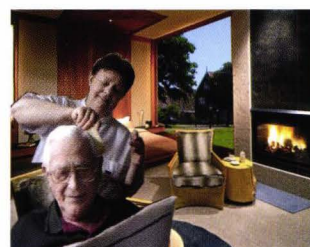


CONCEPT WELL TEL

- COMBINATION OF HOTEL FACILITY AND NURSING
- SMALL GROUPS OF ROOMS ORIENTATED TOWARDS THE PARK
- COMMON LOUNGES
- RESTAURANT AND WELLNESS FACILITIES

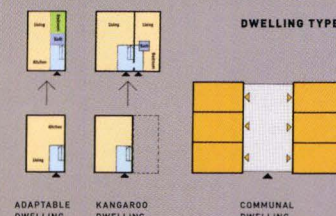


COMMON LOUNGE

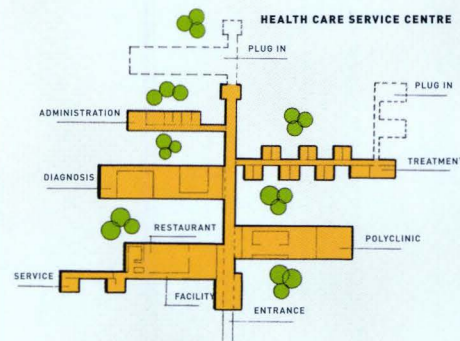


PRIVATE ROOM

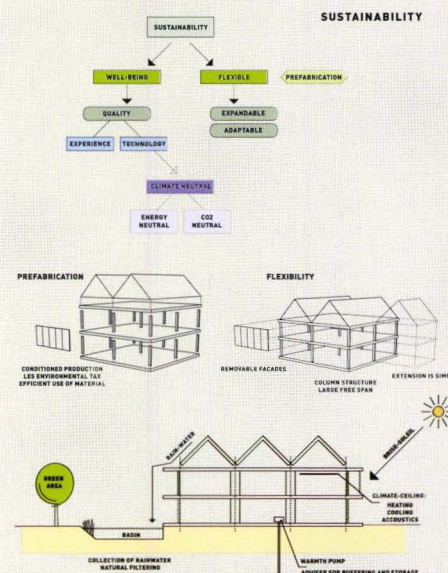
DWELLING TYPES



HEALTH CARE SERVICE CENTRE



SUSTAINABILITY



for the transport of persons and goods and for the practice of water sports. Furthermore, it can be used for the efficient provision of heating and cooling, a necessity due to climate change. The city is composed of similar segments which can be created in response to demand, and are connected by bridges and tunnels. A gridwork of roads, waterways, building sites, (green) spaces and amenities is designed for each segment.

Double use of land in the Well Park

The above-mentioned grid includes a park in a strategic position. The park

also offers Wellness, Cure and Care. In the green spaces along the areas of water there are wellness amenities for relaxation, healthy food, exercise, spirituality, social life, culture, art and leisure. Furthermore, there are the Consultancy Service Centre and Healthcare Service Centre.

Well-Tel: energy-efficient, sustainable and flexible

A Well-Tel has been outlined as an example of a schematic, architectural design. In 2025 the construction will be largely prefabricated, which makes it possible to achieve great material efficiency. A structure of columns with a

large free span and façades which can easily be removed guarantee flexibility and allow for expansion. Awnings, heat pumps and a climate-control ceiling provide a pleasant climatic environment, even in extreme weather conditions.

Motto: Well Come City

Main designer: ir. J.D. Splinter

Firm: Splinter architecten

Team members: SDB

W&E adviseurs

Urban Visions

... is half the solution

A new city, a new vision: prevention, wellness, care and cure are present everywhere. Life seems faster, the economy is growing, boundaries are fading, global warming is having its effect. This city is special because it focuses on the needs of its citizens. Citizens are entitled to choose according to their own lifestyles from a variety of services on offer. How do individuals envisage their lives, homes, healthcare and well-being? The key concept is individual perception. Professionals will have to learn to start from individual problems instead of providing standard solutions.

In the scenarios that follow we zoom in on crucial episodes in citizens' lives. This is visualized on the three panels, with at the core the Therapy & Health Resort, a new concept for prevention, wellness, care and cure.

Scenario 1: Dementia

Sophie hasn't been doing well for quite some time now. Around 3 o'clock in the night she gets out to feed the cows. Then she checks locks again and again because she's afraid of intruders. She keeps me awake all night, every night. I can't keep up with her. It hurts me to tell her over and over again that we don't live at the farm anymore. Twenty years ago we moved to the green neighbourhood we live in at present because of our farmers' roots.

I decide to pay the physician a visit, without Sophie. "Well Mr. Smith, disorder and amnesia are common for women her age; she's after all already 73 years old". After tests at the psychiatric hospital, the diagnosis is: 'Lewy Body Syndrome', a form of progressive dementia. The physician advises us to contact a 'care coach'. Our care coach is called Miranda. She visits us regularly to see how we're doing. At first Sophie wasn't very fond of her. After Miranda talked about our farm, Sophie started to trust her. It's a good thing Miranda is the only care coach who visits us. Walking is becoming a problem for Sophie. Miranda explains that it's a compli-

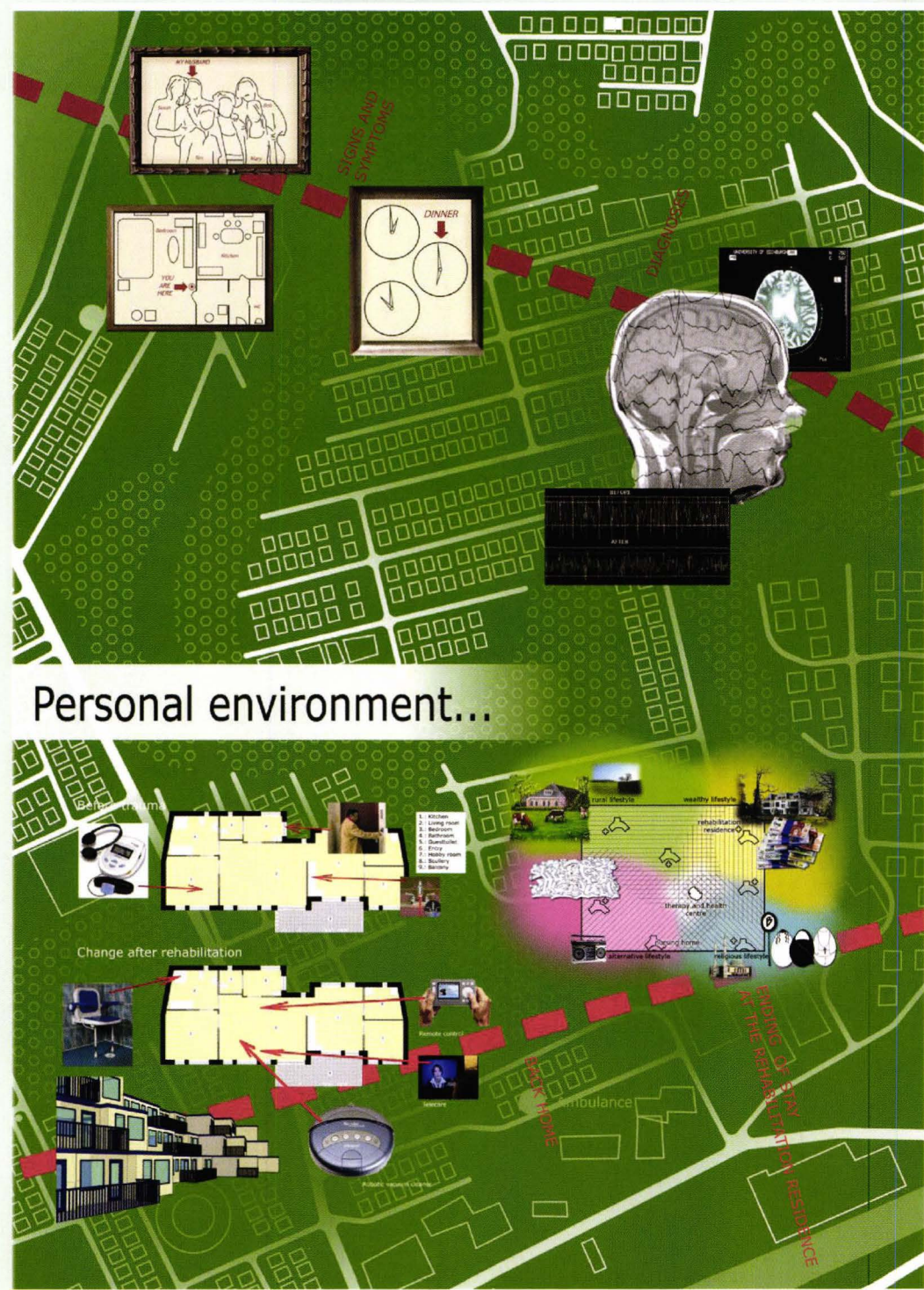
cation in this disease. I'm worried about it because her mobility will only decrease in the future. We will have to find solutions as to accommodation and care. Miranda explains that we have a variety of options because of the privatization of healthcare. We can stay in our own home or move to a nursing home. I find the choice rather hard but Miranda is kind enough to help us. She proposes to combine staying at home with day care for Sophie in the Therapy & Health Resort. In the resort Sophie has a physiotherapist who practices walking with her in a special therapeutic bath. In addition she practices eating with special cutlery with the ergo therapist. Also she is given a massage treatment in combination with soothing music. When Sophie returns from the resort she is always calm and relaxed.

Unfortunately, Sophie is still restless at night. Emotionally I decide that we had better go to a nursing home. We are lucky in finding a spacious flat amidst plenty of greenery. Miranda supports us moving to our new home. It is Miranda who takes care of finding us suitable accommodation and of moving house. The nurse that took care of Sophie in the Therapy & Health Resort is also Sophie's nurse in the nursing home. This is called patient-related nursing: a nurse stays with a patient independent of place and time as long as is necessary.

Miranda proposes to make use of the Therapy & Health Resort for my relaxation; the insurance company will cover expenses. So I decide to join Sophie in going to the resort. Every Wednesday I am having a massage and aromatherapy. I am content: when I turn my head I see Sophie also enjoying a massage while her favourite tune is softly playing.

Scenario 2: Bike accident

Thomas, 36, is going to his girlfriend on his motorbike. He tries to overtake a car. He does not see the car from the opposite direction and crashes into it. The driver sees the biker in pain. He calls the emergency number and within five



minutes the ambulance arrives. Thomas is taken to the hospital. In the first-aid department, a physician examines Thomas. A nurse checks his vital functions, which are stable. X-ray photos are taken because Thomas has a headache and pain in his left leg and abdomen. He also seems rather confused. The surgeon studies the photos. His diagnosis: a complicated fracture of the left tibia. He decides to operate. Thomas stays in hospital for two weeks. A care coach who will see to it that he gets the proper care supports Thomas. Because he lives on his own, his care coach advises Thomas to go to a rehabilitation residence until he will be

able to manage by himself. This rehab residence collaborates with the nursing home and the Therapy & Health Resort. From the nursing home Thomas receives help with his daily routine, such as washing and getting dressed. In the resort Thomas gets specialised help from physiotherapists and there is time to relax. The relaxation facilities include: sauna, therapy bath, relaxation bath, solarium, handicraft room, herbal garden and meditation room. To get to the resort, there is a shuttle on demand. After a six months' stay in the rehabilitation residence, Thomas has recovered to such an extent that he is allowed to go home. His leg still hurts and he has



trouble standing and climbing the stairs. Thomas gets a shower chair and a stair lift. In addition he gets domestic help and home care is called in to treat his injury. His care coach makes the necessary arrangements.

Thomas's girlfriend had severed their relationship during his rehabilitation, which troubles him a lot. He is very depressed. A welfare worker is contacted and offers support. Unfortunately this is not sufficient and Thomas is taken to a mental hospital for supervision. After five months the psychiatrist decides that he can return home.

Motto: ... is half the solution

Main designer: Atelier Wonen Welzijn Zorg van de Hanzehogeschool Groningen

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Tineke Jonker
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Ehsan Arjang
Lucien Olinga
Daniel Pelsmaeker
Linda Gooijert
Linda van Velzen
Misha Born

Carefree 2025 Markerdam

Introduction

In 2025 a lot of things will be different from now but at least one thing will be the same: the desire of human beings to live a high quality, healthy life for as long as possible. The Healthy City concept is a fresh new idea on a future society of people who feel responsible for their own health and well-being and choose to live a healthy life. By creating a healthy and health promoting environment, citizens of Markerdam will be able to live a carefree life. This new healthy lifestyle is stimulated by a 4-layered health structure consisting of The Healthy City (1st), the CareStations (2nd), the HealthCampus (3rd) and the Prevention & HealthPromotion Policy (4th). The urban design is part of this health structure so there is an optimal connection between social network, mobility network and health network.

1st layer

The healthy city

The most striking intervention in the first layer is keeping the car out of the city. There are enough arguments to do so, especially with regard to The Healthy City concept. For example, there will be less traffic accidents, less air pollution and related diseases, less noise pollution, more space for public parks and gardens, no more traffic jams, a safer and more attractive public space for children to play in, which means less obesity among young people and citizens in general because physical movement by walking and cycling is stimulated. Also the elderly, very often afraid of high speed traffic, will go out more because they'll feel safe. In addition to the citizens the environment also benefits from this intervention. CO₂ emission, global warming and depletion of natural resources will be reduced when the citizens use alternative transportation. Of course a well functioning public transportation network is a necessary condition for a car free city and since a totally new city is developed it's the perfect opportunity to design an optimally adjusted and well-operating urban

mobility network. By removing the car from the city, human health and quality of life, environmental health and urban mobility, serious problems in the densely populated Randstad, will improve.

2nd layer

The carestations

The health network is directly linked to the mobility network by so-called CareStations, a new concept for basic healthcare facilities in combination with urban mobility. The CareStations provide for 'daily healthcare' such as GP, dentist, pharmacy, physiotherapist and social work. More specific supply can be adjusted to the district composition. Every CareStation includes a first aid post for simple procedures. Patients will be transported to the CareStation in their district by ambulance, where they'll receive first aid. If necessary, stabilized patients can be transported through the transportation network to other CareStations or the hospital at the HealthCampus. Conversely, medical specialists can easily travel between the CareStations if their help is needed at some place. The CareStation is an accessible and recognizable facility. People pass this facility every day going to work, school or the city centre. They can use healthcare supply 'on the way'. This suits the intensification of society, where people want to experience as much as possible in less time. Ideally, seeing the doctor should not disturb your daily activities. By approaching healthcare as an ordinary, daily facility and placing basic healthcare in these urban junctions, citizens will easily find their way to the doctor, both physically and mentally.

3rd layer

The healthcampus

When 'daily healthcare' is no longer sufficient and a patient needs more specific and intensive treatment, he'll visit the HealthCampus, a green and friendly area nearby the city centre that is directly connected to the network as well. At this campus all forms of healthcare

CAREFREE2025 MARKERDAM 1/3

The main goal of this healthy city concept is extreme improvement of public health and wellbeing by prevention, taking away health risks, stimulating citizens to live a healthy life and improve the accessibility of healthcare by approaching it as an ordinary, daily facility. The urban design is based on a 4-layered Health Structure that has been developed with a healthy living environment in mind. Therefore, the city itself forms the 1st layer The Healthy City. Care and health out of the city, a high quality public transportation network will provide for the urban mobility. An attractive environment with foot and cycle paths will stimulate the citizens to move their body so both human health and environmental health will be improved. The health network is directly linked to the mobility network by the 2nd layer The CareStations which provides for 'daily healthcare' and first aid. It is an accessible and recognizable facility people pass this facility everyday and can use healthcare supply 'on the way'. For specific and intensive treatment patients can visit the 3rd layer The HealthCampus, a green and friendly area near the city centre where healthcare is combined with wellness and recreation. As said earlier, the main goal is preventing people to get sick, therefore the local authorities should pursue a 4th layer Prevention & HealthPromotion Policy.

1st layer The Healthy City



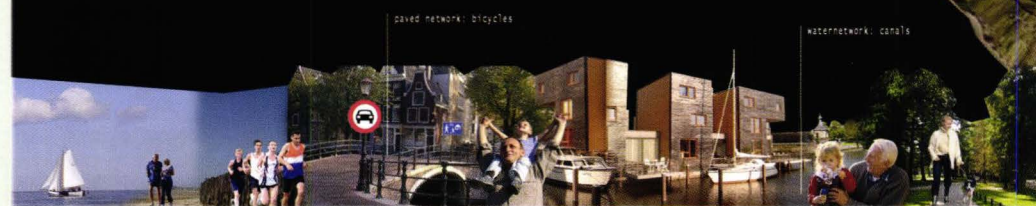
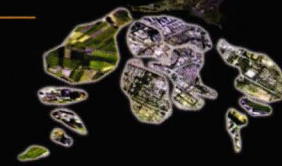
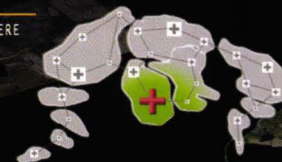
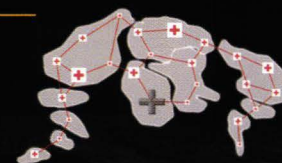
2nd layer The CareStations



3rd layer The HealthCampus



4th layer Prevention & HealthPromotion Policy



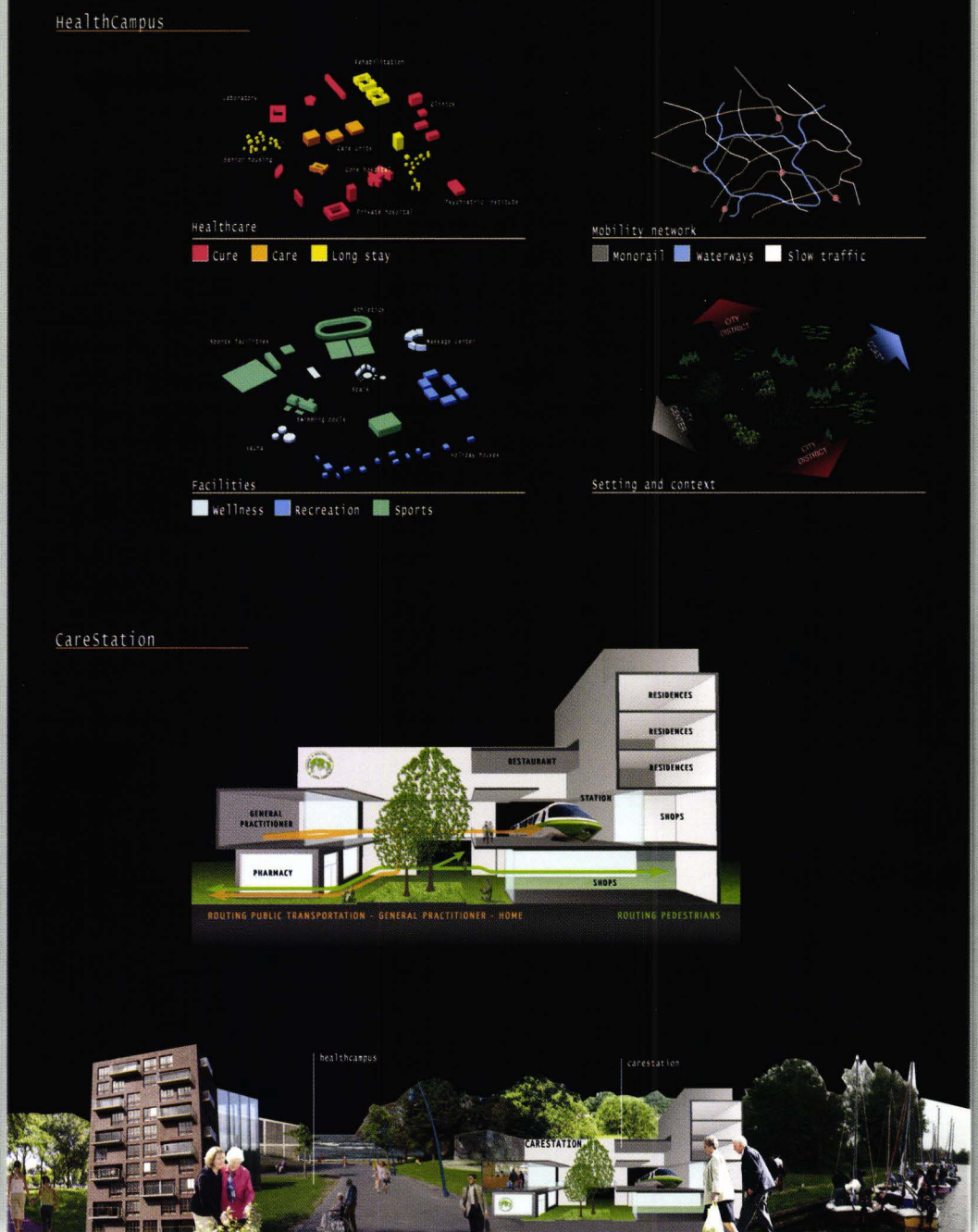
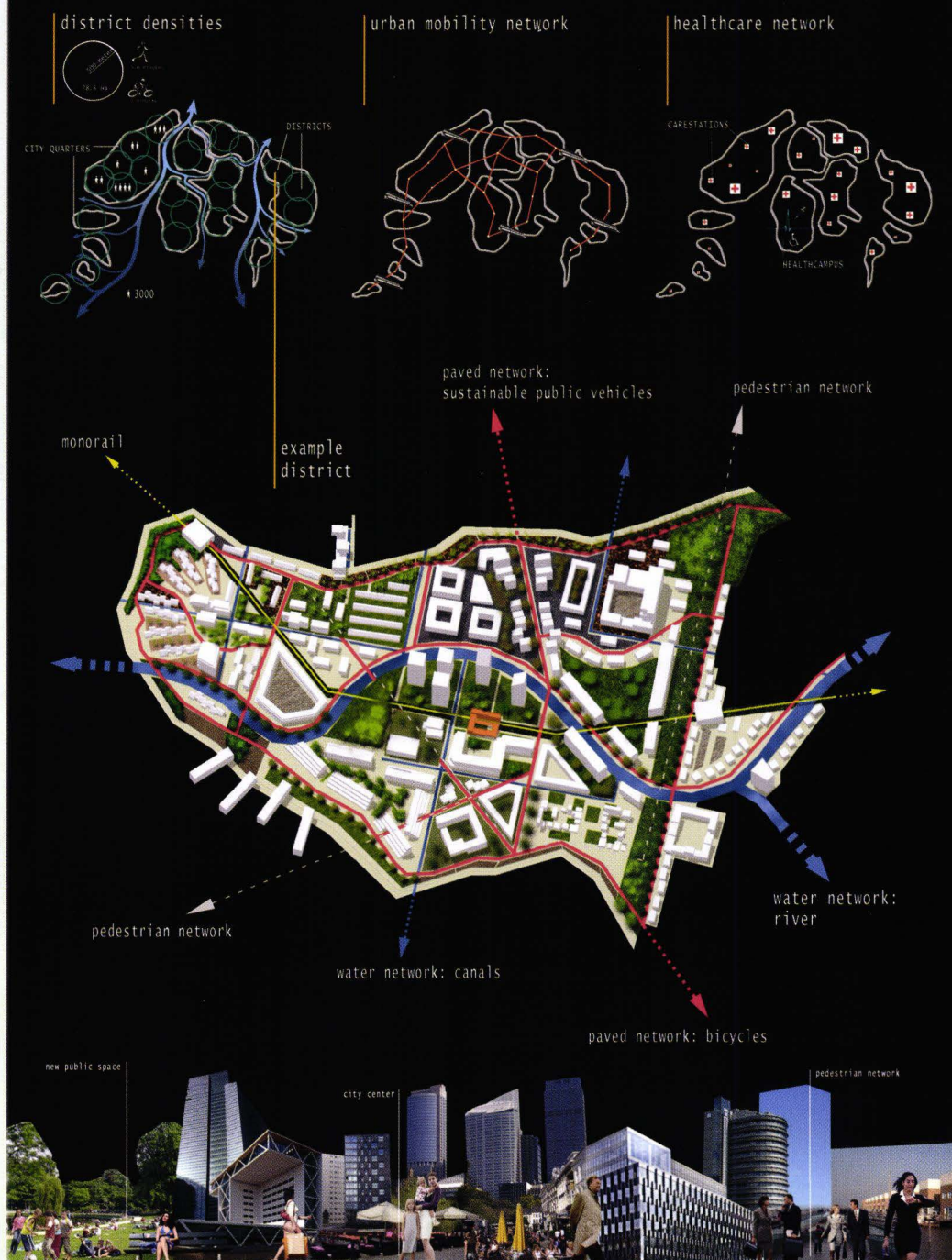
and wellness are available. Ambulatory cure treatments, protracted admissions, rehabilitation and even residential areas, combined with home care, are available at the campus. But also wellness centres, spas, sport facilities, hotels and restaurants can be found here. Total healthcare is centred at this one campus so the buildings are located closely together and can take advantage of each others personnel and facilities. The giant and complex hospital buildings are history, at campus level the various facilities have been decentralized to independent buildings. At city level it is clear for all citizens where to find healthcare: at the HealthCampus. The campus

itself is well-organized in relatively small and convenient buildings and referred patients don't have to travel far from one specialist to another. Combining healthcare with wellness and recreation will create a lively and friendly area that is not just meant for the sick people, but for every citizen or tourist.

4th layer

Prevention & healthpromotion policy

Citizens should not be reminded of sickness and health all day, so healthcare is not the most important part of this concept. It's all about promoting the healthy lifestyle; citizens of The Healthy



City will live a carefree life in attractive surroundings for as long as possible. The local authorities should promote this lifestyle, for example with preventive campaigns, low-priced body check-ups, attractive insurance policies, cheap rate car rental for outside the city and free use of public transport. The urban design forms a basis for this healthy living by attractive parks, foot and cycle paths and short distances.

To conclude

Of course it's inevitable that people get sick and grow old. People who need permanent treatment are assimilated into the healthy society for as much

and as long as possible. They'll be living in small communes near a specialized CareStation for instance. Home care should provide individual independence as far as possible. Citizens of The Healthy City deliberately decide to give up their car in exchange of an attractive and healthy living environment; they will be idealists to some extent but in 2025 the environmental issues and urban mobility problems will probably have grown to such level that concepts like The Healthy City will be the only option. Living in The Healthy City will literally feel like a breath of fresh air!

Motto: Carefree 2025 Markerdam
Main designer: Sandra ten Dam
Firm: TU/e - Heijmans Vastgoed
Team members: Joost van den Hurk
 Jolien de Jong

We Care

The culture of tomorrow is not the culture of today

Our culture will increasingly emphasize living a fulfilling and enjoyable life, even for the elderly and chronically ill. Medical advancements and commercial initiatives are already making this possible for selected patient groups, and in the future this will become more widespread. Being ill in whatever form will have less impact on our daily lives, which will create an environment where healthcare will be perceived as a "normal" line of business. This calls for a new approach towards healthcare.

The people of tomorrow are not the people of today

Today, about two-thirds of the Dutch population live in cities, which means the majority of the population in 2025 will have grown up in a city. Therefore most people, even the elderly and impaired, will demand high standards pertaining to amount and quality of facilities (cultural, recreational, healthcare, etc.). And, since illness or impairment will be less impactful, everyone will be able to take part in the vibrant city life.

The cities of tomorrow are not the cities of today

Especially in the Netherlands, the current pace at which we are consuming space and other natural resources does not provide for a sustainable future. Our sprawling cities with multiple suburbs are taking away space and polluting nature with too much light, smell and noise. These considerations ask for, or better said: demand a new type of city.

The healthcare sector and the city are changing

The city becomes a compact city. The new-style health business facilities will have to exist in a new type of city. A city with a smaller footprint, for the sake of preserving the natural surroundings and resources. The new city will therefore be "compact", meaning many people will be housed on a small area. Although for the whole country the

density is very high, there are no true compact cities in the Netherlands. In a compact city, 160,000 people could be housed on 11 square kilometers, which is over 20 square kilometres less than comparable cities in the Netherlands today. This means new land doesn't have to be poldered, but can be hydraulically filled. Therefore the land doesn't have to be pumped dry, which could save energy and improve future water management of the Markermeer.

Space in the compact city has to have multiple uses, to provide everyone with enough space to live and perform other activities. To ensure the city will be healthy and livable, a second surface level consisting of public park areas will be created on rooftops in the city. This will not only have positive effects on the inhabitants, but also on water management, since the flow of rainfall to drains will be slowed.

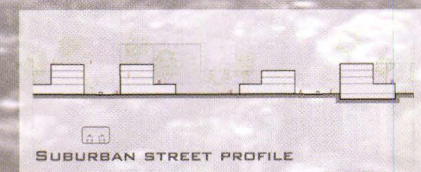
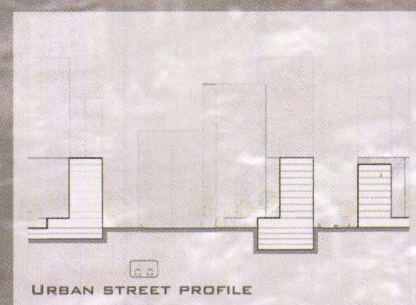
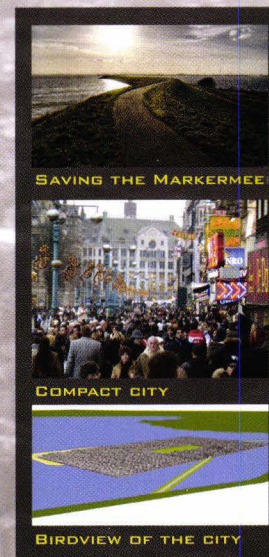
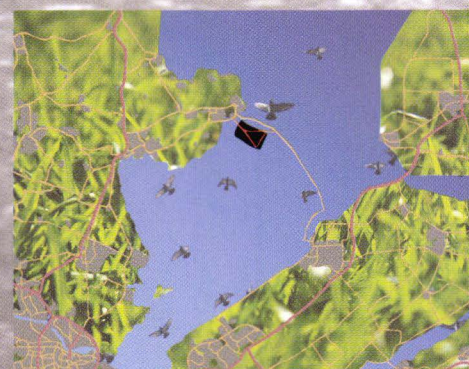
Healthcare becomes health business

For illness to become less impactful, healthcare must become a "normal" part of everyday life. Using healthcare products or visiting healthcare facilities will become just as normal as buying a toaster or getting a beauty treatment. For this to happen, we as a society have to realize that being ill does (in more and more cases) not mean one is isolated or has to make changes in one's normal lifestyle. This will become more accepted as medical science, and the belief we have the power to make our own happiness, progress.

Something that could hold back this realization is the attitude of healthcare facilities. Healthcare institutions have so far been approaching people as "patients", instead of as individuals with distinct lives, desires, and identities. Healthcare facilities will have to treat people they serve as clients instead of patients. This will happen naturally if healthcare institutions are completely privatized. Healthcare will become "health business", efficiently run by private organizations.

WE CARE

'CREATING A COMPACT CITY'

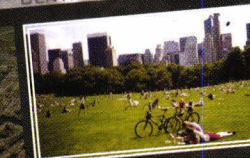


CITY BASED ON A GRID. TOTAL CITY 11 SQUARE KILOMETER

TRANSPORT BY SUBWAY

14,500 PEOPLE PER SQUARE KILOMETER

CENTRAL PARK



CITY

Healthcare facilities become health business shops

In a compact city healthcare facilities must integrate into the urban fabric, instead of being inconspicuously located in sleepy residential areas. After all, the new-style businesses will have to compete for their customers' attention. Health business facilities will more closely resemble shops or wellness institutions than clinical and bureaucratic bastions.

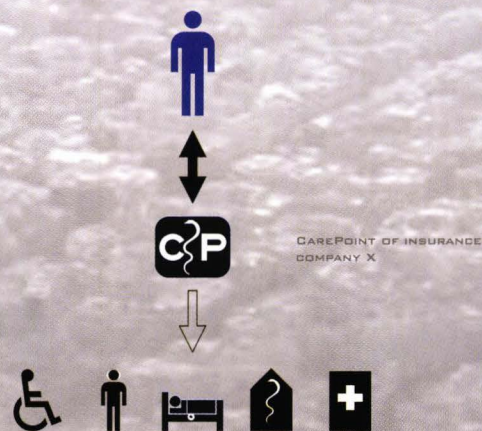
Furthermore, privatization means that health insurance companies will try to offer more service to their clients. In the future, insurance companies will create

a franchise of fast-care stations. These "carepoints" will offer, in addition to administrative and health and prevention information, the first stop healthcare facilities like a GP. Through these changes healthcare will not only become more accessible, but also more approachable.

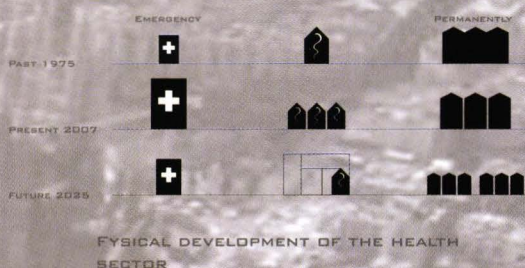
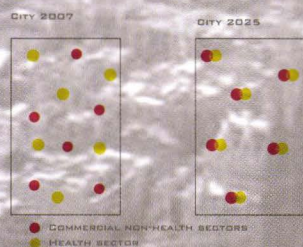
The spatial organization of healthcare is changing

To make healthcare a commonplace business and normal part of our lives, it must be visible. It must be so visible that we take it for granted as a normal business. The way to accomplish this, especially in a compact city, is to cluster healthcare with other facilities.

'WORKING OF THE HEALTH CONCEPT'

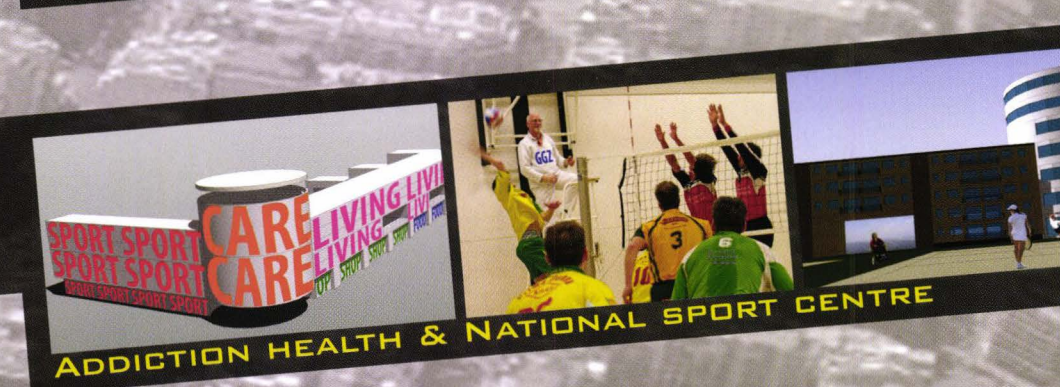
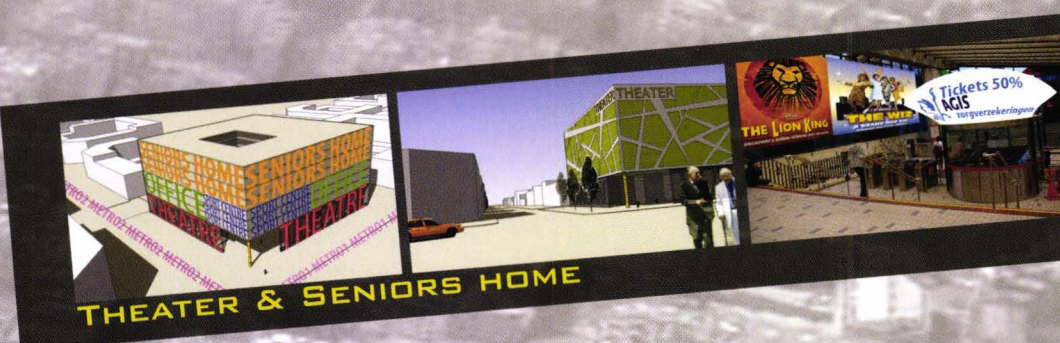
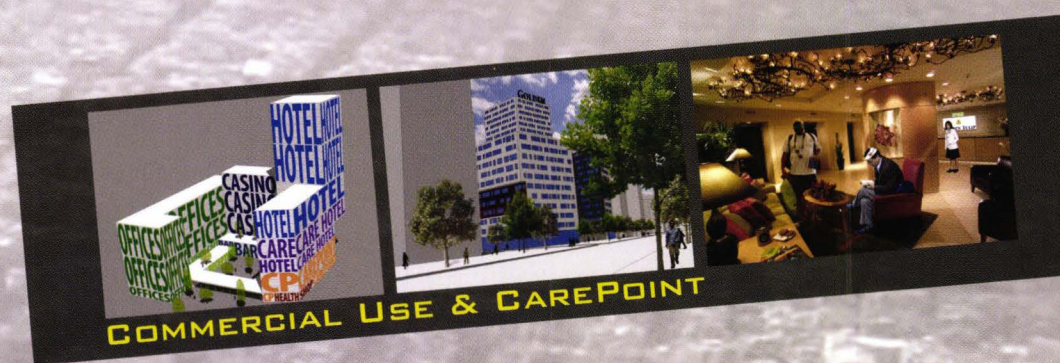


CREATING 'CAREPOINTS' FOR FIRST AID
AND INFORMATION ABOUT THE INSURANCE
COMPANY



PHYSICAL DEVELOPMENT OF THE HEALTH
SECTOR

'PLACING HEALTH BACK IN THE SOCIETY'



VISION

IMPRESSION

Cultural, entertainment, recreational and other facilities give the city its identity and provide for a vibrant lifestyle. These facilities are very important for a new-built city, which was recently emphasized by the news that more and more people are leaving Almere because it lacks adequate high quality facilities. In most cities, facilities naturally cluster to create dynamic cores, each with a different identity: hotspots. These hotspots will be natural places for the new-style health business institutions to establish themselves. Through clustering, the different facilities can profit from one another. For instance: the waiting room for a chiropractor could double as the first

room in an art gallery. Here the waiting experience is improved by the possibility to look at art, and the gallery gets a new platform to generate interest. For many facilities the front desk could be shared as well, providing for longer opening hours and savings on personnel costs. Because health businesses will be more visible and linked to other facilities, healthcare will be perceived as a normal part of everyday life.

Healthcare will be accepted and integrated in our daily life as a normal business, clustered with other facilities in hotspots that are completely integrated in the urban fabric of the compact city.

Motto: We Care

Main designer: Rob van Keijsteren

Firm: TU/e - Heijmans Vastgoed

Team members: Patrick de Ruijter

Nienke Bothoff

Sander Willems

City without a Care

Healthcare in 2025: curing care, care and their design report.

The current Dutch healthcare system has been devised to handle "care". Curing care, or the "cure", which is part of this, is well-organized and the level of facilities is substantial, certainly in comparison with the larger part of the rest of the world. Curing care can be organized and requires structures, buildings and financial means. We expect the 'extramuralization' of curing care to progress. Because of technical innovations, a higher average level of education and improved medical care, participation will become normal. Care for these disorders will hardly be medical anymore. Diagnosis, advice, monitoring, exercise, nutrition and pharmacies are integrated into new wellness centres. The dividing line between healthy and chronically ill is fading. People exercise because it fights and prevents disease or because it makes them feel good. Sports centres, swimming pools and cultural and social facilities have been integrated in residential areas and neighbourhoods, a development that is becoming more and more visible and is expanding.

In the current system, non-medical care, referred to as care, receives insufficient attention. The idea is to prevent curing care by providing daily care in advance. The current situation indicates there are hardly any organizations or structures that deal with this. Usually, private initiatives, commitment of other people or coincidence prevent people from requiring curing care. The issue is how to realize an improved balance between cure and care in the future, as a result of which the valuable part – nursing the sick – can be limited to a minimum, and the pleasant part – health or curing care – is harmonically included into our society.

How to "organize" daily care in the city?

- curing care is provided afterwards, daily care beforehand

- curing care costs money, daily care saves money
- curing care can be organized, daily care cannot!

Daily care cannot be organized in a spatial sense and depends on the social coherence in a city. Conditions can be made for social coherence in the spatial advancement of the everyday environment. Postwar urban planning ideologies have taught us that social concepts cannot be enforced. Social coherence develops if there is a willingness to design a city from the perception of its inhabitants. Daily care may develop if people know one another, watch out for one another and see each other, for instance when someone accidentally discovers that his elderly neighbour suffers from a disorder and warns a general practitioner in good time or if a woman baby-sits the disabled children of her neighbour, allowing the neighbour to break away from her isolation and go to the cinema. In addition to these fairly casual types of daily care, there are privately organized activities such as neighbourhood fathers, Internet forums for exchanging private services or baby-sitting services.

Design report

What are the spatial conditions for social coherence? We see them on various levels, for which we have used the metaphor of a cruise ship.

A cruise ship stands out; it distinguishes itself from its environment and thus provides passengers with group identity. This can be noticed inside and outside: the sea is visible at all times and people take joint pride in a recognizable and beautiful everyday environment. It is a compact cruise ship with bustle and activity because the communal rooms are limited and connect various private rooms. Spatial density is a condition for social coherence.

Similar to a cruise ship, the direct housing conditions must provide any facilities, daily care and leisure required on a daily

If I show a picture of an ocean liner one might think of "love boat", light-hearted, sunny days, meeting people in an enclosed space with a fantastic view over the ocean.



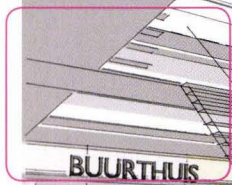
City without a Care



basis. There is much to do and there are ample opportunities for meeting people in a relaxed atmosphere. The environment encourages meeting and greeting and the development of activities.

The cruise ship is elitist: this is where our metaphor falls short. According to us, anyone can get on the ship, as is proven by the Zonnebloem, but without the sad atmosphere of helplessness. The Netherlands do not have a city with an everyday environment particular enough for people to feel a strong bond. Using the carte blanche of the IJsselmeer, we investigated what comprises an environment with character and strong bonds. The key lies in the com-

bination of compact urbanity, a direct relationship between living and facilities and the experience of particular quality of living: in this case open water. Venice is the only city that combines water and compact urbanity convincingly. The San Marco square is one of the loveliest urban squares with marvellous views of the Canale Grande. Is it possible to generate comparable spatial and urban qualities in the IJsselmeer? We found that it is if a structure is chosen based on a series of public squares and surrounded by a lively mixture of facilities, care and living. The density of houses around these squares is intentionally increased, allowing for a



An inner courtyard encourages the interaction of people.



An open courtyard might be public or private. A space for meeting friends.



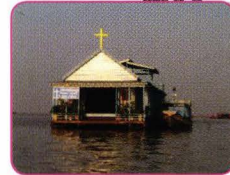
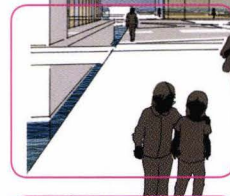
compact city with a basis for as many small-scale facilities as possible. The compact city can be realized because the water provides space and views from the houses and excitingly staged views from public squares. The result is an urban structure which is unparalleled in the Netherlands and a daily special experience for inhabitants. The particular type of urbanity will ensure that the city draws visitors – the secret of any properly functioning city.

The houses in this city have a strong relation with public space and the courtyard where people live. Depending on the desired type of houses, the inner

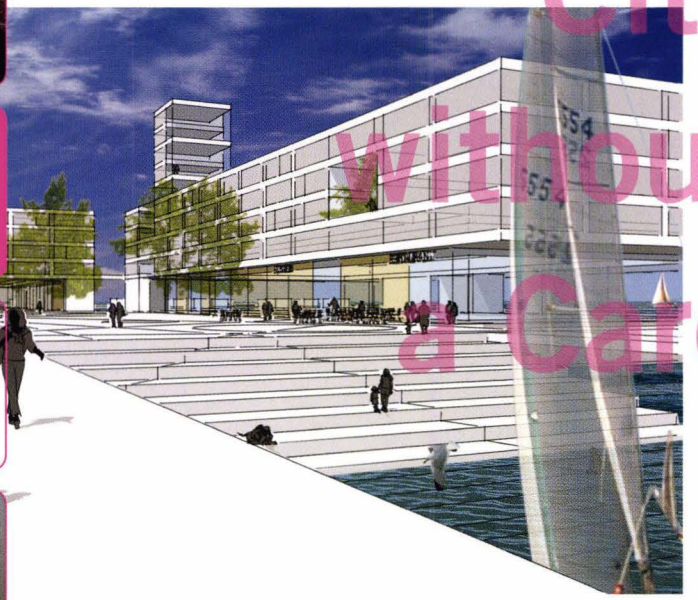
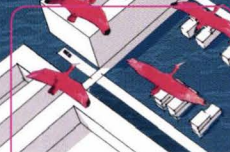
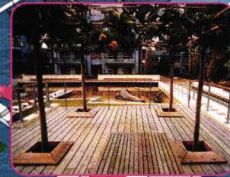
courtyards may be public, semi-public, or private. The model thus provides opportunity for formal and informal encounters. Due to the relative density daily facilities such as supermarkets, day-care centres, pharmacies and sports facilities can be realized near the houses. Decentralization of facilities is required to provide grounding to the direct everyday environment. Mobility increases because everything is in easy reach by bike or by foot which stimulates small-scale and privately organised daily care. It will be much easier to reach clients within walking distance, and in turn the direct accessibility of various facilities stimulates small-scale entrepreneurship.



A dense urban square gives space to interaction



Extraordinary quality of water, view, space and atmosphere



There is no urbanity without organized curing care. There is no daily care without urbanity.
Take care of cities!

Motto: *City without a Care*
Main designer: *Sjoerd Betten*
Firm: *KAW architecten en adviseurs*
Team members: *Willemien Bosch*
Diet Hensums
Reimar von Meding
Marcel Tankink
Dariusz Kwiatek

Networking islands

The hospital as pharmakon

The hospital as we now know it is the result of the technological developments of the last century. Everything revolved around medical science. The focus was on curing patients' illnesses rather than on their personal well-being. Even now, too much attention is given to the illness and its remedy. Elderly people are hidden in nursing homes and chronically ill try to deny their clinical picture because they do not want to be left out of society.

Healthcare has become the prisoner of an expensive bureaucratic system. Due to ever more complex technology, the clustering of medical functions has only increased. Alienation is arising between the hospital and society, not only in a spatial sense but organizationally as well. This results in long waiting lists, impersonal treatment and inefficient assistance. Due to its organization and spatial planning, the hospital acts as a cure as well as a poison for its patients.

Networking islands

To once again offer healthcare on a human scale, the layout of the city must be reconsidered. The position of healthcare in daily life must be redefined. A personal living environment with a shared collective awareness is necessary in order to achieve social cohesion. Every individual will have his home base in a network of islands, irrespective of culture, religion, social class or educational background. People who require care will be supported within this network. This will create the necessary preconditions to once again include healthcare in society.

In the new healthcare model, the hospital can no longer be identified. It will form an integrated part of the city's network and its presence can actually be felt. Thus, healthcare will be liberated from its unwieldy organization. Doctors, surgeons, therapists and nurses will become part of the network, so that the

boundaries of their working areas will be blurred. They can offer care according to their own professional insights rather than the insights of a large organization which they have no control over. Healthcare becomes a decentralized matter offered on a personal scale. This will be for the good of the patient as well as the care provider.

Flows of space and time

The islands of Markendam are interconnected by a public transport network. This infrastructure comprises three different transport systems, to which healthcare functions are linked. This makes them easier to reach, more flexibly organized and an integrated part of people's daily lives. Waiting lists are being reduced through more efficient planning and the stable transport network. Virtual networks are used to make it easier to exchange patient data. Using a PC, a patient can communicate remotely with his health consultant. This will enhance the accessibility and the patient's ability to manage his or her own situation.

Now that people requiring care are once again finding their place within society, a widely supported policy will be used, in which care is provided to everyone. Market forces not only result in security for the richer share of society, but form a precondition for the decentralized organization of healthcare. Market forces are used to promote quality, innovation and flexibility. The care consumer may choose from a wide selection of treatment options and can choose the option that best suits his or her attitude to life.

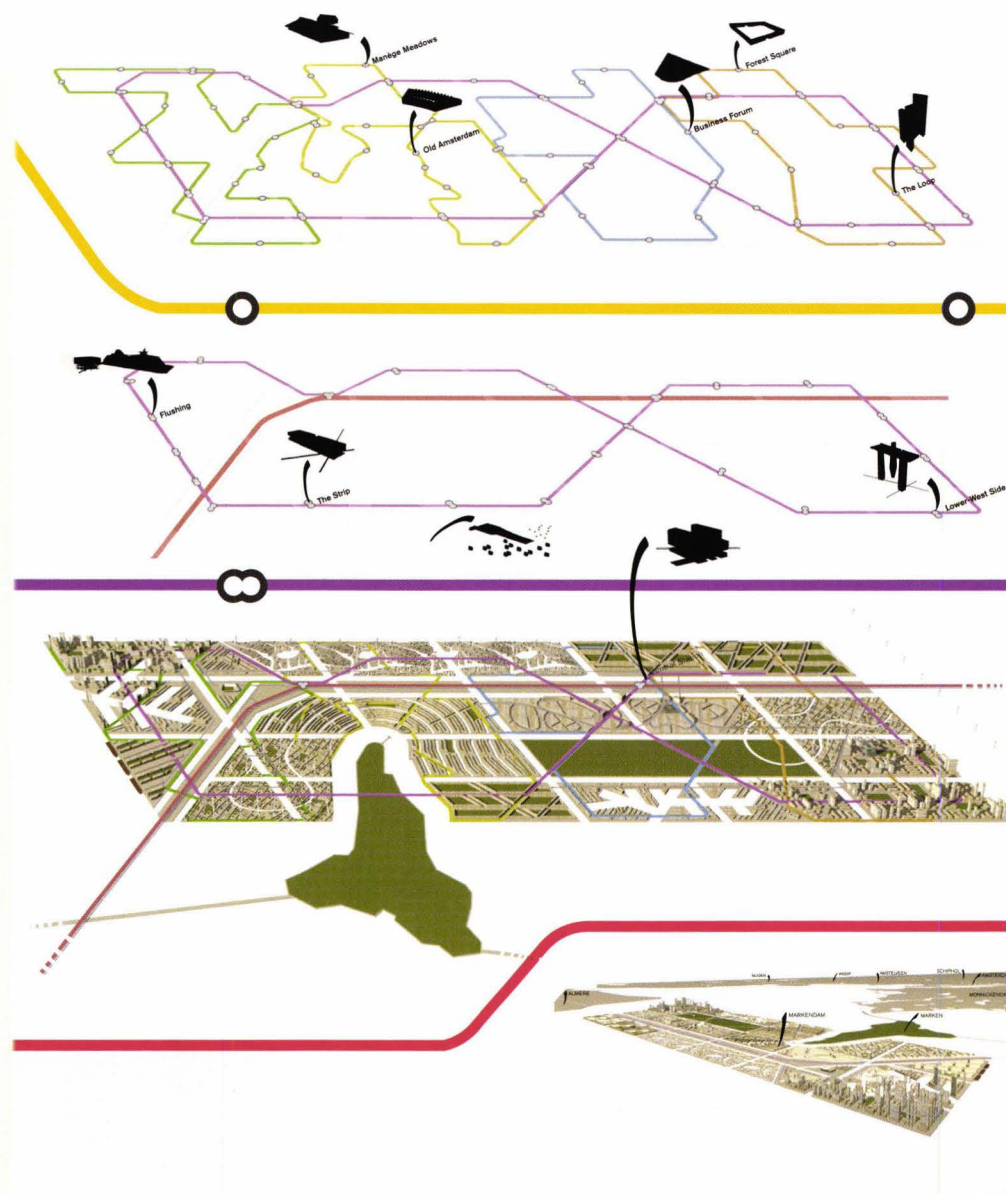
The three scales

Three different entities can be distinguished in this locally organized healthcare: acute care, elective care and chronic care. Each fulfils its own role in healthcare and in the city. Institutions are present or absent in their own way and can be found in the right place at the right moment.

networking islands

"The city itself was seen as a place that produced illness when it was not functioning well (physically or religiously) and thus could and should be designed to promote health in its very layout."

Michel Foucault - Birth of the Clinic



Continuous Care

Care is personal but anonymous. The patient has been taken out of the community, but only as a temporary situation. The patient needs to rest in a quiet environment. Thanks to the location and the direct link with all types of mobility in and around Markendam, the efficiency of instant care is guaranteed.

This makes it into a regional as well as a national platform for specialized, emergency and intensive care. Instant care is based on an on-demand process and care will be delivered just in time. Vis-à-vis the city, instant care

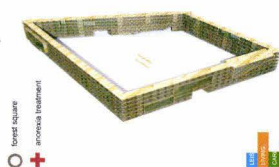
has an introverted, monolithic character, which makes it recognizable as an archetypal building. Residents know that help will be available in emergency situations.

Casual Care

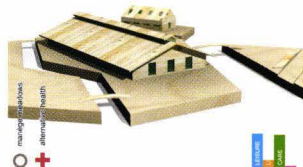
Within casual care, the care offered is liberalized. Market incentives are clearly visible. Healthcare is linked to commercial organizations, consumptive and aimed at relaxation. The patient can become part of the nameless masses or take a more extraverted position. This elective care can be well planned and in many cases repeated treatment will be necessary. It is

collective care

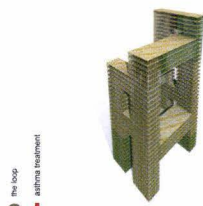
participation / flexibility / tailored / residential



central square
+ increase treatment



central square
+ increase treatment



central square
+ increase treatment



central square
+ increase treatment

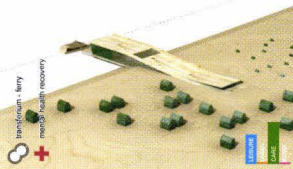


Forest Square

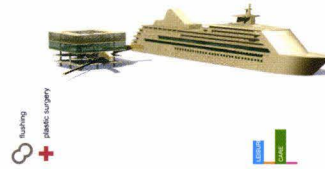


casual care

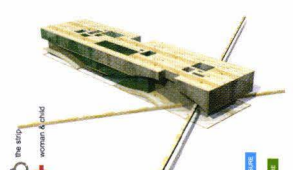
predictability / freedom of choice / accessibility / commercial



central square
+ increase treatment



central square
+ increase treatment



central square
+ increase treatment



central square
+ increase treatment



The Strip



continuous care

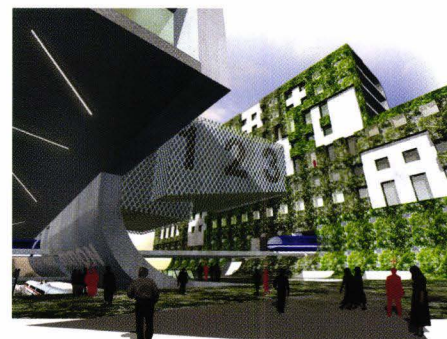
availability / proximity / expertise / efficiency



central square
+ increase treatment



central square
+ increase treatment



Central Station



therefore important for patient and caregiver that the care is chosen or offered according to their own insights. Casual care is flexible in nature and will quickly adjust itself to the demand or trends of the moment. Thanks to the links with commercial organizations, residents who may have nothing to do with the care institution are also present here. This way, visitors of the oncology centre can go to a film theatre or library during the long wait for their treatment. The care on offer will have a casual character, based on the idea that illness is part of life. Patients will get better here even if they are not cured.

Collective Care

Healthcare centres can be found in the twilight zone between healthcare and the living environment. Healthcare can hardly be recognized as such, it is fully part of society. Community functions incorporated within these residential complexes not only enhance the social cohesion within the building but on the entire island. The ability to adjust is mandatory for all functions. People may have an office at home, but on the other hand this home can also be connected to a care point to be turned into a type of sheltered accommodation. The nurses that occupy the care point will also take care of chronically ill patients elsewhere.

On the 'blank' care square, dialysis will be performed, physiotherapy sessions will take place and a physician will be treating a group of asthma patients during the day. During the evening, bulimia patients will find mutual support amongst one another and an accountant will help elderly people fill in their tax forms.

Motto: *Networking islands*

Main designer: *Arch. Robert Collignon,*

Firm: *DHV B.V.*

Team members: *Ir. Stefan Kolen*

Ir. Teun Spruijt

René Rodrigues de Miranda

Ir. Michel Doens

Ing. Gerard de Graag

Ir. Jan van Kuijk

Ir. Sander Vorselman

Monique Kranendonk

Ellen van Vlierden

LEEF! gelukkig zijn, bewegen

BEWEGINGSLIJKE LEVENSTIJL

Sinds 2015 van de Nederlandse bevolging, wordt de beweging steeds meer een onderdeel van de levenswijze. De beweging wordt steeds meer een onderdeel van de levenswijze. De beweging wordt steeds meer een onderdeel van de levenswijze.

Feiten-onderzoek

ARTIKEL/NIEUWS 2007

ARTIKEL/NIEUWS 2025

Top 5 oorzaken voor de gezondheid

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2. Ongezonde leefwijze
3. Depressie/psychische problemen
4. Arbeidsomstandigheden
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LEEF!

ZORG VOOR GEZONDHEID

De zorg voor gezondheid, preventie, zou een onderdeel van het dagelijkse leven moeten zijn. In de stad LEEF! wordt een nieuwe lifestyle gecreëerd, zorg voor je gezondheid, zorg voor elkaar. De stad is zo georganiseerd dat ze uitnodigt tot bewegen en gezond leven. De stad is groen, breed rust, en toegankelijk dynamisch. De gezondheidsproblemen die anno 2007 het meest van invloed zijn op de kwaliteit van kosten in de gezondheidszorg behoren grotendeels tot verleden tijd. LEEF! is een stad waarin het verantwoordelijk en bewaard. Lief is om te bewegen. Bewegen is een sociale uiting. Bewegen is een levenswijze, bewegen is gelukkig zijn.

ontmoeten
geluk + gezondheid
bewegen
landscap

De stad is groen, breed rust, en toegankelijk dynamisch.

Meer ontmoeten elkaar op straten van wonen. Autowijzen en groen.

AUTOMOBILITEIT > LICHAAMELIJKE MOBILITEIT

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ACTIERADIUS 375M

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LEEF! - gelukkig zijn, bewegen en ontmoeten in een gezonde stad

Being healthy means being happy!

... It's a beautiful late summer day, September 2025. Children are playing football or hanging upside down from the climbing frames in the playgrounds. Under the trees their parents, grandfathers and grandmothers watch them play, while reading a book or working on their laptop. There's peace and quiet, but business as well. There's no sound of motorbikes, people are walking and cycling everywhere, working or practising a sport. Meeting each other, getting to know each other and helping each other. This is life in LEEF!

... It's September 2045, early in the morning. Through the digital highway the daily news is coming in on computers and mobiles. The newspapers announce 'Residents of LEEF! are the most happy people'. Study proves that LEEF! residents are the happiest residents in the Netherlands. Moving around and exercising are paying off. The residents are 15% healthier than others in Holland, because they are moving around daily. Diseases like coronary heart disease, diabetes mellitus, stroke, osteoporosis, intestinal cancer, breast cancer and dementia are on the decline. Mental health is improving and children are much brighter. The average life expectancy is approximately 4 years longer. This is life in LEEF!

1. Breaking the trend

From 2007 till 2020:

- population of 65 years and over is now 19%, in 2038 it will be 25%
- potential demand for nursing increased by almost 50%
- productive population (20-64) decreased from 61% to 54%
- employment in the social services sector increased by approximately 30,000 jobs yearly

This means that 22% of the working population will work in the social services sector and welfare (WRR121). This can only be realized when all school leavers will work in the social services

sector, which is neither desirable nor feasible. This future is getting closer and in some cases already a reality. What's the solution?

Care=life, painting a picture of a permanent solution. Prevention instead of care is the foundation for this, prevention is better than cure. Cure and care in one's own environment is much better than in a hospital or an institution.

Care=life, believing that a happy life is the solution. Happiness as a result of:

- exercising sufficiently
- meeting and/or helping other people
- an environment
- an infrastructure which makes everything possible.

1.1 Moving

Do you know that:

- exercising is leading to less RSI symptoms (TNO)
- active women have 20-40% less chance of developing breast cancer (KWF-The Dutch Cancer Society)
- senior citizens, who exercise/move around three times a day, run fewer risks of dementia (University of Washington)
- moving decreases the chance of having

intestinal cancer (Joep Bartelsman, AMC)

- exercising has a positive effect on the development of children's brain functions (NOC*NSF)

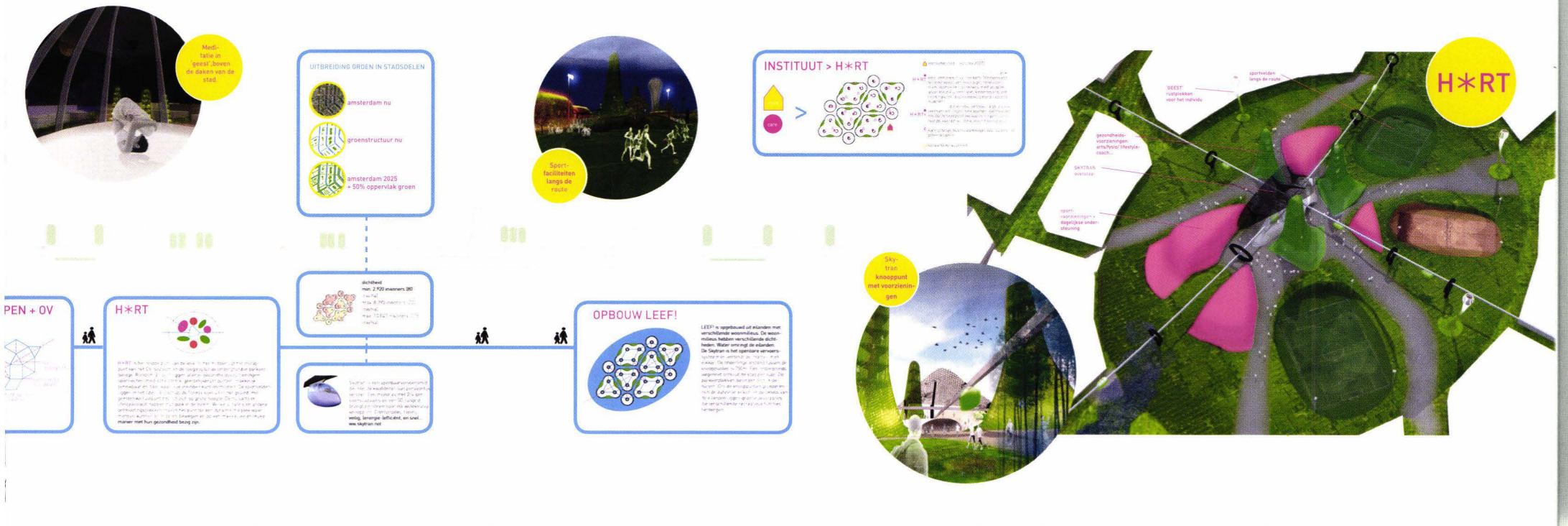
That's why LEEF! is inviting you to move and to exercise. By giving children space to play football or other sports in the neighbourhood. By giving senior citizens a place to walk and adults a place to cycle, along green pastures and a varied scenery, which offers all kinds of recreation. And by offering connections through an extensive infrastructural network, which makes the use of a car within the neighbourhood unnecessary and walking and cycling feel comfortable and efficient.

1.2 Meeting

Do you know that:

- one out of three senior citizens is suffering from some form of loneliness and 15% is clearly depressive
- Dutch train travellers would like to have more contact with fellow travellers (newspaper Spits)
- support from people around you is very important for the mental health

ontmoeten in een gezonde stad



- little support, too much criticism or too many arguments can lead to depression (Finch et al, 1999; Seeman 1996)
- sport is connecting people in city neighbourhoods (Forum VROM)

That's why LEEF! is made up of neighbourhoods with a diverse structure, which offer possibilities to meet each other physically and virtually and to co-operate. People's physical health is great because of the social coherence and the possibility to participate. Disabled and senior citizens can have a place in society, because they pass their time in the H*RT in close collaboration with schools. People who suffer from dementia live together in small groups of 6-8 persons. There, professionals can take their own responsibility, every individual can make a difference. Meeting each other and getting acquainted, listening to what's necessary and attention for the individual are things that matter. Medical care has been transferred from secondary to primary health care. Chain care with good coherent agreements between primary health care insurers is

leading to optimum medical care near home, in a familiar environment. Primary care facilities are situated in the H*RT. Residents can visit the clinic in their own neighbourhood. They can go to a polyclinic for specific diagnostics or hospitalization. Chronic patients will receive medical care near home, for example in small dialysis centres where employees and patients feel at home.

2. Design principles: care = life

Did you know that:

- in Sweden 70% of the senior citizens, who suffer from dementia, and the mentally handicapped, who would stay in-tramural in Holland, live in small-scaled housing, amid the population
- in Germany an intricate network of dialysis centres exists
- in Holland there's a hospital where 31 FTEs of specialists give consultations at 3 different locations
- the Thomashuizen seek a national presence with 100 houses
- children and immigrants like to sport in the neighbourhood, not near the cities (Forum VROM)

- in daily life residents in classic neighbourhoods seem to walk and cycle more than residents of postwar areas (Vitale stad)

Starting point for the design of LEEF! is the standard of healthy moving for 30 minutes a day. The daily routine of moving around between H*RT, neighbourhood, parking lot and public transport give sufficient exercise. The neighbourhoods are 'green' and there are no cars, so it's a safe area for children to play. They can climb on poles or walls, there are stairs and hop, step and jump tiles. There is sufficient storage capacity for bikes, skate boards and skaters, and because of the changing scenes the same distances are felt much shorter.

The H*RT is the social centre of a neighbourhood where the following can be combined:

- polyclinic
- vaccination post and travel clinic
- pharmacy
- family doctor
- physiotherapy

- midwife
- recreation and daily expenditure
- fitness
- parking lots
- public transport

Handicapped and senior citizens who need care can live in small houses for 6-7 persons. Downtown there are four dialysis centres for every 10 patients. The core hospital has been reduced to 45% of the present norm, because of decentralization of the different functions and the decrease of care because of moving and meeting each other.

Motto: LEEF! – gelukkig zijn, bewegen en ontmoeten in een gezonde stad

Main designer: Paul de Ruiter
Firm: Architectenbureau Paul de Ruiter b.v. i.s.m. Twynstra Gudde
Team members: Annika Hermann, Willeke Smit, Marije Talstra

Geheel en al

Networks

Networks are systems of connections between entities. The connections enable the entities to interact. They complement one another and rely on one another's qualities. In 2025, networks play a determining role on every conceivable level. Cities are organized in complementary networks, as is the healthcare system. People live in social networks, care for each other and feel safe as a result.

Background

In Europe, a new élan has risen, emanating from a renaissance of traditionally European values such as humanity, tolerance, public spirit, collaboration and individual excellence.

The Netherlands assumes a self-confident position, based on knowledge. Education is society's driving force. High-quality technical knowledge concerning alternative sources of energy is an export product. High quality education stimulates the development of the individual, leading to creativity, private initiatives and entrepreneurial spirit. The basis, however, is a strong community in which individual development is ingrained.

People feel responsible for both themselves and their community and respect the environment. Lifestyles have developed from consumerism to more immaterial values. Consideration is a theme. The government is compact, pragmatic and stimulating, in pursuance of a long-term vision. It stimulates private initiatives and supplements shortfalls, and offers a limited but powerful social safety net.

City

A water city has emerged as a new entity with a unique character in an urban network. The new city is built on sand from the Markermeer, the deepening of which improves the quality of nature and water. Water turbines in the Afsluitdijk generate energy from tidal currents. This new 'Delta Project' is the city's major energy source. The IJsselmeer is slowly becoming salinized. Because of

its X shape, the city has a long coastline with broad urban boulevards and long beaches. Running perpendicular to the beaches, shorter streets begin and end at the coast. Water and nature are always close at hand. Distances are short, encouraging walking or cycling. The form and location of the city represent healthy living. Each arm of the X has its own residential and working environment. At the intersection lies a compact urban centre with facilities that complement those of Amsterdam and Almere.

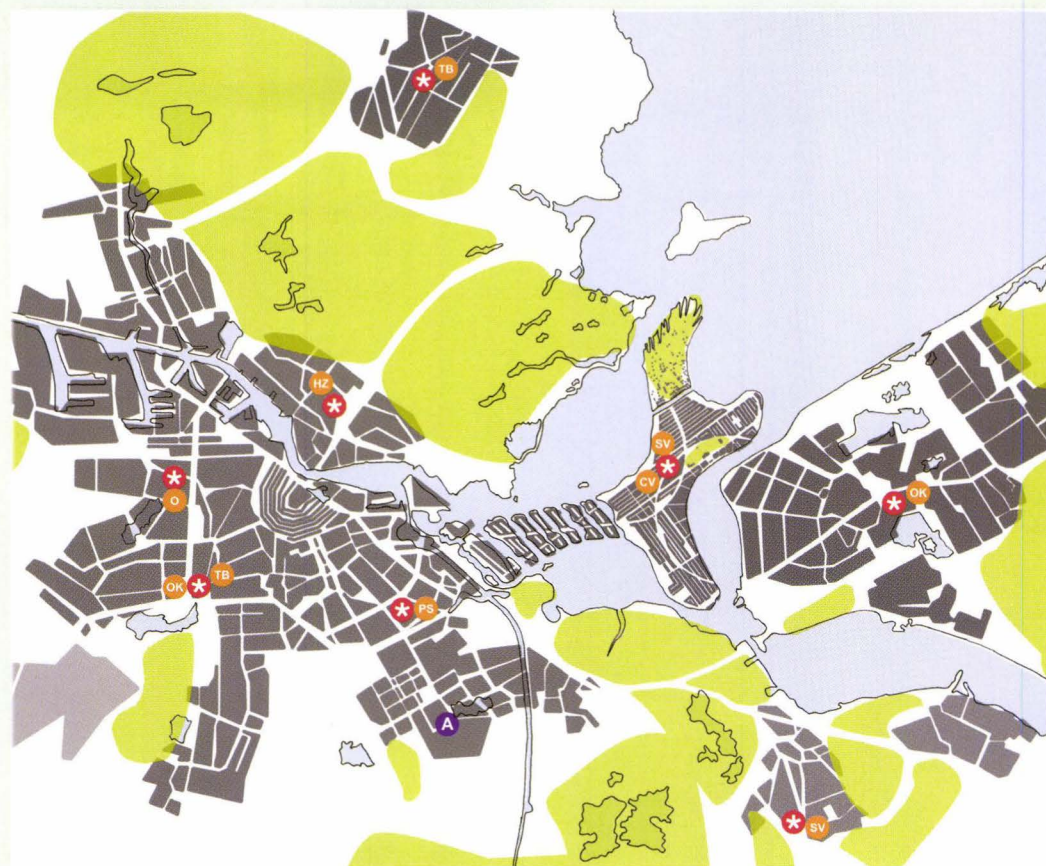
Care

Holistic care is the leading principle. Man is not seen as the sum of its deficiencies but as a creature with a soul. The human body is a coherent system of networks that, in principle, is curative and capable of staying healthy. 'Care' is not an isolated phenomenon but rather an integral part of our daily lives. Care is easily accessible everywhere and facilities are integrated into the city. A healthy lifestyle, combined with prevention, (nutritional) information, wellness and fitness facilities, ensures that we remain healthy for a longer period of time.

Care providers work together in care chains that introduce a link between traditional primary, secondary and tertiary levels of care, with good mutual communication and integrated care. The Electronic Patient File (EPD) also helps. A free market is necessary for both care and cure, with the government guaranteeing the distribution and availability of a minimum level of services.

The general practitioner (GP) is still the confidant, the first and most important point of contact. A GP practice consists of a maximum of 1,500 patients so he can actually be attentive and accessible. Supported by the EPD, the GP has access to specialist knowledge. His network extends to all levels of care and he is the linchpin in the care chain.

People care for each other as much as possible. But this is not always enough.



"Drie maanden geleden ging ik met vage klachten naar mijn huisarts. Hij nam tijd voor mij en nam me te bescouwen en me te onderzoeken. Hij kon online een aantal specialisten raadplegen. Waarna hij me heeft doorgeleid naar het Centrum voor Streeklings en Verandering. Twee maanden geleden heb ik daar een darmoperatie ondergaan. Nu zit ik weer lekker in mijn huis. Ik voel me alweer heel goed want in zo'n omgeving kan je het beste herstellen!"



"Vroeger kon ik als longarts in bijna elk ziekenhuis werken, maar nu worden we gestroomlijnd door een aantal grotere ziekenhuizen met betere apparatuur. Nu werk ik al vijf jaar in het regionale centrum voor ventilatie en circulatie en het me toe ik heb ik al meer patiënten hier goed zelf kunnen behandelen."



"Ben naar geloven is bij mij borstkanker vastgesteld. Ik ben geopereerd in het regionale oncologiecentrum. Ik werd daar erg prettig behandeld. Ik wordt daar behandeld als totale mens, waar de ziekte een onderdeel van is. Ik moet nu nog in de 14 dagen voor bestelling naar de satellietpoli oncologie. Die zit gelukkig in het winkelcentrum waar ik toch al eens per week kom en beneden kan ik te rijk op zaterdag terecht."



The adage 'centralize where necessary, decentralize where possible' applies to geriatric care, (residential) psychiatry and care for the disabled. The main objective is for people to live in (supported) autonomous or small-scale clustered living spaces for as long as possible. Society is willing to spend money to achieve this. Once it is no longer possible, there are compact care centres where people can live in a warm and caring atmosphere. These centres are integrated in the neighbourhood. People who live independently with low-level care needs are provided for by means of a network structure. Compact centres, comparable to earlier Regional Mental

Healthcare Centres (RCG), take care of ambulatory and short-term residential, psychological healthcare.

Hospital care is organized in Academic Centres, Acute Hospitals and Specialist Centres. Former General Hospitals are split up into Acute Hospitals (AZs) and Specialist Centres (SC's). There are 80 AZs (roughly 200,000 inhabitants, 400 beds). All non-plannable specialist medical care is provided here. The centres exclusively house medically oriented functions. Management, administrative and facility services are accommodated elsewhere. The government ensures that



"De diagnose van een beginnend stadium van Alzheimer heeft mij veel verdriet gedaan. Maar als het nodig is kan ik een plaats krijgen in de woongroep 'Ondersteund Wonen voor Ouderen' in mijn buurt. Zo kan ik ook straks nog in mijn vertrouwde omgeving blijven wonen."



"Om, vandaag was er weer die 'gevoelens-boei' op het schoolplein. Wij hebben geleerd hoe ik van vervoeren linnende kan maken. Erg leuk! - en gezond!"



"Vroeger vond ik het fitnesscentrum te duur. Nu de ziekte, samenwerking met de stad die ik samen met twee vrienden een cursus Pilates. Ik heb er veel plezier aan en mijn rugklachten zijn ook al veel minder geworden!"



GEHEEL EN AL



these centres are dispersed throughout the country. Former top-level hospitals, specialized institutes and parts of general hospitals are amalgamated into Specialist Centres organized around 7 themes. The centre's specialisation enables concentration and broadening of knowledge, resulting in a higher level of medical treatment. Diagnosis and treatment plan are given to the patient within a day. The centres collaborate within a regional network, with at least one specialist SC per theme being available in a region of roughly one million inhabitants. There are roughly 120 SCs nationwide. They can be private initiatives but the government is responsible

for their dispersal throughout the country. Alongside this, the market allows for private clinics.

The SCs are physically combined with the AZs: every AZ is grouped with 1 or 2 SCs, which use the AZs facilities. The resultant larger Medical Centres are located at intersections on important infrastructure routes. The buildings are flexible and sustainable, and utilize natural bionic principles for their climate control.

Because large parts of the specialist care are concentrated in individual regions, travel distances will increase.



"Sinds ik mijn nieuwe levenspraktijk naast het streeklaboratorium heb geopend komen er veel meer mensen met gezondheidsproblemen naar mijn intakepraktijk. Vanaf volgende jaar wil ik hier in samenwerking met het centrum ook een eerste gespecialiseerd ziekenhuis aanbieden."

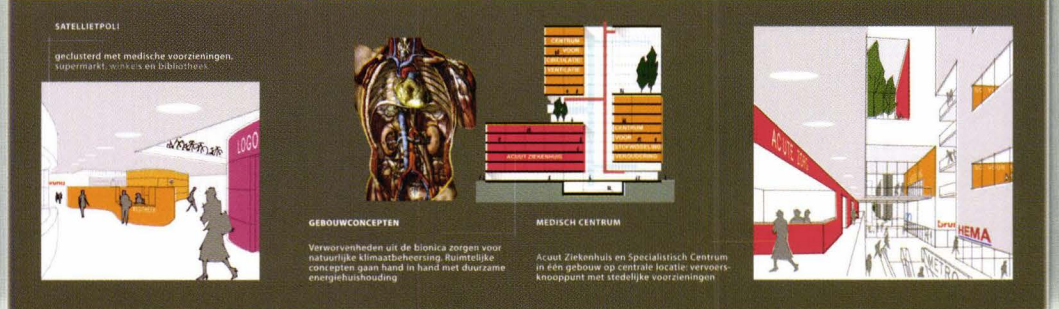


"Een jaar geleden hebben mijn man en ik een nieuwe huis aan de haven gekocht. Op de begane grond hebben we een praktijk voor fysiotherapie gevestigd. Als we over 10 jaar stoppen met werken, willen we er een huis bouwen voor een gezin, een plek om daar met een vriendin, die dat ook met pensioen gaat, samen te gaan wonen en ook worden: een gezin."

"Thuis ik 2 jaar geleden geproject ben met werken, was ik overtuigd dat overtuigd met mijn nieuwe leven. Op zoek naar een nieuwe tijdswaardening ben ik bij het vrij-willigennetwerk terecht gekomen. Nu help ik die kant per week in onze wijkbibliotheek."



GEHEEL EN AL



Therefore, satellite outpatient clinics are available in each city. Specialists from the SCs have surgery hours for simple consultations, after-care or minor operations. These clinics are small medical centres where a pharmacist, physiotherapy or other services are also available.

Carefree human being

The organisation of care and the city is based on respect for the integrity of humankind. Humanity is the most important underlying value. Because of this, people feel uninhibited: carefree human beings.

Motto: Geheel en al

Main designer: Frank Pörtzgen

Firm: Wiegink Architecten

Team members: Miriam Poch
Sil Mantel
Rudi Koster
Bert Muijeres
Rob van der Meer
Tom Vlemingh
Roy Pype
Stefan Oditz
Birgit Kalms
Jeroen Sprangers

Postcode 1572

So, what do I know of a town, about health care, about growing older or about the future? Nothing... unless it's about planning.

The town belongs to its people. The programme to a design is functional. Since I have the necessary input at my disposal, I can decide what the town will look like. Based on that we'll make a plan. The people are its soul.

Healthcare is for the people. A necessity at any moment. I have the knowledge to make plans for healthcare. The plan will give structure to healthcare and create the possibility to make people feel at ease during awkward moments.

An age belongs with a person. Time continues by itself. Only for myself can I try to decide what growing older will look like. In that way I try to see the image that defines old age.

Fortunately, humankind has a future. So, when I contemplate the future and I may determine what the future will look like, then there are tools that help translate the future into a programme.

Not insignificant, there are 3 presentations:

- an impression of the city
- the healthcare that belongs in it
- the development of the care for the elderly and the needy in 2025

Historically spoken a town grows. People divide their time between obligations and spare time. An important part of this free time is spent during old age (+60th). Healthcare is founded on the science of the human body. Illness and physical problems are counteracted by knowledge and speciality. These problems, however, usually go hand in hand with emotions, sensitivity and uncertainties. Nowadays people can easily access information and that is how alternatives win ground. Having a good care system necessitates expensive buildings with expensive facilities in them. I would like to set out with a renewed program. Shops and guestrooms

or houses and social rooms are added more and more to the concept of care institutions. Patients can, if they like, do a bit of work during those long hours. The biggest changes can be expected in the processing systems: administration, communication, patients' charts and facilities. In twenty years nearly everyone is familiar with digital skills.

I am amazed that there are no great alterations in the composition of the population. People's opinions change the most. The main alterations come from my shift in the group-division, as formulated by the CBS (Central Bureau of Statistics).

Assuming people will retire between 60 and 65, there will be less people employed. Here the change lies in increasing individuality and an independent judgement. People are well-informed and can decide for themselves to continue productive labour. The basic assumption of the total is the fact --> 160.000 inhabitants. This is a fact which is compared to the statistics of an Exemplary Town in 2005.

Old-aged	>75	total	11,040	-0.10%
Elderly	60 - 75		26,880	+3.90%
Adults	25 - 60		72,800	-4.40%
Juniors	15 - 25		21,440	+0.70%
Children	00 - 15		27,840	-0.10%

In the plan, extra attention is given to the old aged and the elderly. A large number of elderly people will remain living in their own homes (28,700 people). A number of the elderly will leave their homes and move to a housing property where they may find help more easily. In the future they will have their own front doors and the opportunity to buy all kinds of help that will be nearby. Here changes will take place due to increasing individuality and independent decisions.

A feeling of safety is the main issue. This is the case for 8,100 people. They will buy or rent a living space that suits them. This means that a new care system requires approximately 6,000 housing units, varying from 20 to 200 m². Hence we formulate the following basic assumptions:

- increasing individuality
- communicative abilities request for various possibilities

Simultaneously the demand remains for: Help when necessary
Social and medical help easily accessible and immediately available

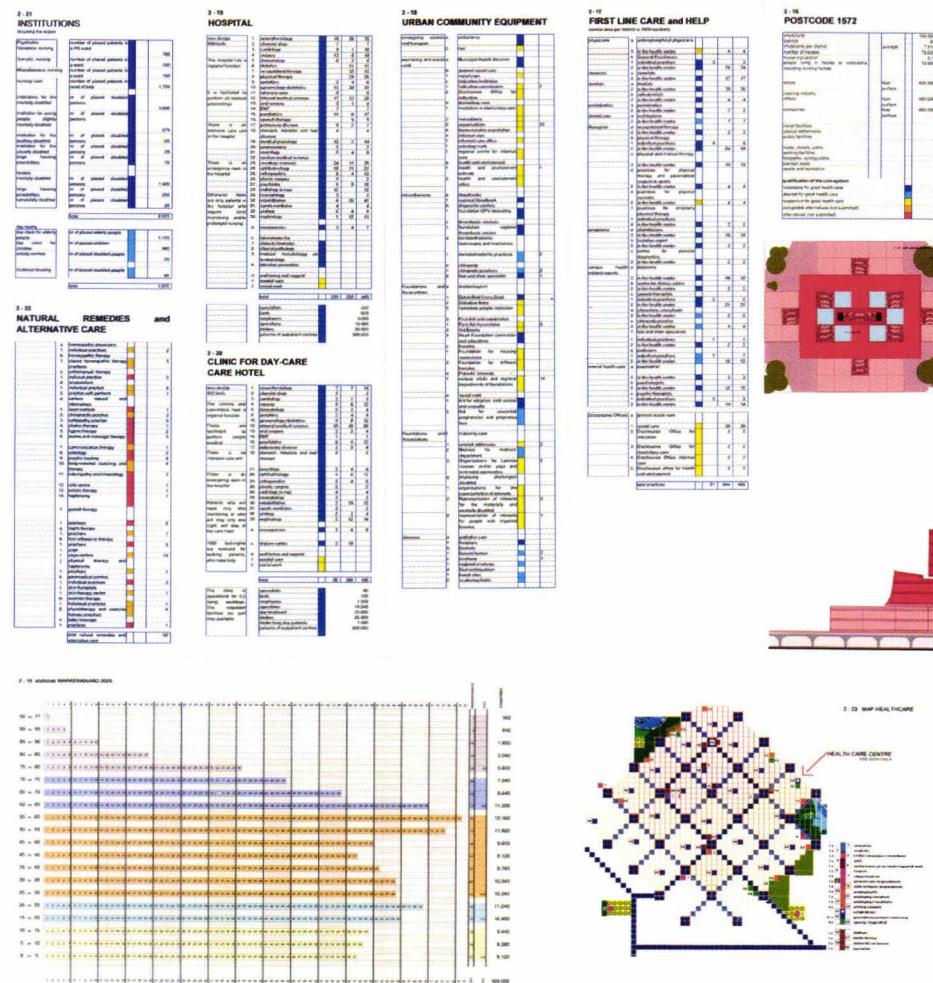
For people in nursing homes the following overview can be drawn up:

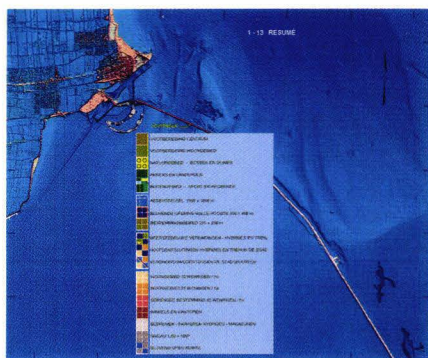
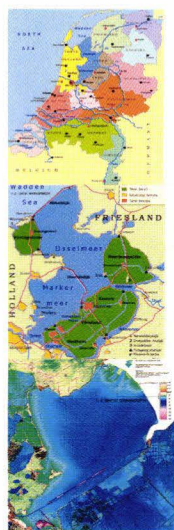
Infirm old-aged people:	
• P.G.:	650
• Somatic:	300
• Nursing and rehabilitation:	150
Other younger infirm people: 1,700	

For them 2,800 beds are needed.

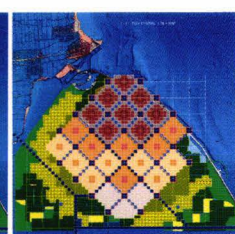
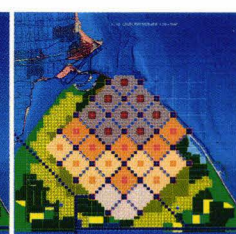
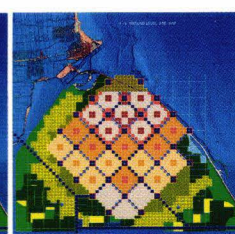
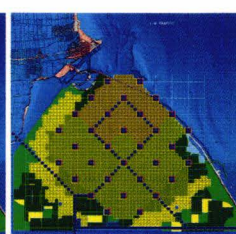
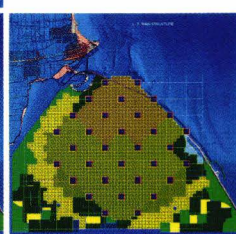
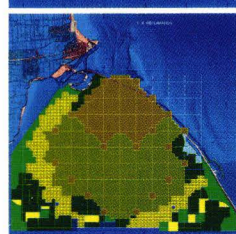
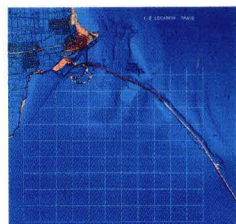
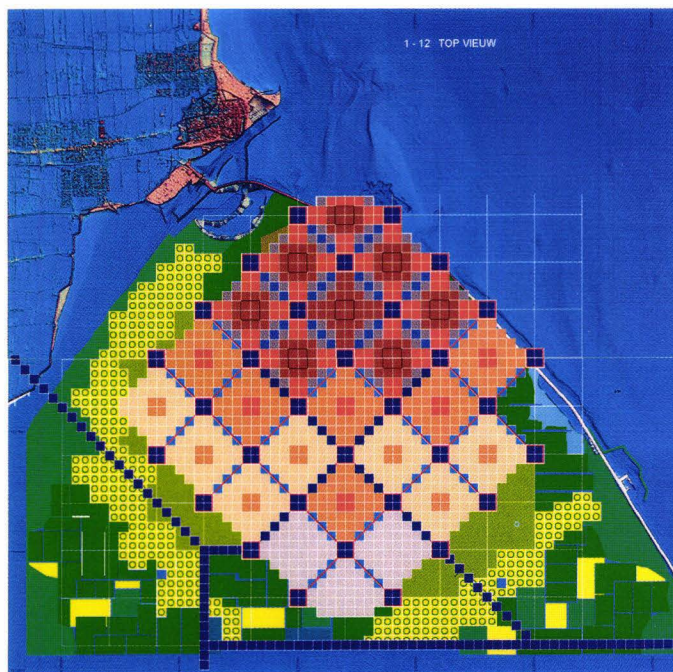
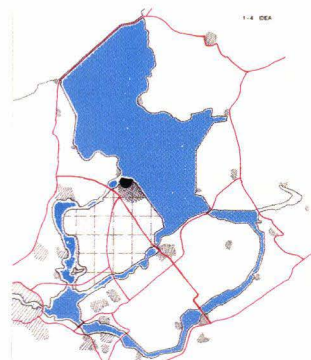
There are 75,000 houses in the town. These are divided into 21 districts in which neighbourhoods are formed. In the centre of each district there is a collection of shops, companies and services. Schools are nearby the centre.

The districts are surrounded by nature, public parks and gardens, playing areas, sporting facilities, a swimming pool and a bench here and there. Underneath the centre there's sufficient space to park the hybrid car.





POSTCODE 1572



On the ground floor we find a supermarket, a chemist's shop, a pharmacy, a post office, an optician and various other shops, restaurants, hairdressers, banks, pubs, etc.

On the second floor there is a health centre in which GPs, physical therapists, pedicures, maternity nurses etc. are situated. Each health centre is accompanied by an information centre and social services. All sorts of complaints, emergencies, problems, domiciliary care, informal care etc. may be discussed there.

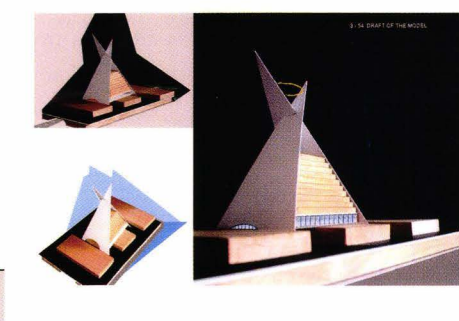
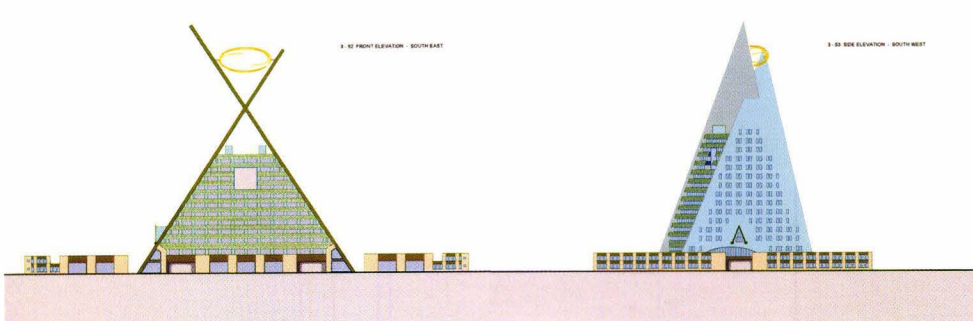
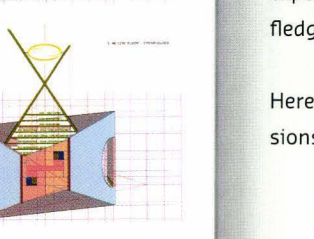
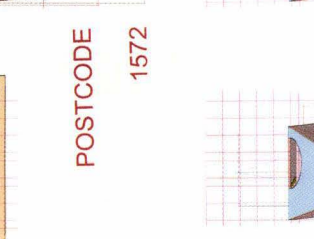
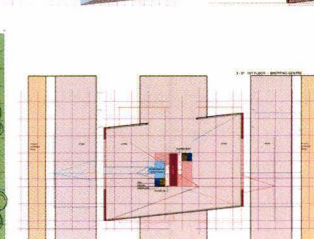
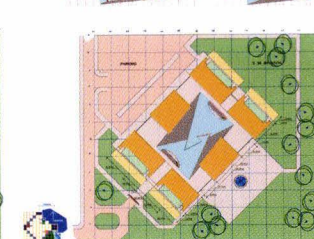
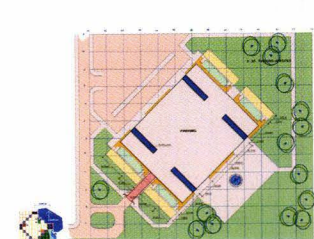
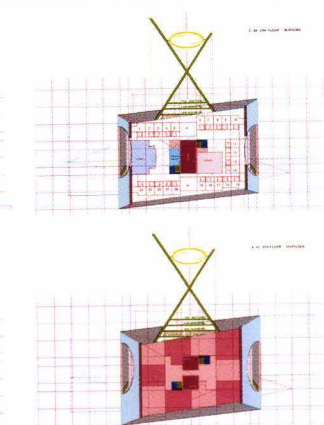
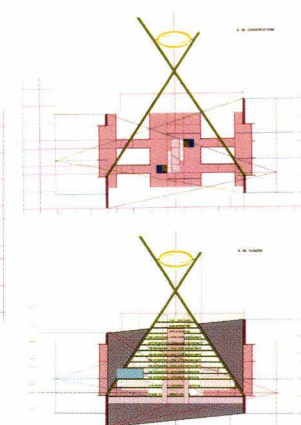
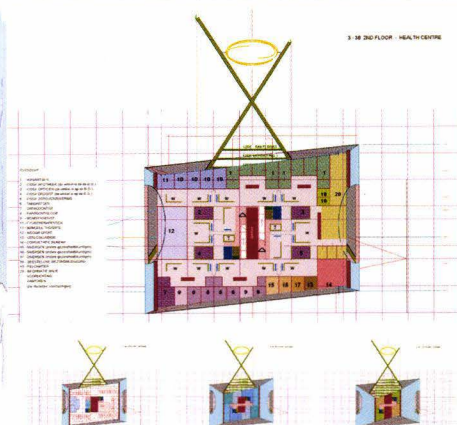
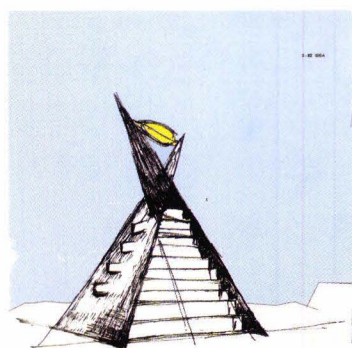
On the third and fourth floor there is protected housing in small housing units and an area to accommodate ill people. Also the common spaces are there. If desired, people can eat at a social restaurant. There's a meeting place, a meditation centre (chapel) and an activity centre.

On the fifth and higher floors we find houses.

The design of the town forms a unity. In this town, people will find everything they need. It's a town for the people; each one with his or her own character, background, job and value. And that goes equally for the playing child, the developing adolescent, the busily engaged grown-up or the active elderly person.

A future that indeed allows people to experience every age of their lives fully-fledged. Even when ill or infirm.

Here, every person makes his own decisions.



Motto: Postcode 1572
Main designer: Ad Backx architect
Teammembers: Willem Betz
Jan van der Linden
André Schutten
Githa Backx
Mrs. H. ten Dam
Mr. B Buiks

Healthdome.org

1. Health-Concept

The extreme diversification of available healthcare and the geographic fragmentation of healthcare institutions has rendered the healthcare system itself intangible. Even the traditionally structuring system of finance has become a mere invisible matrix. It is therefore essential that the recognition factors of healthcare from the outside be augmented for the general public.

This is emphasized by a number of trends:

Whereas until recently 'patient recovery' was the name of the government's game, individual health or rather 'the feel good factor' will become increasingly important from now on. There is an explosively growing need for freedom of choice, resulting in diversification of procedures, means, residential forms, etc. Fusing organizations increase their sphere of influence both geographically and per sector, the overlap and therefore the diversity of products grows. The range also increases because of specialization and down-scaling, as new specialty market segments are opened up. For some target groups, the individual approach from a compact organization works best.

Increasing use of internet and computers in diagnosis, monitoring, file management and self-medication adds to the available options. The boom in domotics increases the freedom and options offered in terms of residential forms. Of course, internet is also useful in making healthcare accessible and structuring choices.

Another consequence of healthcare via internet, but also of tailored (provision of) care, is that many standard or purely functional forms of healthcare treatment will disappear from our townscapes or become less concentrated.

The remaining, more public healthcare components in which personal or physical contact, and the sense of 'feeling and comparing', is important, can be combined with recreational and shopping functions. They will become more at-

tractive by becoming part of other urban activities, despite being 'unrecognizable' as healthcare functions.

In this multicoloured healthcare landscape, we aim to increase accessibility and recognition for clients by giving healthcare an image and a characteristic location in the townscape. By making use of the town identity and by coupling healthcare functions, healthcare related functions, recreational, commercial and residential functions to that identity, characteristic clusters will be formed in which 'care' becomes 'healthy' and is a positive component of urban life.

Despite the ongoing commercialization and fragmentation process, the government must preferably continue to play an important role in the (partial) financing, facilitation, control and steering of healthcare.

2. Health-City

Markerstad is a healthy, recreational town with strong ties to the countryside, in the Markermeer natural water basin. The basin serves as a freshwater buffer in extremely wet and dry periods which

are increasingly common in these days of climatic change. The town is attractive from a recreational point of view, being built on islands which vary in size, because the water level fluctuates by more than a metre. The land must therefore be used efficiently, with a compact building style, while vast 'flood plains' and beaches become available for seasonal housing, recreation and catering purposes when the tide is out. The theme-based character of the town attracts residents who consciously choose to live and work here. Although the nearby towns are easily accessible, most of the residents will stay in their own town for all activities and services they require. There is a vast range of transport options, including water transport. The town centre link route will preferably be a durable transport system. Cars will no longer emit fumes and be silent. The compact town centre with extensive facilities completes the choice of various residential environments for a variety of lifestyles within the bundled theme of water, recreation and healthy living. The bridges are characteristic junctions in this town, and the identity of the

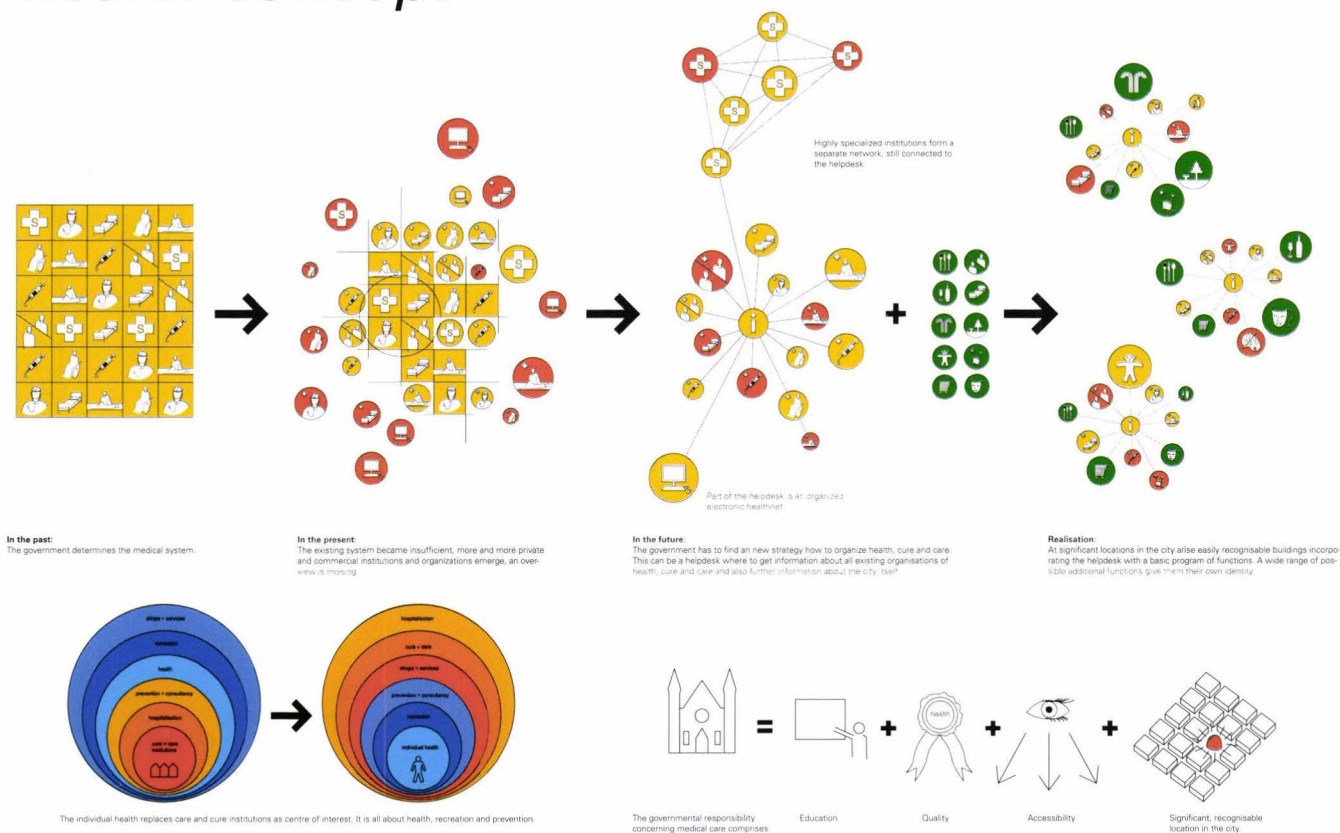
healthcare system is visualized by linking health information points to these bridges.

All possible healthcare institutions will also be provided in town, always at specific town centre locations, on the central access road or on the link route. There is one compact hospital which provides specialist treatment and is also allied to a specialized knowledge centre, for lung disease in this case. Other operations will preferably be carried out in a limited number of polyclinics, with A&E (EHBO) facilities, and coupled to the bridge service centres, along a concentration of a number of sheltered housing units.

3. Health-Dome

There is an organization in Markerstad which is responsible for the health information points. This is a cooperation between the local council, healthcare institutions and/or insurers, a project developer and an investor. The town council remains in charge, within the framework of the current Act on Social Development (WMO). The sense of recognition is determined by the specific situation and branding. The branding of such loca-

1. health-concept



healthdome.org

2. health-city



 **healthdome.org**

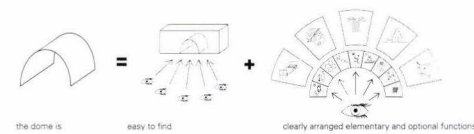
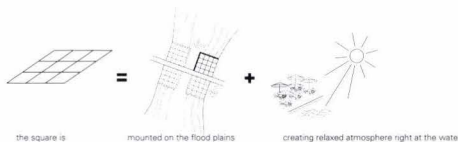
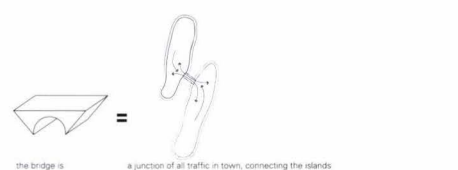
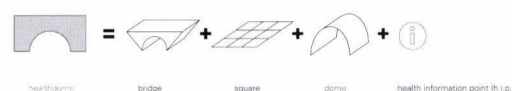
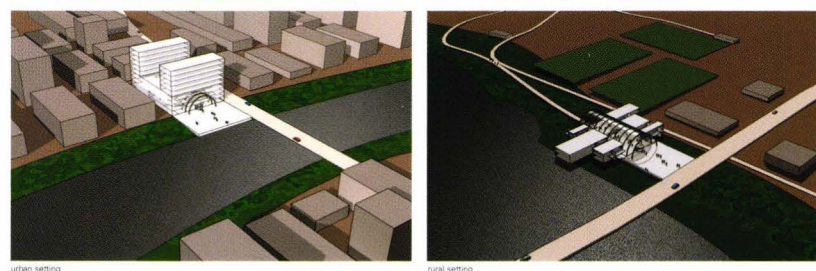
tions will be marketed as 'health domes' with a recognizable shape but varying in size and material, and with varying programmes and form of embedment in the urban context.

The health domes will be coupled to the identity of the town, especially in terms of the programme, because of the domes are also providing all the information one could require about recreation and services offered by the town, while being physically surrounded by the typical recreational and health related functions. Besides offering assistance and advice in the recognition and arrangement of individual healthcare needs, the health domes are intended as a place where the general public can organise their lifestyle and health matters, in terms of education, child day care, odd jobs, sickness, pension, household chores, etc.

Above all this however, the urban coupling lies in the situation of the domes near the bridges over the water, which are so characteristic for this town and which form the basis around which one or more squares are built. The bridges interconnect the islands, bringing many people together. The housing density on the islands is higher around the bridges than elsewhere. The health domes offer views of the flood plains.

Bridge-Dome-Square is the new urban formula for the healthcare identity. The branding of healthcare and the city has been successfully combined and the domes are the recognizable objects which lend shape to the thematic conscience of the healthy town.

3. health-dome



 **healthdome.org**

Motto: *Healthdome.org*

Firm: *Architecten van Mourik*

Team members: *Arno de Vries*

Peter Vermeulen

Romke de Haan

Cornelia Sailer

Max van Steen

Katie Tedder

Mijntje Vervoort

Take '25

Technology has always greatly influenced the manner in which we live. Mobile IT technologies especially have given us the possibility to work any place any time. The World has become so accessible that day and time changes make this a necessity. The standard day rhythm of the 20th century where everybody worked from 8 to 5, five days a week has rapidly disappeared after the changing of centuries. Typically working time was strictly separated from free time. And because one mainly worked in a sitting position during "working time" free time was traditionally used to mobilize the body. In this way the body was prevented from receding into a bad condition with all its resulting problems.

It is not for nothing that many weight related sicknesses have proliferated around the beginning of this century. At this moment in time a day for many comprises of a mix of activities. One feels the compulsory need to keep the body healthy because recovery is rather expensive. Work and movement go together just like time to do and sort out private matters. Naturally healthcare for people who need help and the aged can be combined in this way so that it does not have to be "out clustered". Considering this, current society is actually very similar to that of former societies where people lived and worked in small communities and relaxation and body repair ran concurrently.

Also vacation as we knew it at the change of the century has vanished. Naturally it is also physically unthinkable to work seven consecutive days in a week, even though many pharmaceutical aids are available for this. With emphasis on socializing and to charging the mind with positive ions for the next labour session, the time required is found in a longer period of three months in a year. There where during the working period the workplace is especially found in an economically favourable area and the climate is not too extreme then the place for relaxation is a place which is very attractive loca-

tion because it is for example situated in nature which plays a major role and/or that the climate is very pleasant. People have mostly two or even more earthing places which are visited once or twice a year. The things that are really important for them usually fit into two large suitcases which can be taken along. Workplaces are shared with others but can however be 'customized' with a variety of technologies so that it becomes personal space. Digital 'paintings', colour from LED walls, smell, music etc. can be changed at the turn of a knob to the suited sphere. In this way people live two lives and in a surrounding which best suites what they want to do. While the world is becoming one whole - borders both physical and non physical have been largely levelled off - the reverse tendency is that people are living in much smaller communities. There people find each other which one way or another become socially connected. That could be due to beliefs or specific interests, but could also be from the point of view of lifestyle or otherwise. Healthcare is also largely organized into communities. Although healthcare can

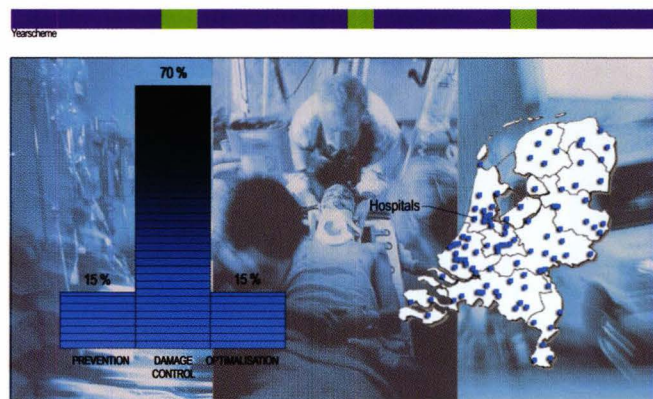
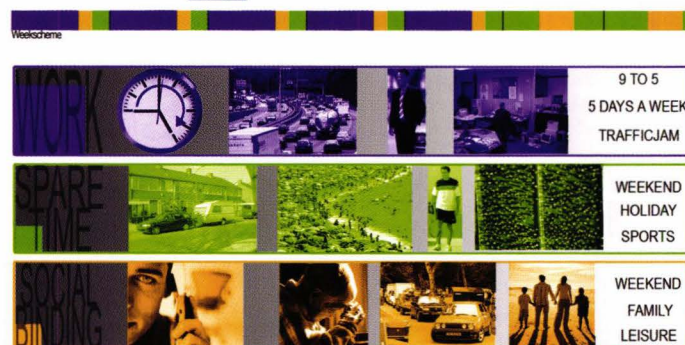
be divided into three categories namely prevention, damage control and optimization, their proportions have shifted enormously in the last decades. At the beginning of the century the ratios were 15, 70 and 15% respectively, now the accent lies with 40, 20 and 40% mainly on prevention and optimization. The centres where advanced technological diagnostic and procedures took place have for a while not been so widely spread. In the Netherlands there remain only three of these centres with a coverage area of around 6 million people each.

One can find capital intensive sources such as expensive medical equipment, accommodation and people (knowledge and skills). A large part of healthcare is aimed on prevention which is necessary because we are becoming much older and at the age of forty one's body must not be burnt out. This part, where there is no need for direct contact with the service provider, one finds the biggest concentration in the activity communities, where attention is mainly given to the maintenance of body and mind. But

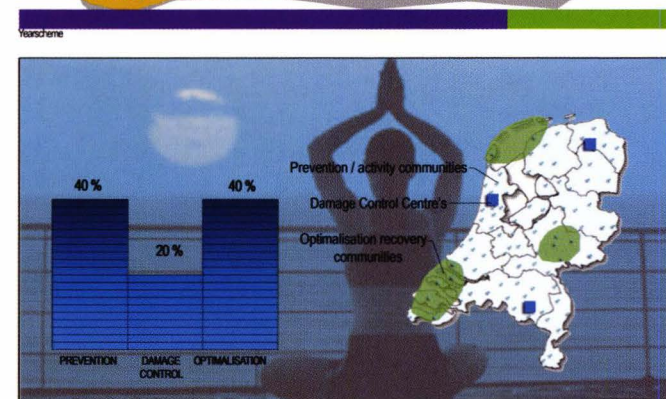
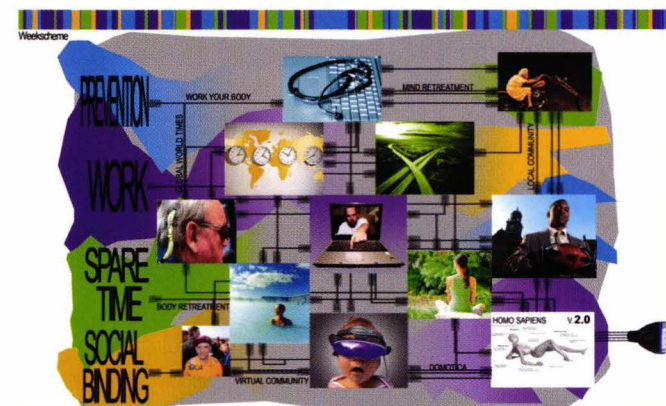
also the former "primary diagnostics and treatment" take place here. Optimization takes place mainly in the recovery communities where both physical as well as mental adjustments fall under the treatments. Personal guidance and treatment is important here. Most psychological ailments can be corrected with medication, but some guidance is always important. In these communities people also have time available to look after the elderly and people who need help. This is why the average age is older here. Luckily the whole healthcare sector has in the last ten years invested a normal level of around 15 to 20% of the annual budget in IT compared to the 2% around the changing of the centuries. Because of this all treatments can be carried out remotely and all personal diagnostic information is available everywhere from the permanent monitoring.

Also another added advantage of the largely vanished set work times and living in communities is that the traffic which previously caused enormous congestions in Europe, can now only to be seen in the archives.

TAKE '25



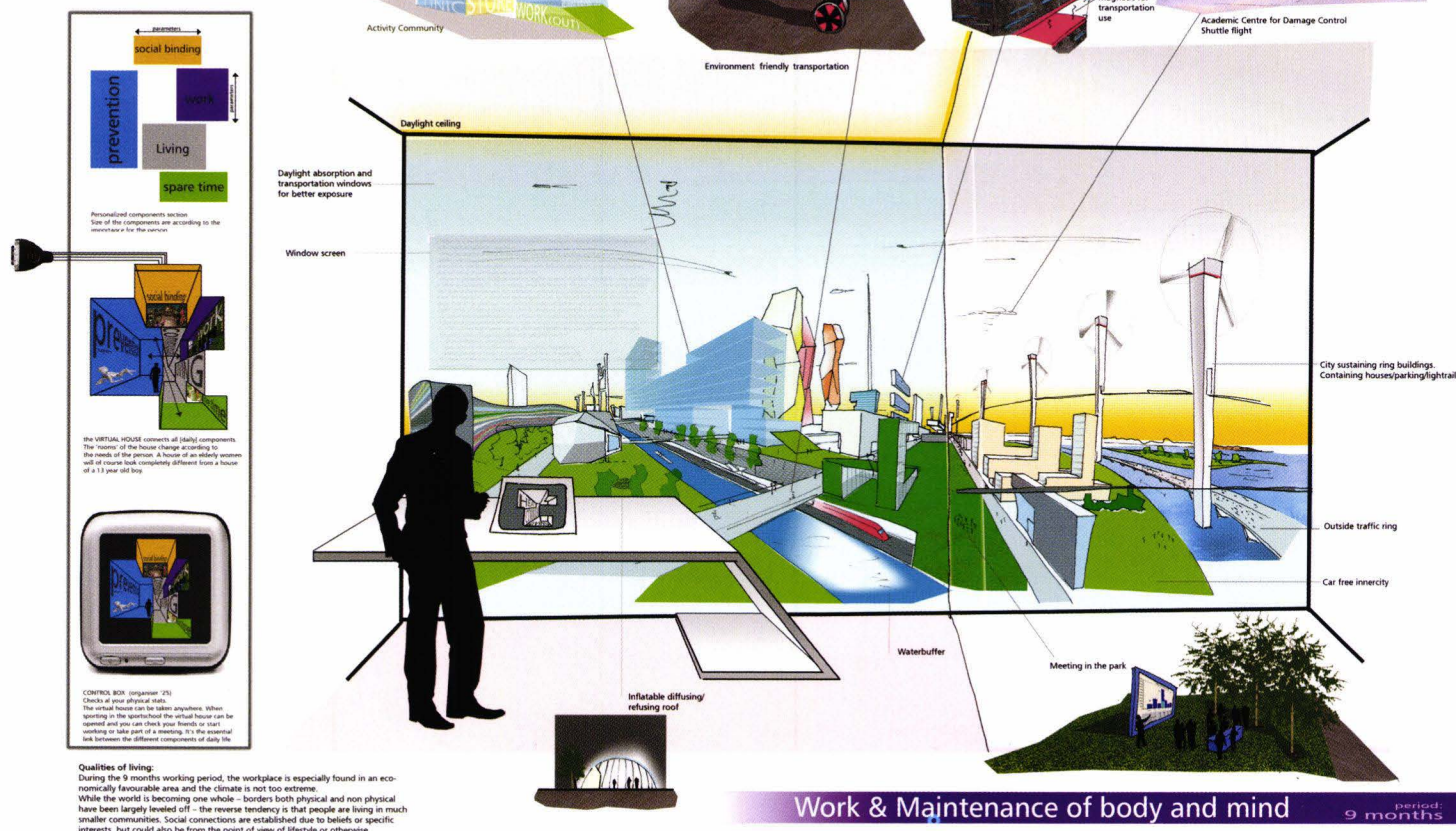
Typically work time is strictly separated from free time. And because one mainly works in a sitting position during "work time" free time is traditionally used to mobilize the body. In this way the body is prevented from receding into a bad condition with all its resulting problems. Didn't we notice the many weight related sicknesses proliferated around the beginning of this century?



At this moment in time a day for many comprises of a mix of activities. One feels the compulsory need to keep the body healthy because recovery is rather expensive. Work and movement go together just like time to do and sort out private matters. Naturally healthcare for people who need help and the aged can be combined in this way so that does not have to be "out clustered". Considering this, current society is actually very similar to that of former societies where people lived and worked in small communities and relaxation and body repair ran concurrently.

TAKE '25

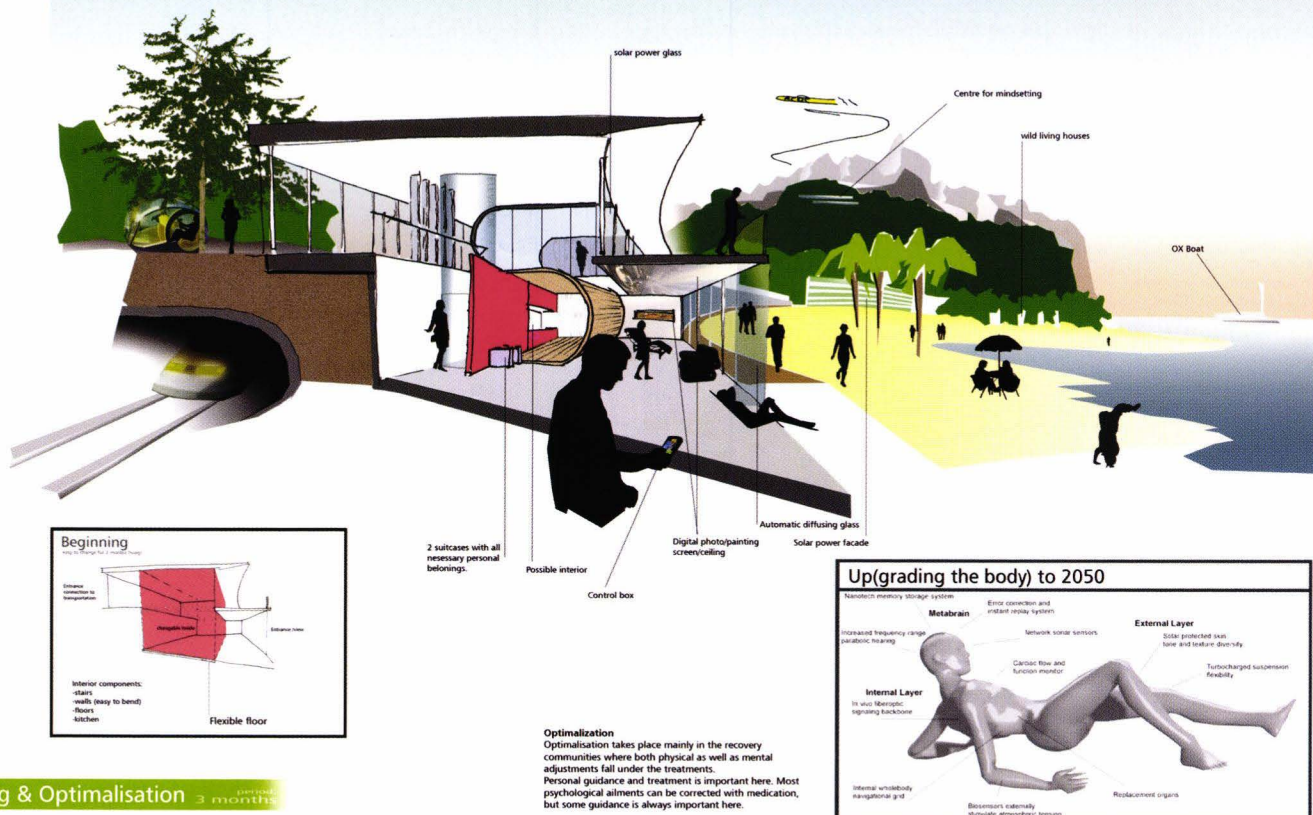
ACTIVITY COMMUNITIES
A large part of healthcare is aimed on prevention which is necessary because we are becoming much older and on your 40th your body must not be burnt out. This part, where there is no need for direct contact with the service provider, one finds the biggest concentration in the activity communities, where attention is mainly given to the maintenance of body and mind. But also the former "primary diagnostics and treatment" take place here.



The former energy problem is, despite a lightly increased demand, not an issue anymore because the need for mobility has decreased and buildings have become energy sources instead of energy consumers. The objective set by the G8 in June 2007, halving carbon dioxide emissions, has already been achieved by 2050 partially due to the development of a hydrogen economy. That this has generally led to both physical and mental health improvement of course needs no explanation.

TAKE '25

ELDERLY
In these communities people also have time available to look after the elderly and people who need help. This is why the average age is older here.



Motto: Take '25
Firm: Burger Grunstra architecten adviseurs
Designer: Ir. A.C.M. Burger
Ir. G. Schuurman
Ir. S. Baars
Team members: Drs. J.B.H. Zuidema
A. Kamphuis
G. Buijs, MSM
Ir. E.S. Hora Siccama
Ir. M. Timmer
J. de Groot
H. Lassche, MFM
Ing. J. Brink, MBA
Drs. J. Th. Kedzierski

Access To FLOOD

A - The design contest aims to trigger indicative answers for the following issues:

What will the make-up and functioning of the social healthcare sector look like in 2025?

How will climate change be dealt with (e.g. diseases such as malaria)?

How will unhealthy lifestyles be dealt with in 2025?

How will technological and economic developments, in particular those bearing on the social health care sector, be dealt with in 2025?

What will the urban environment look like in 2025?

B - Design assumptions

The sectors 'Well-being' and 'Healthcare' are part of a small but sustainable public system for the provision of social healthcare. The market strongly influences many elements of the sectors 'Housing, Social Healthcare and Well-being'. In these sectors, many private schemes and arrangements will come into existence. For the purpose of this advice, such developments are left out of scope.

C - Relevant developments that influence the social healthcare sector

ICT and domestic applications will fulfil an essential role in 2025, in particular to support and maintain client independence. For example by creating direct video linkages between family, neighbours, friends and social workers to reduce social isolation and alienation. Such applications may also play a role in responding to expected labour shortages in the social healthcare sector. Services focused on well-being and leisure will play a large role in the future. From a health care perspective, such services are expected to impact client health proactively and positively. They will prevent clients from needing care in (too) early stages. The integral approach of Housing, Social Healthcare and Well-being will be extended to other public functions, such as Education and Sport.

D - Vision on Social Healthcare

The elderly and disabled should be enabled to continue living amidst other citizens in dynamic living environments.

New housing projects ought to be fully sustainable and adaptable to a wide range of social healthcare requirements so that intensive healthcare can be delivered at home.

For clients needing 24-hour monitoring, safeguard measures must be available. This will necessitate the continuous presence of a physical setting where such clients can be looked after when needed. Clients will continue to need a tangible location to request and arrange for the delivery of the services they need (e.g. in the fields of social healthcare, well-being, shops, schools and sports facilities).

E - Architectural and urban planning responses to realize this vision on social healthcare

A response is the 'Fixed Layer to Order Accessible District' (FLOOD). Accessibility is a key parameter of this system. A city is formed by adjoining residential areas. In turn, a residential area is formed by different but adjacent neighbourhoods. The heart of a residential area is the so-called 'service area'. A service area is located such that it can be reached from the eight surrounding neighbourhoods within fifteen minutes and contains essential public (well-being and social healthcare) and private (stores) services. All buildings are accessible to the disabled and can be adapted to meet a large variety of social healthcare requirements. Land-bound family housing that contains several floors will have an elevator included in its construction design.

F - Specifications on the regional level

The modern city of the future will float on the crossroads of the connections between Amsterdam, Groningen and Almere in the 'Markermeer'.

A northern city part will be created for leisure activities, water storage and

REGION

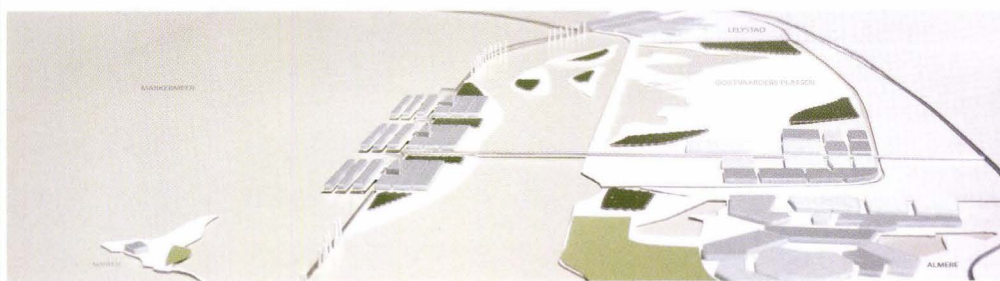
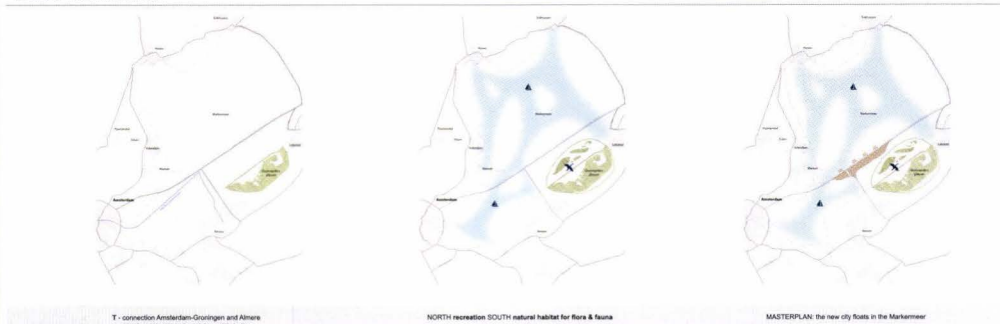
tableau [1/3]

access to FLOOD

SCHEMES OF THE MARKERMEER actual situation



SCHEMES OF REGIONAL MASTERPLAN



sustainable wind energy and a southern part for a nature park.

The city can be comfortably reached with all forms of transport (road, railway and water). It utilizes and integrates innovative forms of transportation into the urban landscape, such as a direct and secure High Speed Line with hospitals in Amsterdam, Groningen and in wider Europe.

G - Specifications on the urban level

The city is constructed along the main connection between Amsterdam and Groningen. The main thoroughfare is directly connected to the city's service areas.

The residential areas are characterized by traditional Dutch urban elements, such as canals, small residential islands and housing areas along beaches. Since all housing units are highly accessible, it is irrelevant where to live from an accessibility point of view.

Residential areas are spatially separated by recreational areas. These areas are accessible to a large variety of social groups. They function as social meeting spaces and as sports facilities.

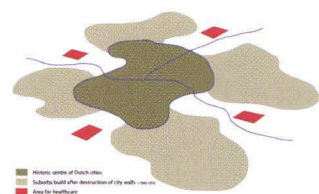
H - Specifications on residential area level

Every residential area has a Community Centre (a tangible building). This serv-

FLOAD

tableau [2/3]

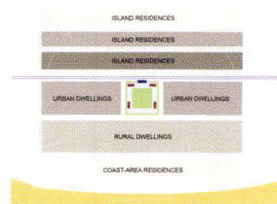
access to FLOAD



Scheme of typical Dutch city with suburbs



Scheme of Flood Layer to Order Access to Districts



Scheme of building typology

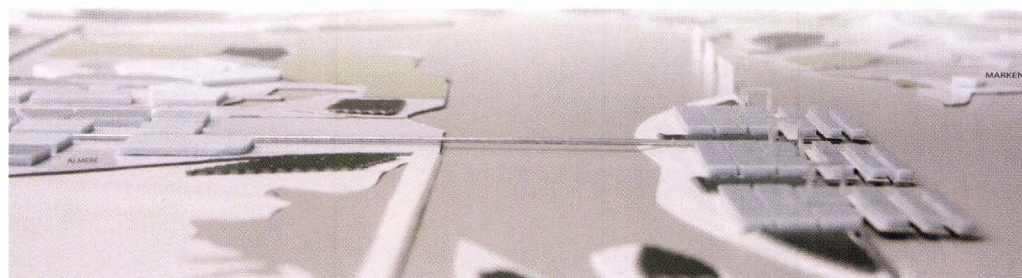


ISLAND RESIDENCES

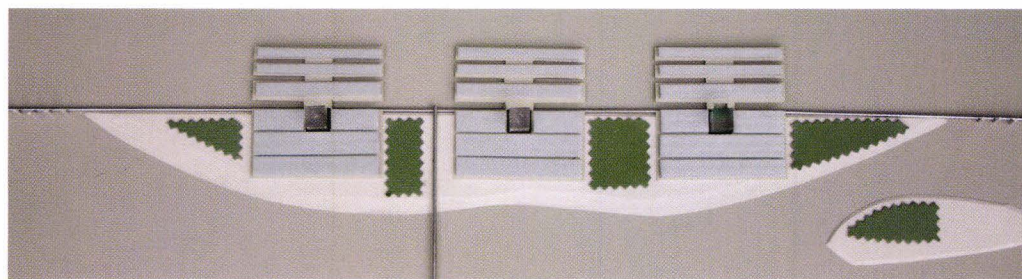
URBAN DWELLINGS

RURAL DWELLINGS

COAST-AREA RESIDENCES



Model impression of the relation of the new city with the existing city

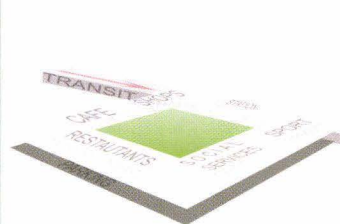


Model impression of the new city

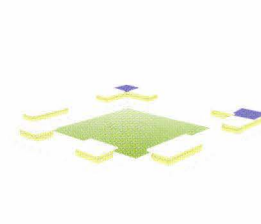
FACILITY CENTER

tableau [3/3]

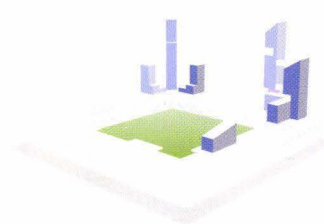
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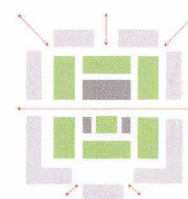
Impression of functions on ground level



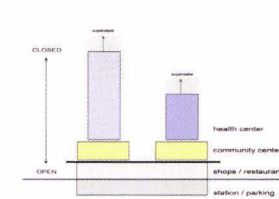
Impression of the Community Center (yellow) and the entrance of the Health Center (blue)



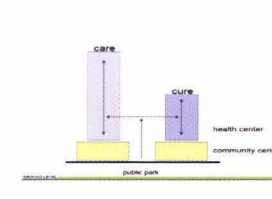
Impression of the Health Center (Cure + dark blue, Care + light blue)



Scheme of ground level



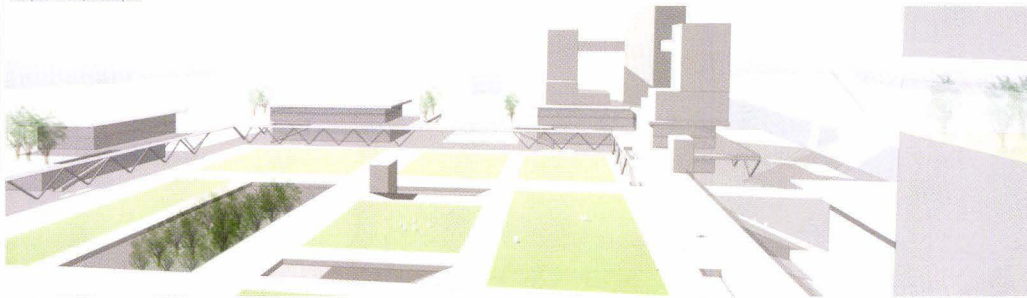
Scheme of the functions



Scheme of the movement between Care and Cure



Aerial impression: view of the park of the Facility Center



Aerial impression: view from a room of the Health Center

ice centre provides for a large range of integrated facilities and products in the fields of well-being, social healthcare, education and sports.

In the Community Centre zero-line, first-line and parts of second-line support services are integrated. New elements include the presence of several medical facilities (e.g. minor operations). In addition to a Community Centre per residential area, the city has a number of Health Centres. Health Centres contain Care and Cure sections and have several highly accessible entrances. Cure sections provide emergency aid, complex operations, long-term hospitalization and revalidation facilities. Care sections

provide integrated nursery services to the elderly and disabled.

I - Specifications on building level

Upon entering a Community Centre, clients will be received by a hostess who not only provides information, but also connects the client's request with the appropriate service within the Community Centre.

The Health Centres are vertically oriented, meaning that they consist of separate parts that are built on top of the Community Centre. The Health Centre sections remain easily accessible yet they are separated from the open and

inviting Community Centre space. Upon entering the Cure section of a Health Centre, the client will arrive at a check-in desk where a collaborator will inform the medical staff of his/her arrival. A medical officer will subsequently come and accompany the client to the operation area. After its successful conclusion, the client will recover in a hotel room type facility with modern ICT and domestic applications.

Motto: Access to FLOAD
Main designer: ir. M.H. van Arem
Team members: drs. D.-J. Zijda
dhr. K. Boersma

I XVII XVII I

Vision new town in the Markermeer

The concept of "Healthcare 2025" has been based on aging, economic developments and the changing demand of healthcare. The healthcare principles are a continuously changing building process. These buildings do not meet demand anymore and cannot meet the speed of developments.

There is a growing need to flexible buildings and housing that can be adapted to the requirements.

To remove and add where necessary.

The new town is situated in a Healing Environment. This phenomenon can be integrated for any target group in the healthcare process of this town. This concept of healthcare close at home is a continuously repeated element in this town. Healthcare in high-rise buildings, in areas including many lakes, rivers and canals and other waterways, and in houses for people that need much care, all closely connected to the inhabitants of the town. In these cases healthcare should be offered in-house as much as possible. Only in case of emergency Healthcare centres should be involved. Healthcare principles which are in the same building including a surrounding that stimulates the healing process and healthcare for each other. To support families in their need for healthcare, but without them losing their need for privacy. Being supportive for each other is an element that fits very well in this context. In view of the character of the area as a whole, our design vision does not feature pre-designed residences on pre-arranged plots, be it high or low-rise building. Our catalogue is evidence to the fact that standard designs are now making room for contemporary architecture. This brings about area diversity relegating serial building to the past. The private residence is thus turned into a unique concept different from all surrounding living elements. A dynamic and coherent entity of man and his personal architecture is set in a natural and healthy environment.

Modern High-rise

The design "modern high-rise" is equally flexible with care facilities close to home. This building is constructed in three parts. One is a natural, communal garden bordered on two sides by a permanent centre. The centre features a roadway on each level. To the outside of the centre space can be realized for specific facilities. The steel construction allows a kind of change system in the rooms, enhancing the theme of flexibility. In the facilities rooms various health care and other functions can be taken up in the programme.

Disuse is not applicable here since the facilities rooms can be lifted from the steel construction, allowing an ever changing facade structure. The high-rise can be designed according to the needs of the user and business exploiters: living, healthcare, shops, etc. The high-rise, however, despite all of the above, features living as its most essential element. In view of the term high-rise this is often regarded as a drawback for lifestyle comfort. In our design, however, we can relegate this notion to the past. This is underscored by

the provisions in the permanent centre: the present and future streetscape can be viewed also from various points on higher levels. Apart from traditional passenger lifts the high-rise is supplied with various car lifts allowing the residents to park their car in front of the door on all floors. The streetscape in our design features modern galleries and has side-walks, a street, lay-bys, and every front door has a private zebra crossing, guaranteeing safety and an overall structure of the streetscape. It ensures that the individual is central in the design, which in turn is expressed in the most important element of "living".

Water Dwellings

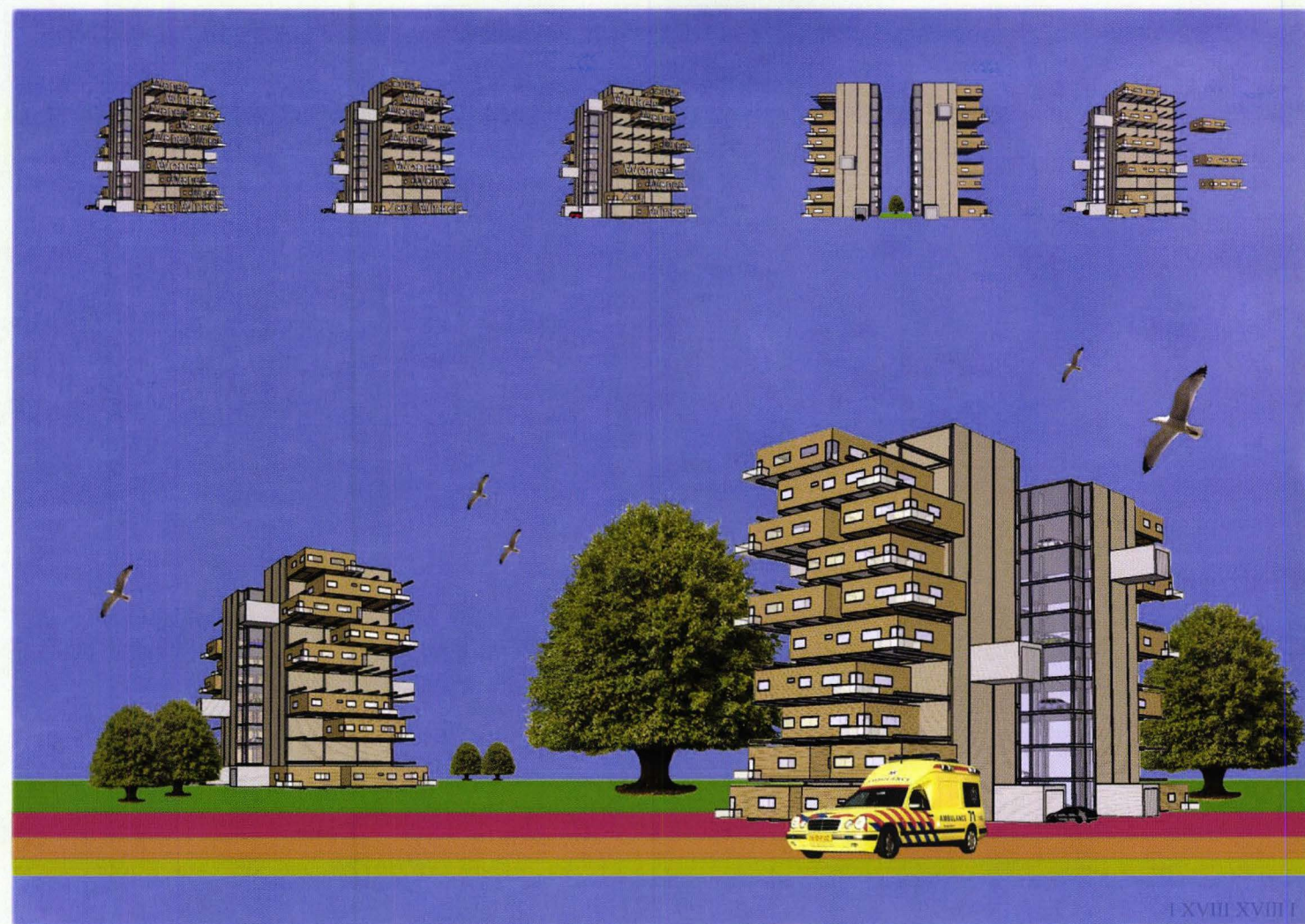
The design "water dwellings" has been set up in a flexible manner, so that residents may integrate their own plot. Creating your own living environment for individual needs and requirements with different models and types, provides the owner with a personal Healing Environment. This flexible approach allows any type of healthcare needed by the owners to be translated back to the privacy of the personal living environment.

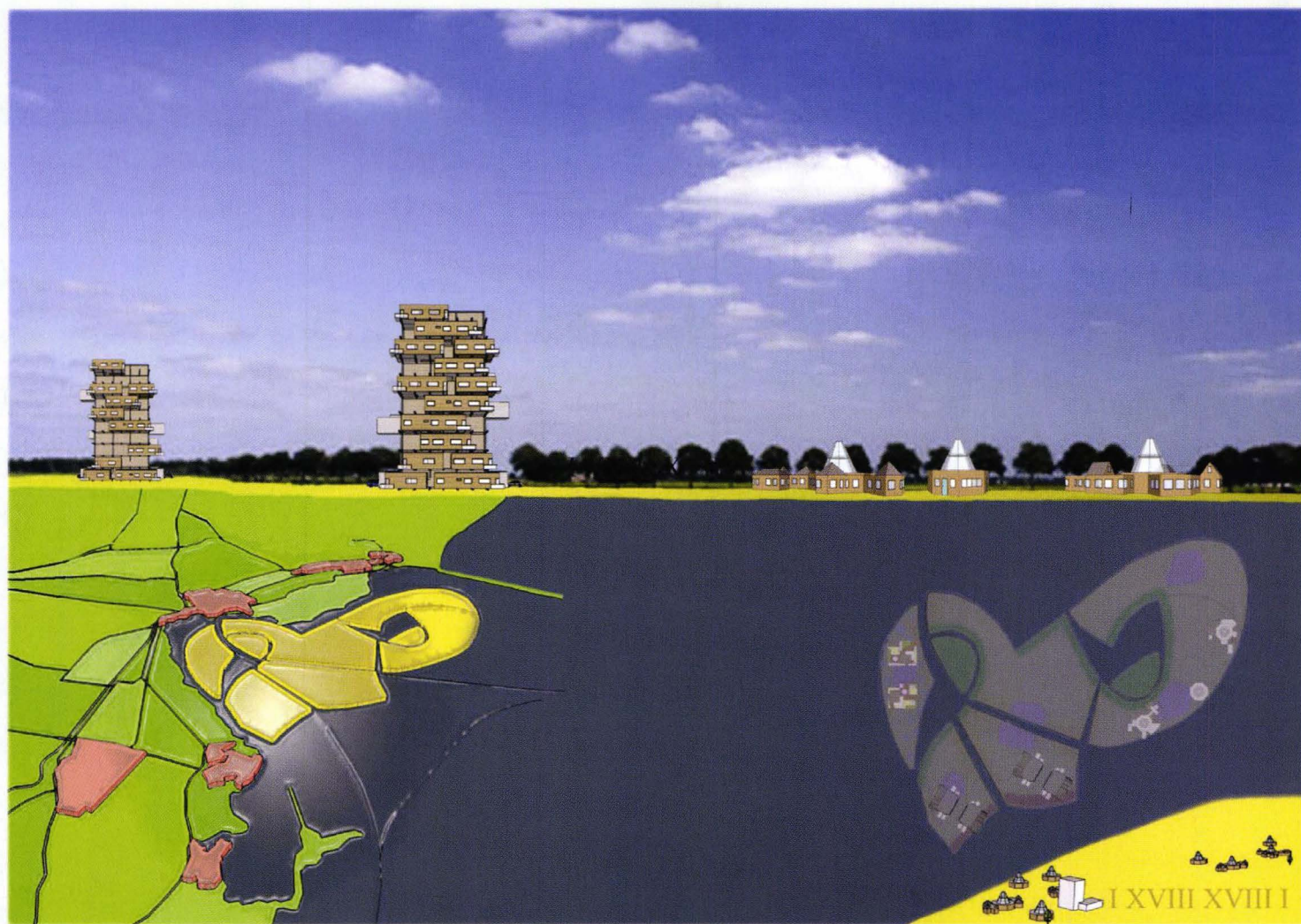
Another versatile feature is the flexibility to change the area to a new health care situation with restyled health and living requirements, should the present health provisions no longer meet the demands.

The living areas and the environment can be aligned to form the optimal combination of plot and location by means of a catalogue system. These combinations create the Healing Environment which can be laid out to meet specific needs. Thus the final design is in the hands of the prospective inhabitants.

Various generation dwellings

The design "various generation dwellings" encompasses the word flexibility and is interwoven with the underlying principle of healthcare. But in this situation informal care is the keyword in the overriding theme of healthcare. The only permanent concept within the living quarters are the centrally located informal care towers. These towers can be restyled to individual wishes with different functions and possibilities reflecting the versatile

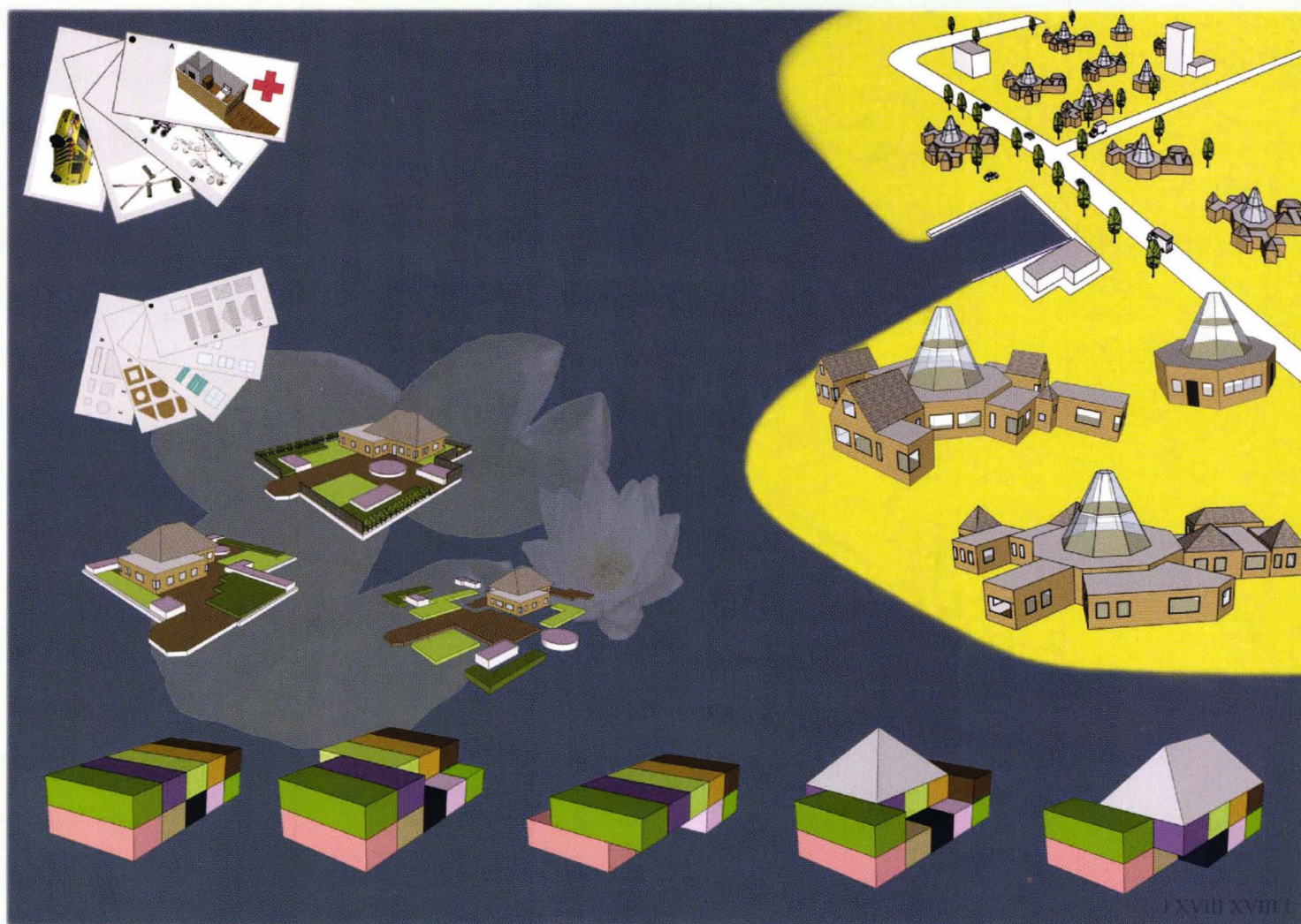




programme. Numerous options apply such as the family living kitchen, care room, swimming pool, sports facilities etc. Every family has its own needs to look after each other with the support of the informal care facilities.

The tower features sun regulating glass. A standard feature to the central hall is the care room.

This room is transportable with the so-called ambulance lorry and, in case of emergency, can be transported to the local Healthcare centres or to the main health care centre in the centre of town. Apartments or premises can be added on to the informal care towers, e.g., an apartment or dwelling for the grandparents, family, young family or single people. The dwellings themselves can be grouped and regrouped by means of individual segments such that the individual needs and requirements are met at all times. This way of styling and restyling guarantee unique structures with unique combinations of informal care. Here too, the final design is in the hands of the future residents.



Motto: I XVII XVII I

Main designer: A.B.E. Meuleman

Team members: A.Cnossen

R. Speijer

P. Hovestad

BRIDGE-N

Welcome to our new town. The town of Jack Banks, Fien Clemens and Hennan el Houd.

Future developments

Cultural influence will give fear of the extreme believes which will influence choices, but also a mixture of social activities.

People will suffer from combined syndromes and new tropical diseases because of the climate change. People get older but feel younger. We are able to keep people younger but we also want to stop the eternal live. People get heavier and more responsible for their own health, and authorities keep an eye on these persons. Privacy is limited.

There will be more contrast in the composition of the population, people who are fortunate and people with a small purse. People are responsible for their personal budget. Care credits can be earned by doing social work. People with enough money will go on care holidays. Less fortunate people are dependent on friends and family whom they need to live nearby.

We must be prepared for the influence of an increasing water level. We still have to deal with an enormous amount of traffic. The perception of the natural environment is very important. There will be a reduction of the population (after 2030). Economic developments are modifying.

Urban planning & nature development

The framework of the plan is considered from a total vision of the North part of Holland. A bridge between Almere and Monnickendam makes a corridor from Almere to Amsterdam and Schiphol and creates an essential basis for further developments. The connection from coast tot coast is made by a living bridge. This connection is part of a sustainable, effective and feasible alternative to fit into the existing infrastructure. Because of this new infrastructure it is

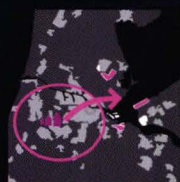


Fien Clemens

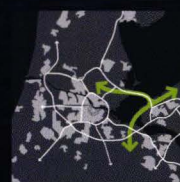
Age: 80 years
 Profession: pensioned
 Characteristic: oldy with limited income
 Living: a rental apartment for senior people



Second Ring



Replacing the Housing Program to HealthCare Park



Ecological connections



HealthCare Park



Waterquality



Waterprotection



CBZ HealthCare 2025

possible to develop the area around the IJsselmeer into a National Park with a unique natural environment where people and animals can enjoy nature. This bridge is first of all chosen because it is important to maintain the water management.

The bridge will retain the visual relation between the two waters. A view of the horizon, over the IJsselmeer and Markermeer, is an important quality to retain. The long bridge (about 6.5 km) will make a landmark for Almere once and for all. The water edge is unique for Holland, existing of enormous floating platforms which give a lot of water oriented activities. With the nature, water and urban functions nearby this city will be very attractive. Its inhabitants can enjoy the horizon and silence.

City & architecture

The city is a new type middle sized water town at the edge of the polder, unique in its appearance with a stratification which reminds of a classic medieval town. Difference is the vertical organization instead of horizontal, with a complete underground infrastructure.

The platform allows for pedestrians and micro vehicles only. A town as building is compact, diverse and very efficient organized. Most of the 160,000 inhabitants live on a complex building with an elaborate urban network, attractive public spaces in cavities with public squares, alleys, facilities for relaxing, education, healthcare and public management.

The layered town is a combination of Manhattan, an Arabic Kasbah and the early 21st century Dutch Vinex quarter primarily developed out of an individual need, but embedded in a strong heterogeneous and social domain. A vital living organism that draw its power from the spaces, shapes and types of residences. A plural city frame is the basis for an extremely flexible use. Advanced systems for infrastructure, care and public facilities can be optimized because of the critical mass. Invisible but present on call.

Visible however is the large spatial diversity in this new community. Beside the vertical city there are the ecological

zones and the motorway-resort, like a reversed Ponte Veggio. The motorway means transport, resort and energy generator in one. And 'Ponte Veggio' as well as the 'vertical city' offers its occupants a typical Dutch phenomenon that in quick tempo is disappearing: a horizon.

Care & wellness

Jack Banks, student, 15 years old, with obesity, lives in a sanatorium with a view of the IJsselmeer. Jack's room is like a hotel room. Jack's parents live nearby. Supervision and regularity are the key words. Jack keeps up with school by computer. He exercises in the park and has one hour of limited computer use connected by a home trainer. Jack can also do some shopping. The chip in his body will measure the nutritive values of his shopping. Jack used to play second life where he pretended to be a sportive-build guy, now the sanatorium helps him achieve that.

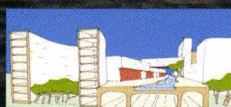
Fien Clemens, 82 years old, small income, lives in her apartment nearby her children and grandchildren in an area she feels safe in. Available are fitness/



BRIDGE-N

Hennan el Houd

Age: 35 years
 Profession: CEO of the healthcare corporation
 Characteristic: modern muslim woman
 Living: luxury oriental arranged real estate at the edge of the city



CBZ HealthCare 2025

physiotherapy, drugstore, community centre, supermarket and grand café with shared garden. When Fien does not feel well she chooses the bronze treatment on the care auction and she is welcome in the annexes of the outpatients' clinic in the shopping centre nearby. She is back the same day after the treatment. At night the multifunctional nurses nearby keep an eye on her and Fien can stay in the guestrooms, also available for holidays or emergencies. From this post subscribers are monitored. If Fien gets mentally or physically restricted, she can move to an apartment building with specialist care. All apartments are community rental.

Hennan El Houd, 35 years old, manager, lives in an oriental decorated house. She has an office in the outpatients' clinic centre in the area, which is built to make minor operations care more accessible. For severe injuries and specialized operations the inhabitants will be brought to the nearby hospital in Almere or even Amsterdam.

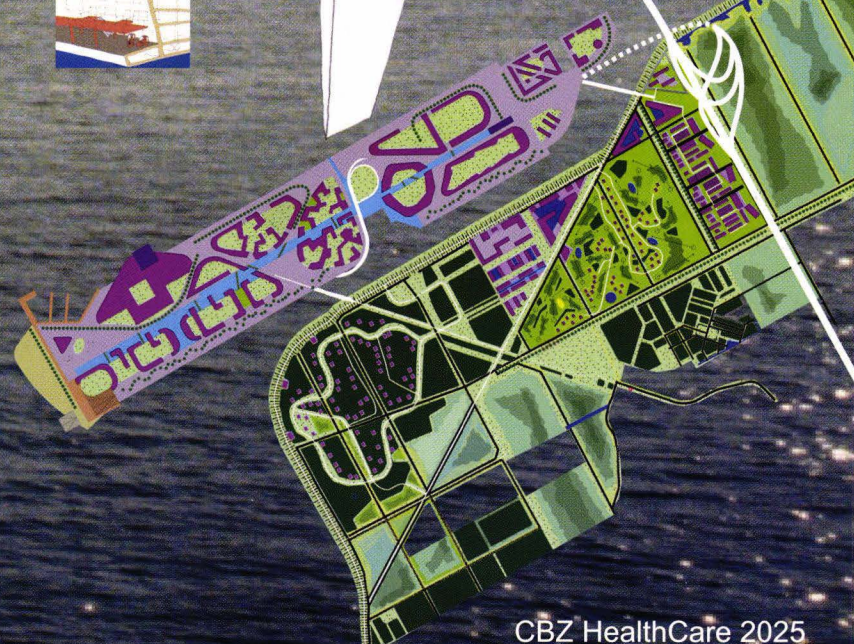
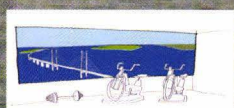
Her day starts with a check on the computer how the annexes in town are doing with personnel, capacity load and costs. If needed a conference call or visit will be made. Hennan also checks the price of her performance on the international care auction. After work she volunteers with Fien, goes for a swim in the wellness and goes home satisfied.



BRIDGE-N

Jack Surimi

Age: 15 years
 Profession: student
 Characteristic: obese
 Living: in a sanatorium, 15 minutes by microcar from city centre



CBZ HealthCare 2025

Motto BRIDGE-N
Main designer Ir. R.M.J.A. Steenhuis
Team members Ing. P.J.M. ten Hove AvB
 Ing. M.W. Wienk AvB
 Ing. J.G.H. van Loon AvB
 Ing. S. Kamerling
 drs. N.A. Götz
 Ing. M.C. van der Meij
 Ing. M. Striker
 Ir. J.V. Scheidelaar
 Ing. A.A. Roeland

Blue Heart

Healthy Living in Markenstad

Markenstad - His Royal Highness King Willem-Alexander officially opened the new town Markenstad today and the keys to the first houses were handed over to their owners. Simultaneously on the island of Markenstad, the first cure and care centres opened their doors to the public in the 'healthiest town in the Netherlands'.

On the new island of Markenstad, healthy living is a way of life. With the combination of good sports facilities, nature reserve and the latest technology, Markenstad offers its citizens the possibility to stay healthier longer. In addition, Markenstad is an environmentally friendly, energy efficient development. Markenstad has four separate wings around a central lake known as 'the Blue Heart'. Water is the recurring theme across the whole development and gives the island a restful, healthy feel. It has also been proven that living in a water-rich environment helps reduce the rehabilitation period of patients, shortening the duration of their stay.

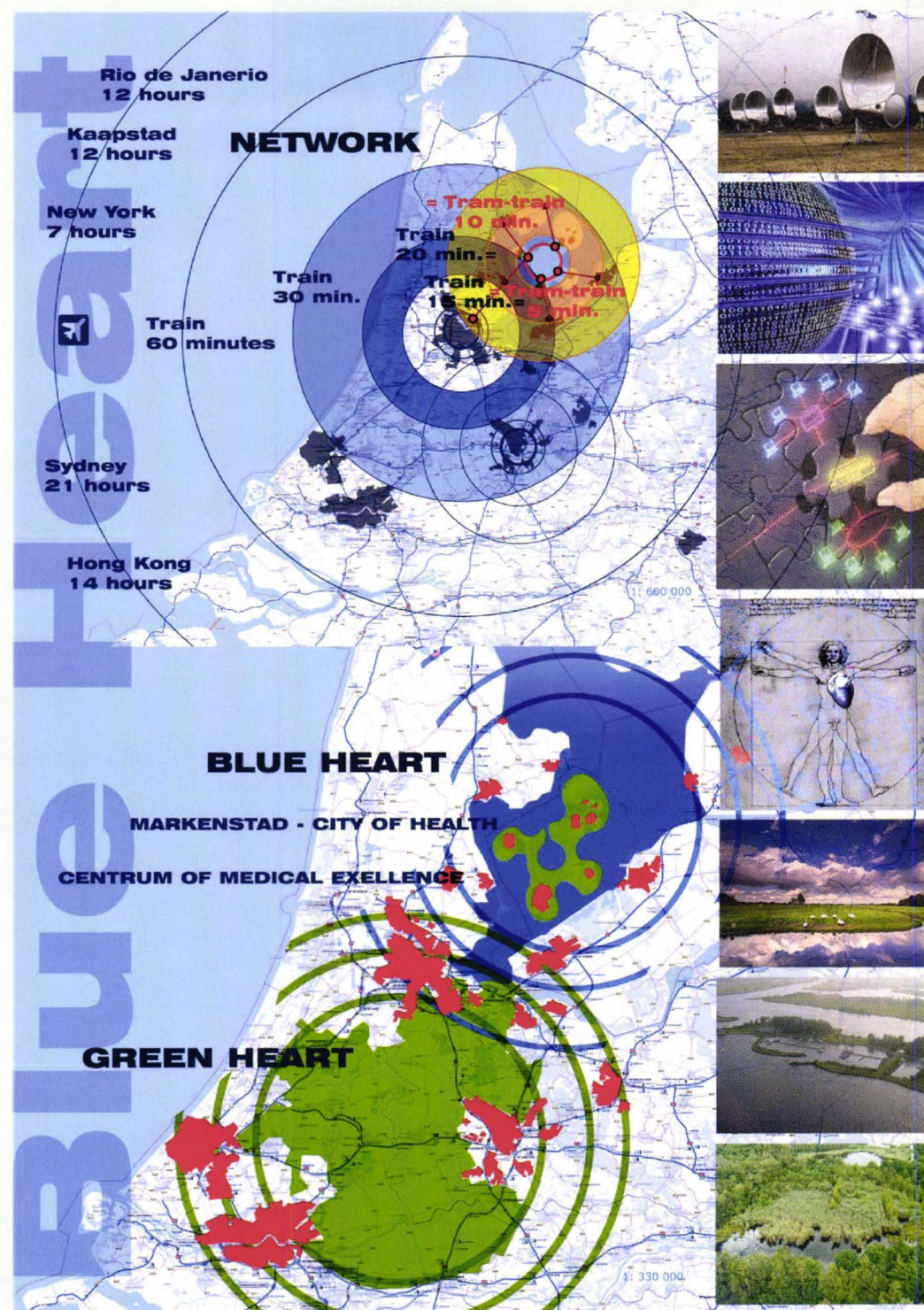
Care and Cure Centres

Markenstad uses care and cure centres to replace more traditional hospitals. Care centres are used for less intensive care with a special cure centre being built for more complicated specialist operations. Care centres offer a wide range of functions such as revalidation, psychiatric care and paediatric care. In addition they offer services such as pharmacists and health spas. The care centre buildings are tastefully decorated and offer a peaceful ambiance according to Dirk Veenstra, Director of the new development. 'We can offer a pleasant stay for patients and a pleasant environment for our staff. The centres are located in a natural environment and offer facilities not just for patients, but also for our staff, family members and other visitors.' Each care centre has been developed for a specific target group. For example there are separate care centres based on age, type of illness and duration of the illness.

Today a special care centre for children with cancer will open which offers extended facilities for parents, brothers and sisters. From the outside, the care centres have the appearance of holiday homes, the difference being that these homes have all the latest medical technology to assist a speedy recovery. 'With these facilities, parents can take over part of the responsibility for the care for their child. This has the added benefit of relieving the pressure on our staff,' says Veenstra. 'On the other hand, it's a pleasure to work in these care centres, the whole environment is a source of inspiration, which means the nursing shortage is barely noticeable here.' To pay for the luxurious surroundings and extra care, an additional insurance policy is necessary. For those who don't have this, Markenstad will shortly be offering a slightly less luxurious alternative, that offers 'apartments' instead of 'holiday homes'. 'If necessary, both developments can be easily adapted into holiday parks, social housing or private accommodation', says Veenstra. 'The development has been designed to be flexible and competitive in a number of different markets, care centres are after all part of a competitive market and trying to make a profit.'

Landmark

The cure centre is located within a multifunctional building, a landmark in the centre of the town. In contrast to the care centres, the cure centre is sterile and clinical in appearance. 'The specialists here work in a sort of factory where broken humans come to be repaired. The patients are unconscious most of their stay here. The care centre consists predominantly of operating theatres, laboratories and research facilities. 'Insurance companies, the private sector and public sector clients can hire these facilities from the estates management', explains a spokesperson. 'Like the care centres, the cure centres offer different facilities in different price ranges.' Located adjacent to the cure centre is a multifunctional complex with a shopping mall, conference facilities, a hotel, office



space and living accommodation. 'The main aim is not the health sector, but the commercial sector', according to a spokesperson. 'In this way, the cure centre becomes part of a commercial enterprise and as a result, financially independent.'

Orbit-nano

Markenstad is trialling different initiatives to promote the health of its citizens. One of these is to have the so-called 'orbit-nano' probe inserted which continually measures clients' health and vital signs. 'This probe is the size of a pin-head. Once inserted into the blood stream, it sends data to an electronic database', says Peter Brink, general practitioner

at the care centre. 'The data are then compared with your own historical data. From this comparison, illness, disease and the effects of medicines can be monitored. An early diagnosis can be made on the strength of these data.' The orbit-nano can also detect trends in a patient's health. Blood tests can determine an increased risk of contracting a particular disease and serve as an early warning to enable medical intervention for prevention. Everybody in Markenstad has a general practitioner (GP) and a personal health coach. The personal health coach advises the client on a broad range of physical and psychological matters. Through the GP, the details on the elec-

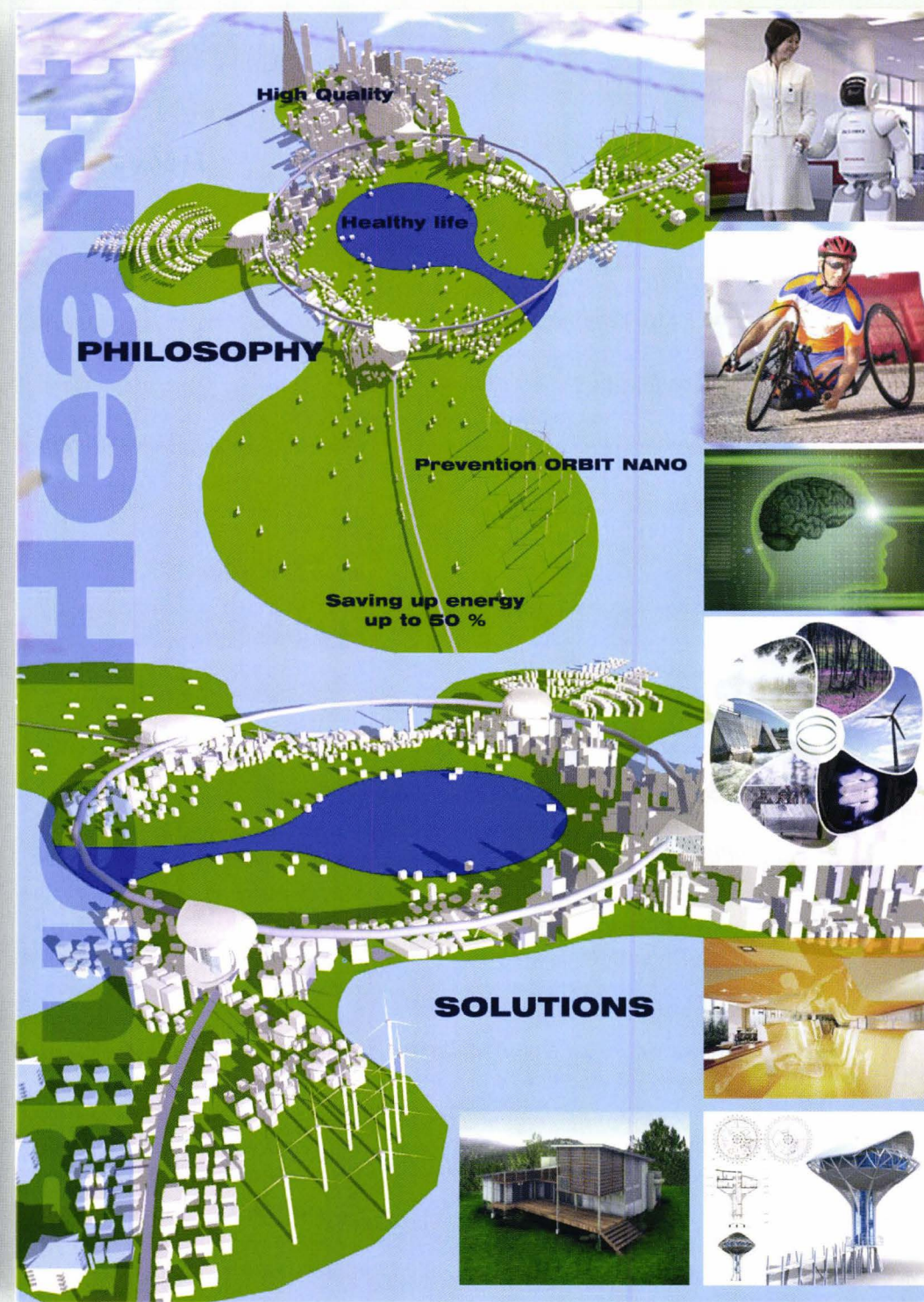


tronic database can be accessed. Both GP and health coach work in a practice located centrally in the care centres, but consultation is also possible via various multi-media. 'The orbit-nano can also automatically contact the GP and the personal coach', Brink explains. 'If you injure yourself during sport, cut yourself badly or suffer a heart attack, the orbit-nano sends an alarm signal and the necessary help will then be called automatically.' Because the island is completely free of cars, the emergency services rely on environmentally friendly transport. Special hydrogen-powered buses and taxis traverse the island. For longer distances, the four wings of the island are

connected by train by a circular track around the central lake, enabling each wing to be reached quickly and easily. In addition to this, each wing is connected to the mainland via a tunneled rail connection and a boat connection. Patients of the cure and care centres travel by specifically developed trains with a track that connects directly to each centre.

Energy

The island's energy consumption is as far as possible self-generated. The buildings on the island have been designed to make use of the natural resources available to them. 'The building's air-conditioning is cooled by water from the



Blue Heart', says architect Linda Jansen. 'Many of the larger buildings have hollow roof constructions to collect water. In the drainpipes are water turbines which generate electricity when this water is released. Many of the facades have been specially formed to lead the wind through turbines thus generating electricity.' According to the doctor who moved into his new house today: 'In Markenstad I have the space to live responsibly and independently, now and for the rest of my life.'

1 All names used in this article are fictional

Motto	<i>Blue Heart</i>
Main designer	<i>Alicija Wiczorek</i>
Firm	<i>Tebodin Consultants & engineers</i>
Team members	<i>Jitske de Haan</i>
	<i>Willem Stevense</i>
	<i>Sjoerd Gort</i>
	<i>Michel Gatersleben</i>
	<i>Mark Elderman</i>
	<i>Chris Ng-a-tham</i>
	<i>Willem Hamer</i>
	<i>Jeroen Baars</i>
	<i>Michelle van Roosbroeck</i>
	<i>Ronald de Vries</i>
	<i>Sophie Smit</i>
	<i>Robert Siersma</i>
	<i>Kitting Lee</i>
	<i>Matthijs Koper</i>

Big Bang

In 2025 we see the Dutch health care system as the aftermath of a Big Bang. The hospitals have 'exploded' into a sprawl of individual clinics and healthcare facilities dedicated and accustomed to specific client groups and needs.

From the Care institution as a city, towards the city as a care institution. The general paradigm of 2007 for hospitals and healthcare facilities was to make them look and feel like small cities, with buildings growing out to mega structures of over 100,000 m². The change in financial structure resulted in hospitals charging rent to its users, amongst whom the doctors. Refusing to pay rates way above market-level doctors left the hospitals en masse and scattered all over the city. They regrouped in private clinics whose scope was defined by client convenience and medical efficiency/effectiveness.

Towards Total Private Care

The shift was enhanced by private investors, who saw the potential in the healthcare market. They transformed medical treatment into new business models that proved sustainable and guaranteed ROI. This led to a divide of the clinical medical treatment and recovery. Of the average 6 days that inpatients would stay in a hospital in 2007, a 2025 patient spends 2 days in the confines of a Clinic. The remaining days are spent either at home or in a Care House.

This divide has become the governmental boundary of the solidarity in the Healthcare System. All treatment in Clinics is covered by the mandatory health insurance. Differences in class, prices and luxury only show up in Care Houses. Citizens can have additional insurance based on their own luxury standards. By their alike nature Care Houses are often run by hotel chains or use logistic services. Care Houses vary in type and shape; some are for just long or short stay and stress their nursing qualities, others are residential and offer apartments and

more or less luxurious living environments. Group living or Protected Living is often thematically grouped around Care Houses. For elderly people these configurations exist along the banks of the Markermeer, but also Mother in Law apartments in their children's garden is a popular formula.

New facilities

This shift had its repercussions on the healthcare system. The General Practitioner (GP) gained importance as gatekeeper of the healthcare system. In 2007 most GPs operated from group practices in health centres. In 2025 these old 'first-line' health centres incorporate the diagnostics function of the former hospital's outpatients' facilities and are known as DoctorPlus (Dr+). DoctorPlus sets diagnose and either treats or refers patients. All patients enter and exit the healthcare system via DoctorPlus, which they are free to pick. When referred to a clinic or other facility, patients are also free to choose. Health Information Centres (HIC) - the equivalent of tourist information, to be found in shopping malls or city centres - can be of assistance in making these choices. DoctorPlusses use Diagnose Centres (DC) and laboratories (LABS) for setting up diagnoses. These are privately owned institutes with the high-end technologies and equipment to provide quick and accurate data.

From Zipcode to Global Positioning Systems (GPS)

The 2007 healthcare system was based on health regions to provide all first and second line healthcare. Accessibility was measured in proximity to the home postcode only. Increase of mobility, workforce participation, IT developments and the ongoing process of individualization changed the standard for accessibility to connectivity and adjustment to daily (commuting) patterns. Accessibility of healthcare services in 2025 means that facilities and services are offered where they are needed and convenient. Patients are regarded individ-

'BIG BANG'

motto



From the Care-institution as a city towards the city as a care-institution!

In 2025 we see the Dutch health care system as the aftermath of a Big Bang. The hospitals have 'exploded' into a sprawl of individual clinics and healthcare facilities dedicated and accustomed to specific client groups and needs.



From Zipcode to 'GPS'

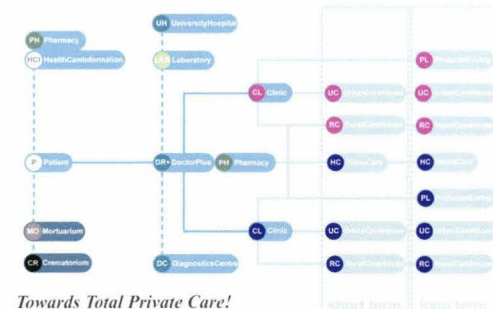
The 2007 healthcare system was based on health regions that had to provide all first and second line healthcare functions. Accessibility was measured in proximity to the home postcode only. Increase of mobility, workforce participation, IT developments and the ongoing process of individualization changed the standard for accessibility to connectivity and adjustment to daily (commuting) patterns.

medical proto types



From planning to 'Plug and Play'!

Decentralized and other specific medical performance can be realized as standard modules, plugged in, to suit the average case or specific client groups.



Towards Total Private Care!

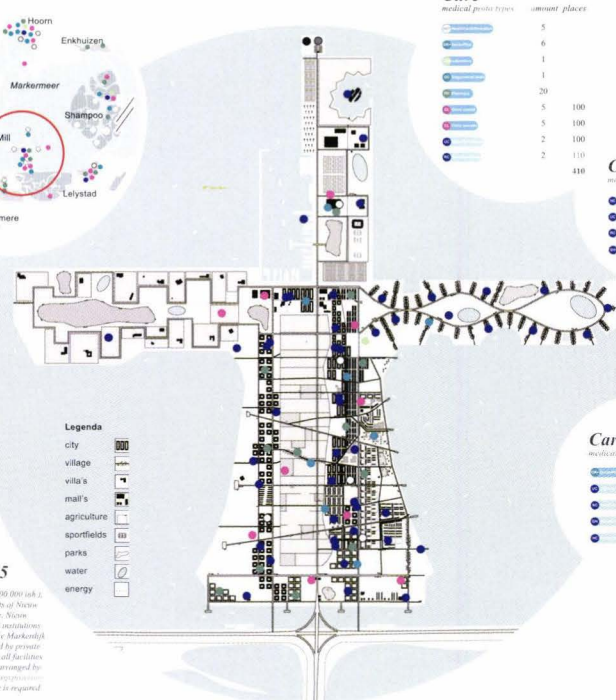
The 2025 healthcare system is based on private ownership, which has the potential to be a more efficient and high performing medical system. The private sector is expected to provide a significant part of the healthcare system, with the government playing a role in regulation and funding.

Nieuw Marken



Mill, HealthCareCity 2025

Mill (100,000 inh.) is part and icon of Nieuw Marken (100,000 inh.), a new city in and around the Markermeer. The five parts of Nieuw Marken all have a similar level of medical infrastructure. Nieuw Marken as a whole is entitled to some highly specialized institutions like an International University Medical Centre along the Markermeer close to Nieuw Marken Terminal. Mill is being developed by private partners and exists of a built and three wings, over which all facilities are divided. If traditional care centre is absent, traffic is arranged by road only and no railroads exist. Healthcare and emergency services are decentralized and therefore transportation of neither is required.



Cure

medical proto types amount places

medical proto types	amount places
1	5
2	6
3	1
4	1
5	20
6	5
7	100
8	5
9	100
10	2
11	100
12	2
13	100
14	2
15	100
16	2
17	100
18	2
19	100
20	2
21	100
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93	100
94	2
95	100
96	2
97	100
98	2
99	100
100	2

Care somatic

medical proto types amount places

medical proto types	amount places
1	5
2	6
3	1
4	1
5	20
6	5
7	100
8	5
9	100
10	2
11	100
12	2
13	100
14	2
15	100
16	2
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97	100
98	2
99	100
100	2

Care mental

medical proto types amount places

medical proto types	amount places
1	5
2	6
3	1
4	1
5	20
6	5
7	100
8	5
9	100
10	2
11	100
12	2
13	100
14	2
15	100
16	2
17	100
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panel 1

uals in search of healthcare accustomed to their living pattern and in accordance with the impact of the illness. As a result, location factors for each facility and service are defined by health impact, accessibility, density and environmental qualities. Not just the home address but any address any time of the day counts. Making GPS the convenient planning tool.

In 2025 ICT is the spine of the system. The government offers all citizens an Electronic Medical Record (EMR) directly after birth. All health institutions are legally obliged to add all factual information on medical treatment and medication to the patients record, that

is a patient-owned debit card-like pass protected by a PIN code.

The image of healthcare has benefited greatly from these changes; in 2025 healthcare is Holland's top 10 export product. Hundreds of thousands of patients from all over the world find their way to Schiphol Nieuw Marken Terminal to access Dutch healthcare facilities. By bringing their families along for support, they also boost Dutch economy.

From Planning to Plug and Play

Ongoing developments in medical technology, shifting demographical numbers and developments in the global

zorgeNLoos living

Quality of Life

Care discretely supports us to enjoy a happy life across the generations and being an active part of community while coping with larger or smaller ailments

Society

- Growing need
- Chronicle ailments will shape the character of healthcare
- Aging society is confronted with growing multi-morbidity, resulting in increased demand
- Health misconduct
- Patient compliance can improve medical treatment efficacy enormously
- Trends towards leisure lifestyle reduce body exercise
- Accessibility for all
- Enduring healthcare is a prerequisite for a stable society
- Patients should have choices and not just constraints

Response

Informal Health Care is a voluntary service in close cooperation with the existing health service tiers of Primary, Secondary and Tertiary Care. The Informal Health Care enables to deliver care to the living environment of all people. This is achieved by providing Care Points which affiliate approximately 500 people to the Informal Health Care Network. Care Points offer personal chaperonage of patients.

Care Points support people to organize assistance at home and offer coaching to people who look after a family member or friend who needs care. Empowerment and self-responsibility are key parameters at the Care Points. Indispensable: Information and education programmes on health related subjects including health maintenance and prevention are provided at the Care Points integrating the know-how of the healthcare professionals and validated information from the internet.

The integration of beds in a Care Point leads to a building structure called 'Health

Dwelling' which enables geriatric or general rehabilitation following hospital care within the local community. Also beds for mental support, demented patient support and facilities for the disabled are included in the Health Dwelling concept.

Organization

In addition to the existing healthcare system, consisting of Primary, Secondary and Tertiary Care, Informal Health Care [IHC] is an interactive layer between society and the existing healthcare tiers. IHC provides a parallel service on a voluntary basis. Care Points as a central function of IHC represent the possible first contacts with the healthcare system. IHC contributes significantly to a better communication within the hierarchical healthcare system.

Operations

Informal Health Care is supported by communities and insurances with a running cost budget but not covering the wages of those working in the Care Points. These voluntary workers will receive special benefits (e.g. health insurance reductions, social benefits and appreciation). Care Points can catalyze social networks in the neighbourhood and become part of a community support structure.

Validation

The Informal Health Care increases possibilities to deliver healthcare services at patient homes on a large scale. The integration of beds in a Health Dwelling connected to a Care Point enables the rehabilitation within the local community following hospital care. Reduction of hospital beds in secondary and tertiary care is achieved by integrating low level care within Informal Health Care. Also dwellings for the disabled, beds for mental support and demented patient support can be included as a part of the Health Dwelling. The buildings need to accommodate the Informal Health Care. This will not necessarily result in new building typologies but strongly build upon existing architectural typologies.

ZORGE



Quality of Life

Care discretely supports us to enjoy a happy life across the generations and being an active part of community while coping with larger or smaller ailments.



Society

Growing need

Chronicle ailments will shape the character of health care
Aging society is confronted with growing multi-morbidity resulting in increased demand

Avoiding health misconduct

Patient compliance can improve medical treatment efficacy enormously
Necessary life style change increases body exercise

Access for all

Enduring healthcare is a prerequisite for a stable society
Patients should have choices and not just constraints, when accessing health care

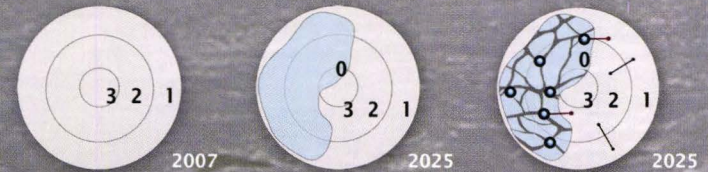
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The integration of beds in a Care Point leads to a building structure called 'Health Dwelling'. This enables geriatric or general rehabilitation within the local community immediate after hospital care. Also beds for mental support, dement patient support and facilities for the disabled are included in the Health Dwelling concept.

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Simone



MEET SIMONE
Simone is a very active 16 years old teenager. She is of high school and really enjoys attending the classes and the socializing with her fellow students. Simone would love to participate in the activities of her contemporaries, but because of her chronic, she encounters many difficulties. Not only the chronic is a restricting factor in her life, she also has to have close monitoring because her diabetes. Besides a continuous and diligent treatment Simone needs coaching regarding her diet and strategies to reduce her weight.

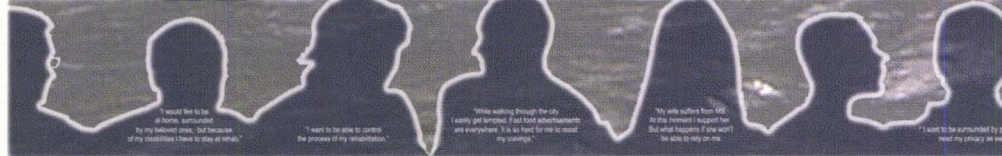
She is keen to make an effort but often falls back into the traps of malnutrition. Her chronic also has an impact on her social life and is a problem for her and others.

Hans



MEET HANS
Hans has been retired for two years now. He lives with his wife in the house where they have spent their three children. His and Peter have been their neighbors for 25 years. They play cards and sometimes on a regular basis. His last working moment was that day and he had been asked for a specific apartment. He had asked Hans to think about their future plan. But Hans is not really ready for moving. He has the huge backyard and the lake on walking distance.

He loves to be outside with his grandchildren. Hans started smoking when he was 15 and that has already affected his body. He is often short of breath, but he doesn't want to quit the doctor says. He would prefer to smoke, but he only wants to go when his life is in jeopardy. Hans wants a car, but he can't drive.



Existing buildings can be reused and new buildings erected as sustainable structures on durable locations.

Why does Informal Health Care work?

Informal Health Care

Provides:

- Access to healthcare for all
- Patient Chaperonage
- Legal security for volunteers
- Enduring perspective
- Freedom of choice

Gives:

- Quality of life for those who need care
- Perspective and identity for the community

More space in existing facilities

Causes:

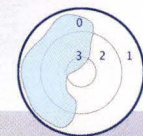
- Only subtle changes to the existing healthcare system
- Positive social interaction
- Patient compliance in treatment

Network, the body

Care Points are not totally identical in each neighbourhood; they are shaped by the affiliated 500 people and their specific needs.

By integrating the new tier 'Informal Health Care' brings together the power of the informal network, the knowledge of the existing health system and the democratic and personal networks from

NLOOS LIVING



Growth

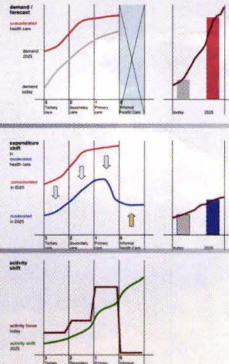
Operations

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Validation

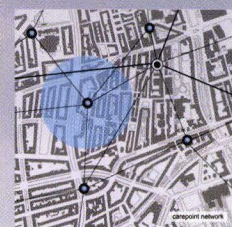
The Informal Health Care increases possibilities to deliver health care services at patient homes on a large scale. The integration of beds in a Health Dwelling connected to a Care Point enables the rehabilitation within the local community following hospital care. Reduction of hospital beds in secondary and tertiary care is achieved by integrating low level care within Informal Health Care. Also dwellings for the disabled, beds for mental support and dementia patient support can be included as a part of the Health Dwelling. The buildings need to accommodate the Informal Health Care. This will not necessarily result in new building typologies but strongly build upon existing architectural typologies. Existing buildings can be reused and new buildings erected as sustainable structures on durable locations.

Health Care 2025 Maximum Health Facility Provision for a Population of 100,000									
Category	Health Care	Health Care	Health Care	Health Care	Health Care	Health Care	Health Care	Health Care	Health Care
Primary Health Care	100	100	100	100	100	100	100	100	100
Secondary Health Care	100	100	100	100	100	100	100	100	100
Tertiary Health Care	100	100	100	100	100	100	100	100	100
Health Care	100	100	100	100	100	100	100	100	100
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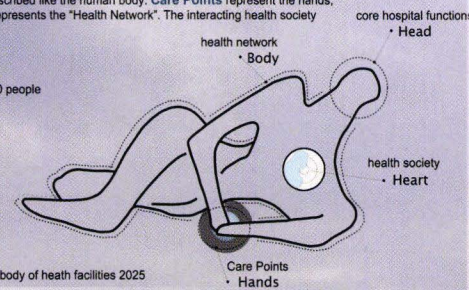


Network, the body

Care Points are not totally identical in each neighborhood; they are shaped by the affiliated 500 people and their specific needs. The integration of the new tier 'Informal Health Care' brings together the power of the informal network, the knowledge of the existing health system and the democratic and personal networks from the 'internet society'. It can be described like the human body: Care Points represent the hands, the core acute hospital functions stand for the head and the contour of the body represents the 'Health Network'. The interacting health society forms the heart of the body.



- Care Point, serving 500 people
- General Practitioner, serving 2500 people



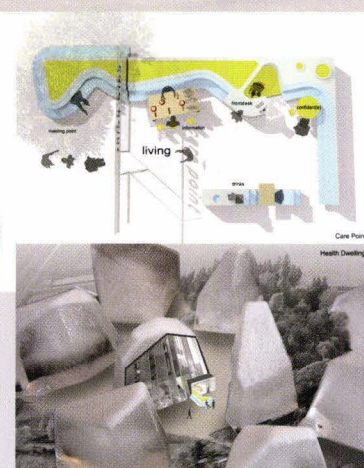
Network lichaam; a body of health facilities 2025

Facilities 2025

Most of the curative activities will continue to be integrated in the core acute hospital functions. It is a goal to allocate Rehabilitation foremost within the social network of the neighbourhood. The Care Points are premises to provide care and coaching to the Health Dwellings located e.g. in an apartment block. Also large scale or clustered living facilities for disabled and for people who need mental care, can be located as a Health Dwelling in the local society, leaning on the care-energy catalyzed by the Care Point network.



The Care Points can be easily integrated into new or existing buildings. They don't require a new building typology but respect existing architectural typologies that can be used for health care purposes. The Health Dwellings which are associated to a Care Point, can be part of the sustainable building structure of a new or existing apartment block.



Why does Informal Health Care work?

Provides

- Access to healthcare for all
- Patient Chaperonage
- Legal security for volunteers
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Gives

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- Perspective and identity for the community
- More space in existing facilities

Causes

- Only subtle changes to the existing health care system
- Positive social interaction
- Patient compliance in treatment



SMOKE'S WISH
Smoke wishes to really make progress to lose weight which could even have positive effects to her onset diabetes which is linked to her metabolism. The constant monitoring of her insulin level is very tedious. Smoke dreams to lead a more normal life of an adolescent where she can not only exercise more often and maybe eventually cure the onset diabetes.



SMOKE LOOKING BACK
"I never expected the solution to my problem, literally would be so close to home. Because of the Care Point, I don't have to visit the specialist so often for my monitoring. Besides that I get psychological support in my struggle to lose weight and get in touch with some other teenagers that suffer from obesity. I feel less alone and more the welcome when I visit the Care Point. The meeting and therapy atmosphere makes me work in a special place. It's very personal and everyone knows about other by name. The Care Point is really very well. Because of this, we must know what to do when things go wrong about their health. But what really made me happy in the Care Point is that I don't have to move. The Care Point brought care to home. And not only the Care Point make home stronger but also, but when my neighbors had the chance to move into the Care Point, they helped. They even wanted to stay because they feel very secure and taken care of in our neighborhood."



HANS CONCLUSIONS
"Informal Health Care with the Care Point is our neighborhood's best answer to all my concerns. I can ask all kind of questions about my health and when one of my grandchildren visit us and has an injury, I can get help right away. The meeting and therapy atmosphere makes me work in a special place. It's very personal and everyone knows about other by name. The Care Point is really very well. Because of this, we must know what to do when things go wrong about their health. But what really made me happy in the Care Point is that I don't have to move. The Care Point brought care to home. And not only the Care Point make home stronger but also, but when my neighbors had the chance to move into the Care Point, they helped. They even wanted to stay because they feel very secure and taken care of in our neighborhood."



"When I was diagnosed with diabetes, the Care Point helped me with the coordination and advice for treatment and care network."

"When my wife got sick I wanted to take care of her, but I wasn't sure whether I was able to. In the Care Point I could follow a course with other care-takers."

"The healthcare system is much more accessible now. I don't want to long anymore when I am around about some medical issues. I just go to the Care Point to get better advice."

the 'internet society'. It can be described like the human body: Care Points represent the hands, the core acute hospital functions stand for the head and the contour of the body represents the "Health Network". The interacting health society forms the heart of the body.

Facilities 2025

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The Health Dwellings which are associated with a Care Point can be part of the sustainable building structure of a new or existing apartment block.

- Motto** zorgeNLoos living
- Main designer** ir. Victor de Leeuw
ir. prof. dr. ing. Tom Guthknecht
- Team members** ir. Bas van Eijndhoven
ing. Quiel Beekman
ir. Victor de Leeuw
ir. Philine Krosse
ir. Gijs Raggers
ir. Annemarie Eijkelenboom
ir. Stefan Grasso

New Marken

The design of the new city "New Marken" has something for everybody. It is located in Markermeer on the Houtribdijk. An already existing dyke between the city of Enkhuizen and Lelystad. This has the advantage that the scenery is less disturbed.

The location provides a large area of scenic beauty. There are a total of five islands connected to the dyke. From almost every point in the city you can see nature, because of the slim form of the islands and dyke. Bringing nature closer to the inhabitants. This proposal requires an improvement of the Houtribdijk. It will be higher, wider and its functions will increase to be better equipped for the future. Besides to the existing function of dividing two lakes and being a transportation route between Enkhuizen and Lelystad multiple functions will be added. This new type of dyke can set an example for the dykes in the Netherlands. A dyke with multiple functions that can still perform its primary purpose and is ready for a changing future. Making the necessity a virtue.

An advantage of making islands is that the water can flow freely between the landmasses. By spraying sand on the lake floor the artificial island can be formed. Such a technique is possible because of the three to four meter depth of the lake.

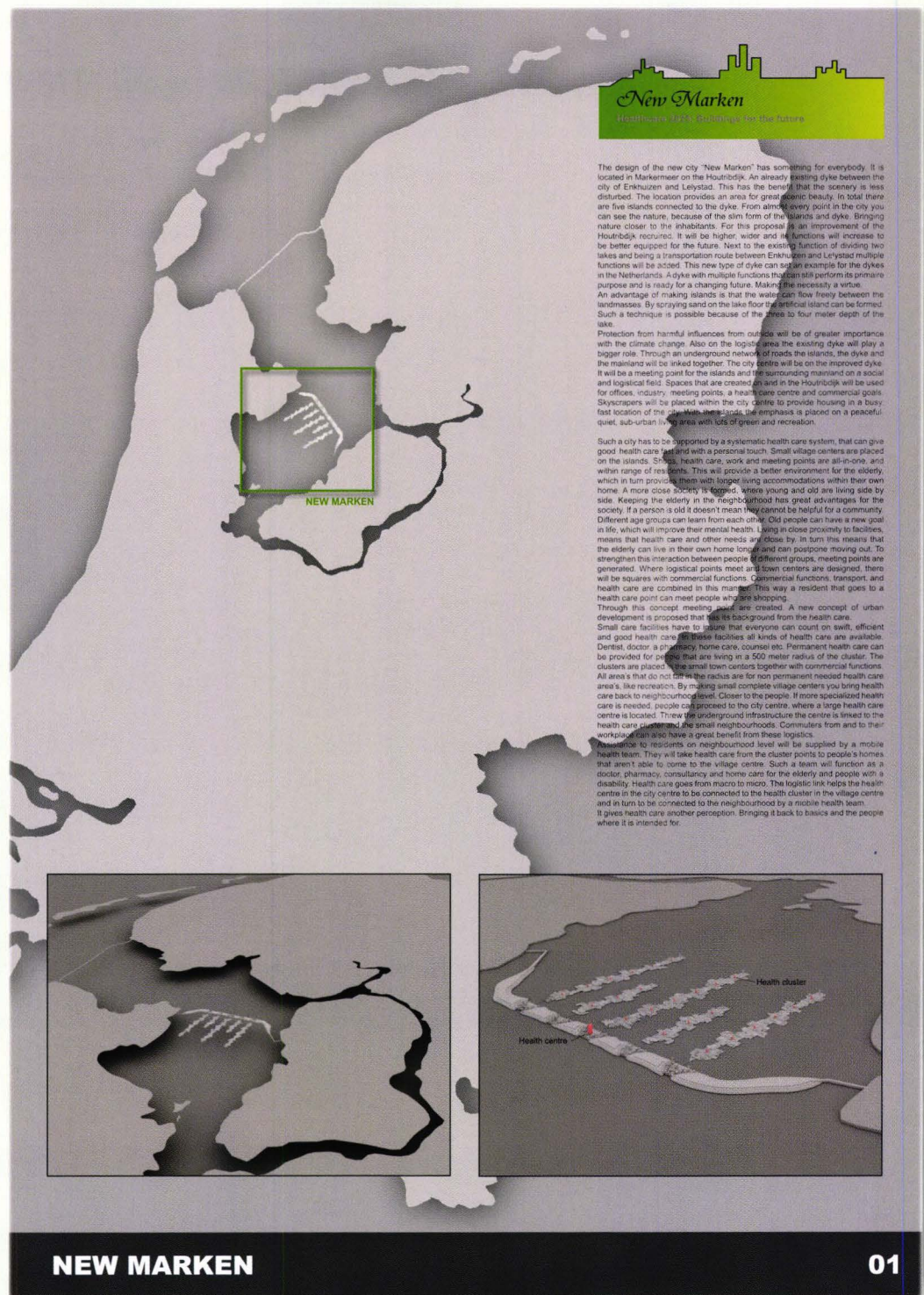
Protection from harmful influences from outside will be of greater importance with the climate change. In logistics the existing dyke will play a bigger role. The dyke and the mainland will be connected by an underground network of roads the islands. The city centre will be on the improved dyke. It will be a social and logistical meeting point for the islands and the surrounding mainland. Spaces that are created on and in the Houtribdijk will be used for offices, industry, meeting points, a healthcare centre and commercial purposes. Skyscrapers will be placed within the city centre to provide housing in a busy, fast location of the city. With

the islands the emphasis is placed on a peaceful, quiet, suburban living area with lots of green and recreation.

Such a city has to be supported by a systematic healthcare system, that can provide good healthcare fast and with a personal touch. Small village centres are placed on the islands. Shops, healthcare, work and meeting points are all-in-one, and within range of residents. This will provide a better environment for the elderly, so they can live longer in their own home. A closer society is formed, where young and old are living side by side. Keeping the elderly in the neighbourhood has great advantages for the society. If a person is old it doesn't mean he cannot be helpful for a community. Different age groups can learn from each other. Old people can have a new goal in life, which will improve their mental health. Living in close proximity to facilities means that healthcare and other facilities are close by. In turn this means that the elderly can live longer in their own home and can postpone moving out. To strengthen the interaction between people of different groups, meeting points are generated. Where logistical routes meet and town centres are designed, there will be squares with commercial functions. Commercial functions, transport, and healthcare are combined in this manner. This way a resident who goes to a healthcare point can meet people who are shopping.

This concept creates meeting points. A new concept of urban development is proposed that has its background in healthcare.

Small care facilities have to insure that everyone can count on swift, efficient and good healthcare. In these facilities all kinds of healthcare are available. Dentist, doctor, a pharmacy, home care, counsel etc. Permanent healthcare can be provided for people living within a 500 meter radius of the cluster. The clusters are placed in the small town centres together with commercial functions. All

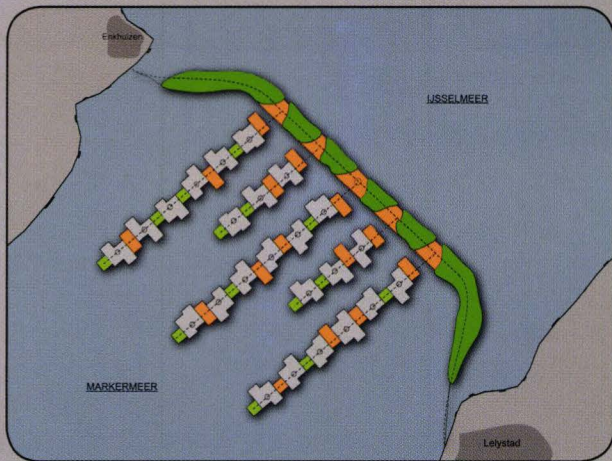


areas that do not fall within the radius are for non-permanently needed health-care areas, like recreation. By making small complete village centres you bring healthcare back to neighbourhood level. Closer to the people. If more specialized healthcare is needed, people can proceed to the city centre, where a large healthcare centre is located. Through the underground infrastructure the centre is linked to the healthcare cluster and the small neighbourhoods. Commuters from and to their workplace can also greatly benefit from these logistics.

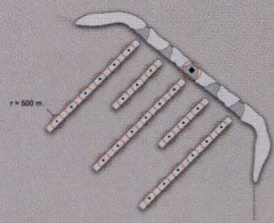
Assistance to residents on a neighbourhood level will be supplied by a mobile

health team. This will take healthcare from the cluster points to the homes of people who aren't able to come to the village centre. Such a team will function as a doctor, pharmacy, consultancy and home care for the elderly and people with a disability. Healthcare goes from macro to micro. The logistic link helps the health centre in the city centre to be connected to the health cluster in the village centre and in turn to be connected to the neighbourhood by a mobile health team.

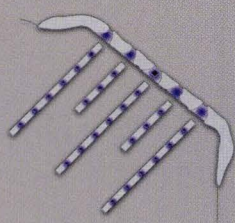
It gives healthcare another perception. Bringing it back to basic and the people whom it is intended for.



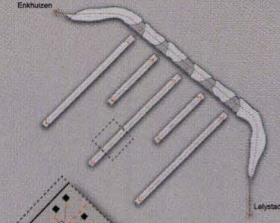
- Nature reserve
- City green / recreation area
- Dense city area
- Low density living area
- Underground infrastructure
- + Health care centre



Health Care Positions + effective radius



Meeting points



Logistics

Life veins of the city

HEALTH CARE CENTRE:

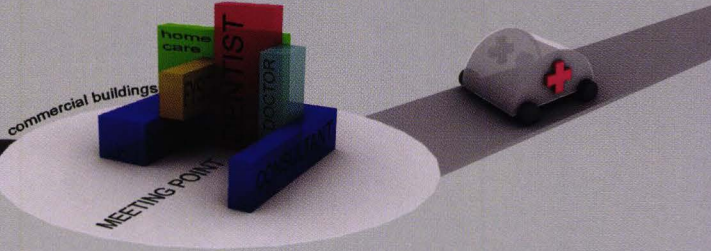
- Hospital stay
- Emergency room
- Specialised health care

HEALTH CARE CLUSTER:

- Everyday health care

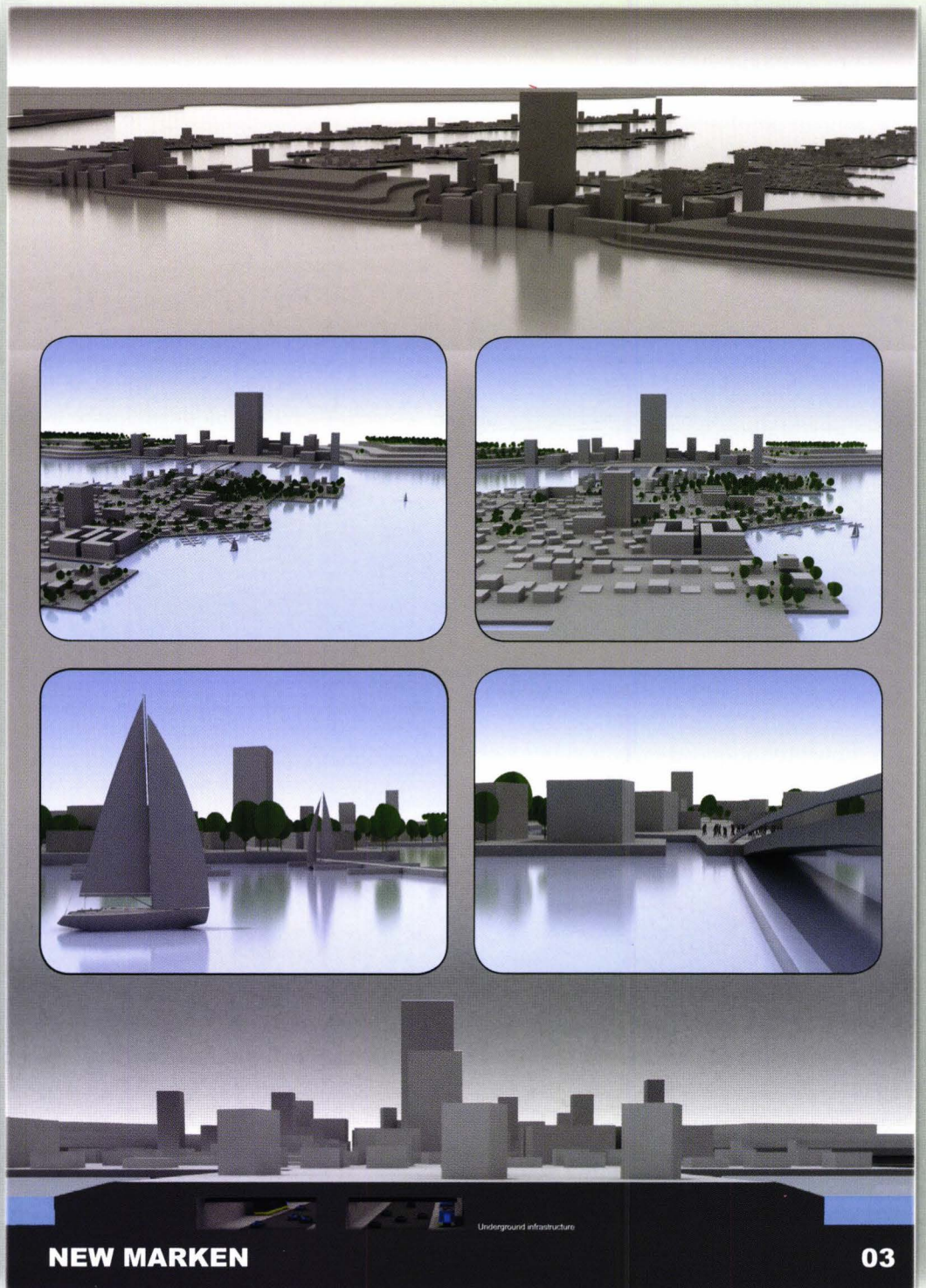
MOBILE HEALTH TEAM

- Mobile team going into the community



NEW MARKEN

02



NEW MARKEN

03

Motto *New Marken*
Main designer *Rob van der Steen*
Team members *Nick den Teuling*

Water of Life

July 2025

In 2006 Al Gore published 'An Inconvenient Truth' which showed the disastrous consequences of global warming if we did not change things for the better. If we did not take action, the larger part of the Netherlands would be flooded. The Dutch authorities have taken action to improve water management, an example of which is the IJsselmeer approach. Water, living, nature and recreation were key words in this respect.

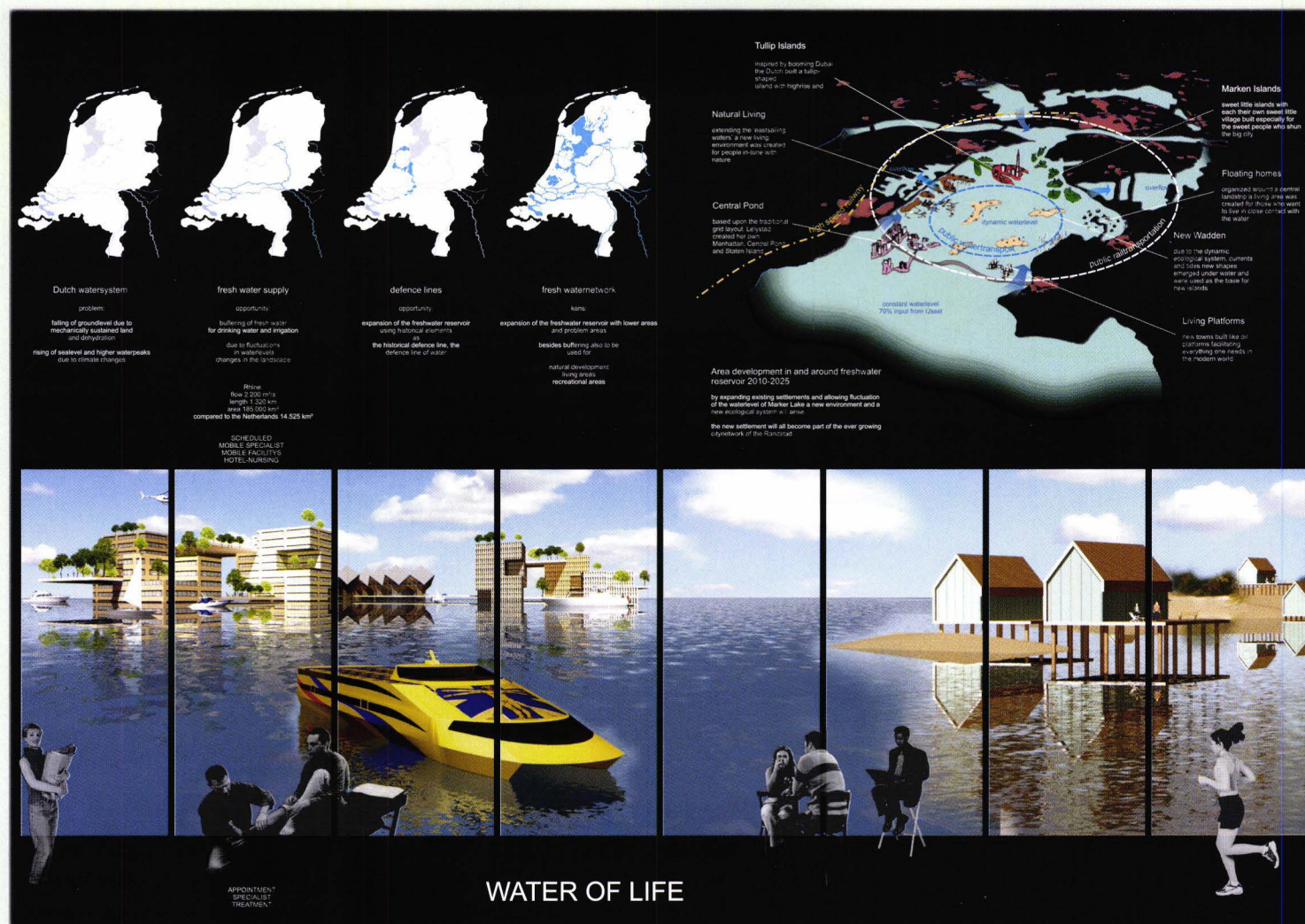
Lake IJsselmeer was thus given a high water level to safeguard the fresh water supply for the surrounding regions. A flexible water level was created for Lake Markermeer to give the area a new ecological impulse. And the building of a dike between IJmeer and Markermeer created room for housing and recreation.

Water of Life aims at preventing the deterioration of the natural values of the entire IJsselmeer. Foreshores in the form of new islands, nature-friendly shore areas and a better connection between Markermeer and the inner dyke nature reserves provide a continuous, diversified landscape. The new city can develop within this landscape.

Water of Life is many times larger than what we call a 'city'. Yet the human scale is the starting principle here. In addition to fixed shores and islands, there are floating islands. These have been realized with foundation systems which have been developed in the Netherlands and which have now been applied all over the world. Floating islands can hold anything a residential area requires: housing, paving, overgrowth, lighting and the hospital of the future. All around the lake there are possibilities for the realization of urban and natural living environments with their own looks.

Mobility

Water of Life consists of various new settlements. A railway line will be built on the dyke between Enkhuizen and Lelystad. This will develop a high-quality railway connection around Markermeer, which all new and existing settlements



will be connected to. The transport in the city takes place by water like in Venice.

Self-supporting

The floating city is largely self-supporting. Its construction is climate-neutral and there will be a planning process based on renewable energy. The construction will take place in accordance with the views in the book 'Cradle to cradle' written by Michael Braungart and William McDonough. All construction material for Water of Life must in the waste phase constitute primary raw material for a new product again.

Hospital of the floating city

A symposium in 2006 saw the following trends for the hospital of the future:

- 1 – The 'hotfloor', the hospital's centre with its operating rooms and intensive care, will not grow very much.
- 2 – The 'hotel', with low-care nursing floors and non-patient oriented functions, may be realized further away from the 'hotfloor'.
- 3 – The office shell of staff and administration is not healthcare-specific and will change the most.

4 – Smaller-scale facilities, no longer all in one building complex.

5 – Some hospitals will become more specialized.

The Hospital in 2025

The hospital in Water of Life is characterized by mobility. The 'hotfloor' is situated at the water front, with a central position in the new city. There are fixed operating rooms, travelling operating units and rooms for intensive and specialized nursing. Staff and administration have been accommodated in business offices elsewhere in the city. There are various care hotels with low-care nursing floors, outpatients' clinics and operating rooms for minor procedures. These care hotels have developed into socially entrepreneurial organizations. Patient groups, who have been increasingly able to shop after the system change of 2006, have played an important role in this. But the staff and the doctors themselves have also developed specialist initiatives.

This way, a group has established in Water of Life on one of the islands, which consists of a combination of podo-

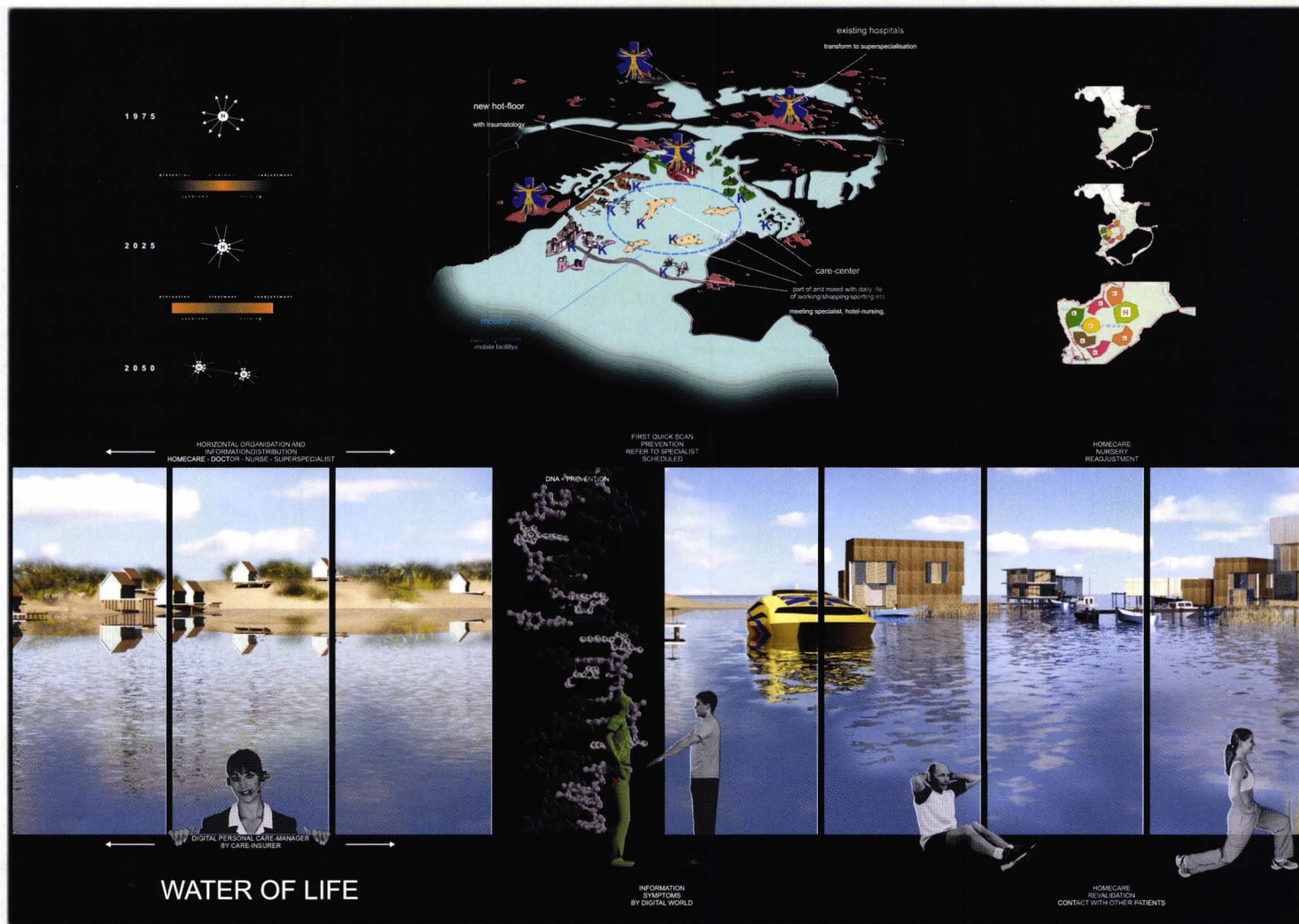
therapy and pedicure, physical therapy and occupational therapy, an orthopaedic instrument manufacturer, a doctor, nurse, psychologist, dentist, dermatologist and a speech therapist. All these have joined forces into a care facility which is integrated in the city district. In addition to the treatment rooms, the project therefore also contains a restaurant, a swimming pool, a sauna and a small cinema. The complex is situated in rural surroundings as a true hotel with customized care with luxury single and double rooms which are suitable for stay with or without care.

The care centre has been equipped for minor procedures. Most operations are however done on operating boats which sail from the 'hotfloor' and perform their work close to the customer. Highly specialized hospitals have developed in Amsterdam, Almere, Lelystad, Hoorn and Purmerend for operations which cannot be performed in the new city.

Care in the floating city

The home as a care facility

Technological developments in the nineties of the previous century increasingly



enabled care to be given at home because thanks to ICT the necessary information is always available anywhere. Modern technology combined with ICT can turn any home into a 'hospital bed'. Clusters of care homes supplement the care hotels and replace the old nursing homes.

Life cycle principle

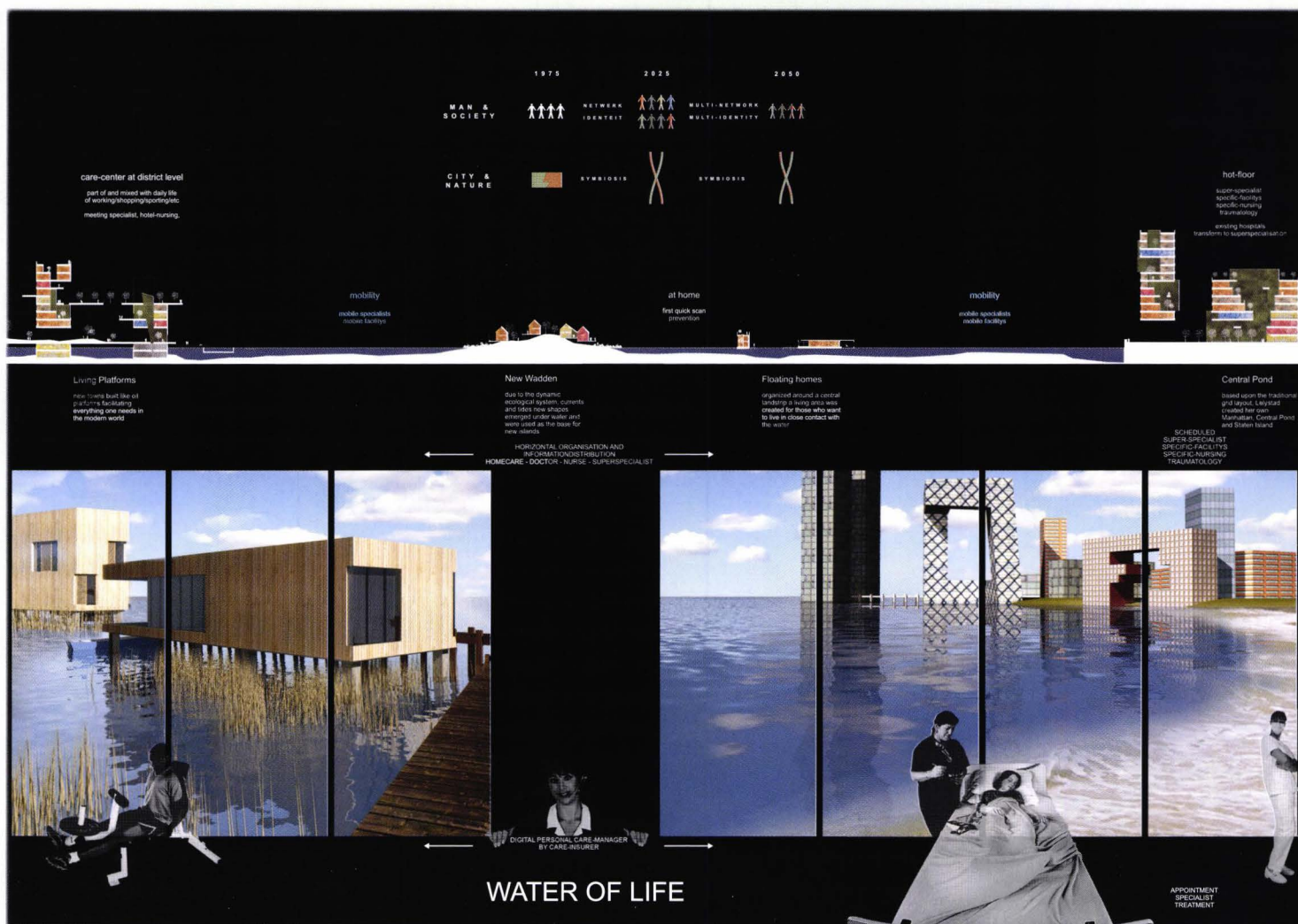
All houses in the new city have been developed based on a cyclical vision. The home should be like a second skin, in which man feels at home in any stage of life. It is a future-oriented construction method in which houses can adapt to changing circumstances during their entire life. Houses which are now built for the 'grey wave' will be suitable for the 'green wave' again in twenty years.

Seniors' City

In spite of the scepticism, senior citizens and developers have taken initiatives to realize specific housing for the elderly. And in Water of Life as well. One of the islands houses the Seniors' City with approximately 3000 houses. These are rental and owner-occupied houses in various price ranges. The houses are suitable for people in any stage of life or health situation whatsoever.

Care hotel

This care hotel is situated in Seniors' City, with care facilities geared to the inhabitants of the island. Operating boats can moor at a landing place, from which caregivers also sail to visit and to treat people at home.



Motto	Water of Life
Main designer	Dick M. Nebbeling
Firm	Artès bureau voor architectuur en interieur
Team members	Jan Giezen Gerwin de Vries Arnold ten Brink

Marker Islands

a landscape for a healthy lifestyle

State of living

In a rush... Everybody is in a rush... driving from one appointment to the other. Eating as you travel. Not getting enough exercise. Planning and looking forward to the next holiday period.

The awareness of the fragility of our bodies is increasing. A healthy life and way of living are becoming important issues in our society. At the same time, the mental and physical pressure is increasing as well. According to CPB, over ten percent of the working class is experiencing too much pressure, resulting in burnout symptoms. Life is becoming more intense and exciting but at the same time more exhausting and insecure. The health situation is changing. New times bring new illnesses.

Taking care of our body by eating healthy food, exercising and taking time to relax and recover should be included in this new lifestyle. A green and natural environment helps our body to recover faster and prevents us from burnout. The number of people with 'obesity' in urban areas is higher than in rural areas.

Concept

The basis of this concept consists of a way of living that prevents health issues as much as possible. So we didn't make a design for healthcare buildings but we made a design for a healthy lifestyle in order to stay fit.

In order to reach that state of life we need to find a way of combining the strive to live and work in a hectic environment with the relaxing "reaching within yourself" kind of environment. Being healthy means being able to really live your life without the downside of health problems. The Marker Islands idea is based on a combination of these needs. People will be able to afford both

a small apartment on the city or urban island and a house or second residence reachable in two hours by boat on a rural island in a very green and spacious environment.

A summary of the concept is:

1 - Every household has two houses.

One apartment in the city and a second house or residence on a rural island in a greener and more spacious environment.

2 - On the city island healthcare will be provided by doctor checkpoints. Specific healthcare centres will be available in the Central Park and on the Boulevard.

You visit these centres for specific health needs and annual health checks. Mental health clinics will be available on both the city islands and the rural islands.

3 - Everyday transportation will be by bike, walking and boat, excepting cars.

4 - Food and building materials will be produced biologically on the rural islands.

Ecology

The ecological situation of the Markermeer nowadays is inferior, there is al-

most no biodiversity. The turbid state of the water makes it hard for animals to live in this area. The amount and diversity of fish are very poor. The island formations make flora and fauna possible in this area.

Islands

Breaking through the Houtribdijk will allow fresh water into the Markermeer. The Islands will protect the shore from high and low tides.

The creation of channels in the Markermeer will let the water flow and clean the lake. The dredging will be used to create an archipelago on the Westside of the Markermeer, the most favourable place to create new land from an environmental and ecological point of view. New "Oranje sluices" next to the city-island make IJmeer a recreational lake with the same water level as the Noordzeekanaal.

This archipelago is self-sufficient in energy, water and warmth. Even food and building materials come from the islands. The outgoing streams like solid waste are taken care of in a waste-to-energy plant.

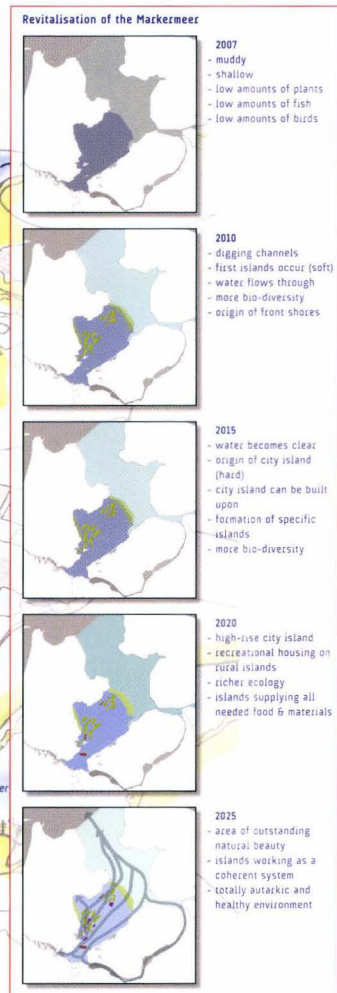
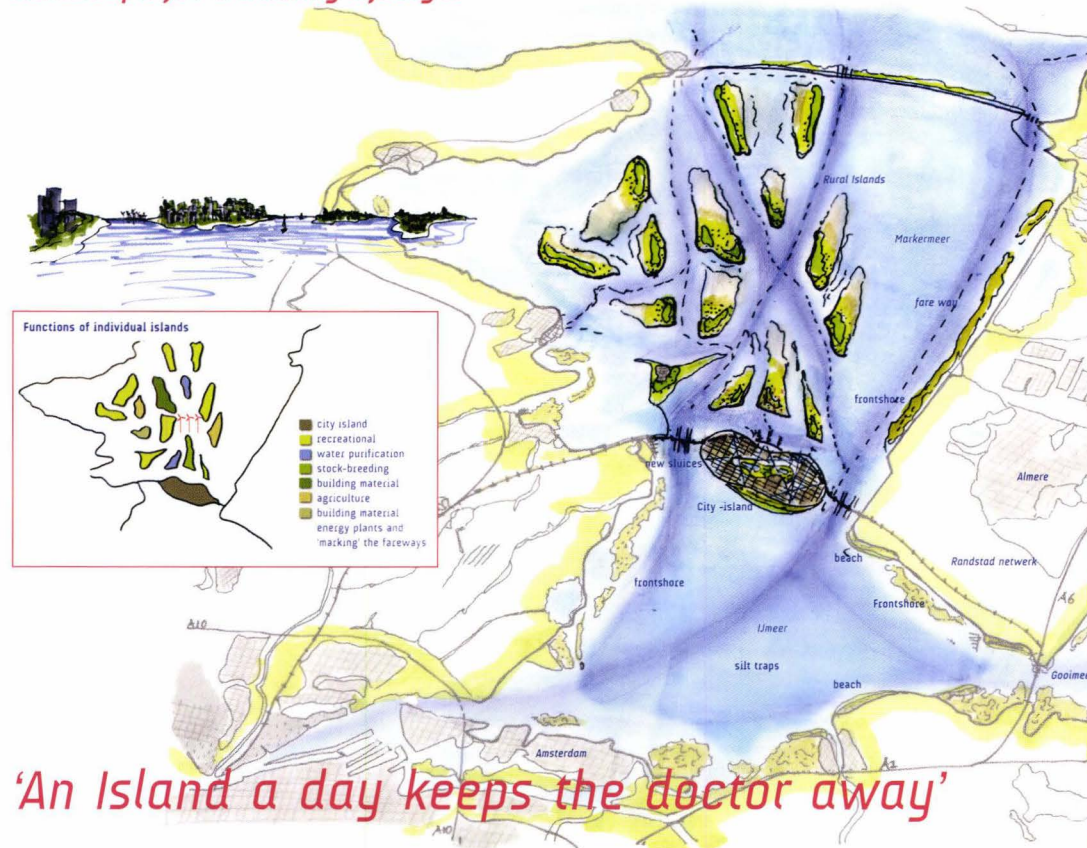
Only one island will be used to create a high density city where the main functions and facilities are located. Every household is housed in a small apartment, around 60 square meters in size. This island will be the place where people spend their time during working days. Buildings are green, store their warmth and cold in deep aquifers to use it in the other seasons, the water from the canals is purified in the courtyard of the building blocks. The buildings are designed as bioclimatic units, and respond to the environmental climate. The city is a clean and safe environment because roads are not used by cars and the main ways of transport are walking, cycling, skating or by boat. This island is characterized by an enormous park. Every district has its own smaller park, which point out the location of doctor practices.

Healthcare

The clinic where medical surgery takes place is as a hovering building in the Central Park. This is not a hospital like we know it nowadays, it's a nice place to go, like a spa. On ground level there are

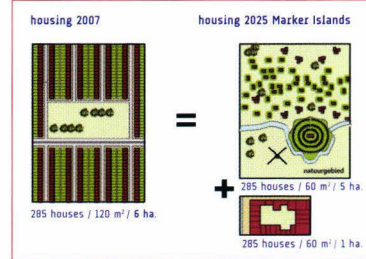
Marker Islands

Landscape for a healthy lifestyle



Marker Islands

Landscape for a healthy lifestyle



In stead of providing every household with a house and garden (Vinex), every household gets an apartment in the city so the city will have all small walkable footprint. With every city apartment comes a place on the island like a cottage, a houseboat or a rental house in a holiday park.

Urban Island

- healthy environment
- freedom of choice
- order
- work
- social life
- auto-free-zone
- distances edited for pedestrians
- public transport
- conviviality
- kinergetic
- dynamic atmosphere
- go loose
- community facilities
- fellowship / brotherhood
- allure

Rural Island

- healthy environment
- peace
- space
- freedom
- vastness
- clear water
- biodiversity / diverse bioculture
- wind water sun
- gardening
- bio-food
- re-energise / recovery
- mental and physical recreation / relaxation
- contact with nature
- living in nature
- movement

'Urban and Rural, the best of both worlds'

more low-care and commercial health functions.

Intensive specific care takes place on the first and second level. People who had surgery are picked up by boat and they recover on one of the islands at there own recreational house. So recovery will take place in your own safe and green environment. Every citizen has to have an annual check up in a health centre, which is located in the central park and along the boulevard. So illness can be prevented in a premature stage.

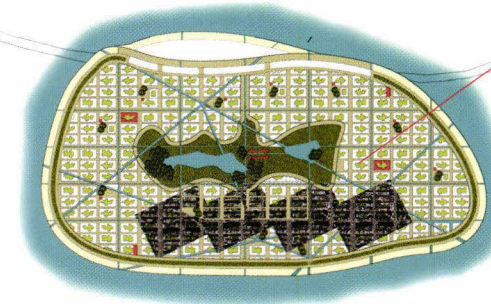
Eldercare is everywhere. Every house can be adjusted to elderly people. Perhaps they stay on the rural islands fulltime to take care of their garden and pets. It's also possible to stay in their luxury apartment in the city.

Common for all healthcare functions is that they are totally embedded in society.

Marker Islands

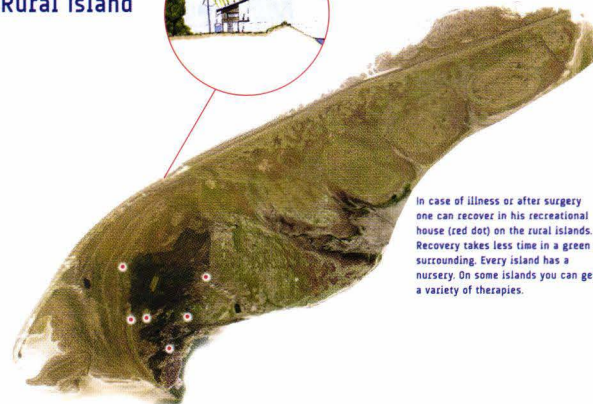
Landscape for a healthy lifestyle

Urban Island

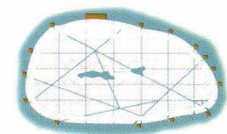


Healthcare in city consists of doctors in neighbourhoods for weekly contact. Health centres in park and on boulevard provide special care on second level and annual check ups. Research centres are located in city centre. Logistics by public transport. Mental and elderly care on both rural and urban islands. Healthcare is totally embedded in society.

Rural Island



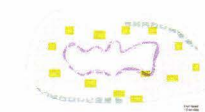
In case of illness or after surgery one can recover in his recreational house (red dot) on the rural islands. Recovery takes less time in a green surrounding. Every island has a nursery. On some islands you can get a variety of therapies.



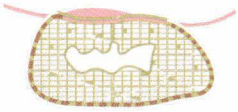
waterways - transport
floating docks - transport to islands



green lung / public green spaces



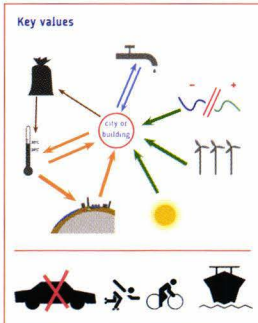
central neighbourhoods
theatre
waterfront commercial



public transport
walking / biking etc.



city buildings on urban islands use seawater for cooling and heating



waste
- limiting emission/discharge

water
- limiting need / demand
- separate emission/discharge
- purifying / reusing rainwater

energy
- limiting need / demand
- sustainable production

heating
- limiting need / demand
- combining surplus and shortage



housing on rural islands are adjusted to tides

Motto *Marker Islands, landscape for a healthy lifestyle*

Main designer *Ir. Marjon Bosman*

Firm *KOW*

Team members *Enos Kruijtbosch, BA*
David Goehring, AIA LEED AP
Ir. Linda Buijsman

Kennistempel

Creating a knowledge phenomenon for the elderly, where they can live and store their life experience and wisdom and transfer it to the following generations. In doing this, they fulfil the moral dimensions of the "successful aging" process and plug the enormous knowledge leak which arises through the demographic aging in our society.

From the elderly perspective

People are getting older and a lot more people get old. How will they face their old age?

25% of the Dutch population will be over 55. These people identify themselves with autonomy and freedom. Personal development is of importance. However, it is inevitable that old age comes with physical limitations. These limitations set boundaries for the possibilities of participation of older people.

'Successful aging' mostly focuses on individual autonomy, often narrowed down to the ability to cope with changing needs. The role of society in this view is mostly limited to facilitating healthcare. However, the following question arises: doesn't the word "successful" mean MORE than adequate housing and healthcare? Man does not live by bread alone: man also needs friendship, self-respect, social recognition, education and involvement, and generativity. Exaggeratedly speaking: does a person actually have to be physically healthy to age well??

Ethicist Don S. Browning describes five moral dimensions of aging well:

- Coping: the need to adapt to changing circumstances;
- Expressing: the need to express oneself in music and art, but also the contact with friends;
- Contributing: the need to contribute to social activities and developments as well as generativity;
- Influencing: the need to influence social processes;

Transcending: the need for personal fulfilment according to spirituality and philosophy. The importance of the first two dimensions will be reasonably constant. The importance of the other dimensions will however considerably increase.

From a society perspective

Images of the elderly vary, but show a simplistic picture. On the one hand we see them as people who enjoy life, are active and travel a lot. On the other hand we see them as people who need a lot of care. Healthcare is an aspect which gets a lot of attention. Society doesn't give old people a large role. However, the people who have the most experience, in different contexts and different foresight, are the elderly. In the foregoing years they experienced lots of situations and activities which led to knowledge that is of uttermost value to society. This can be seen as the strength of the elderly.

If we combine the moral dimensions with this fact we can conclude that knowledge forms the link between the needs of old people and the needs of society. The elderly in the role of knowledge and culture transfers close the structural lag and give the elderly an honourable place in society.

Knowledge

Knowledge (Van Dale): which one gains and learns by study and practice.

According to Nonaka, knowledge can be divided into explicit and implicit knowledge.

Explicit knowledge is the knowledge gained during study and which can be externalized; know-what and know-why. This knowledge can be stored in books, databases and the internet.

Implicit knowledge however is not tangible. This knowledge is based on experience, practice and intuition. The older you get the more knowledge of this kind

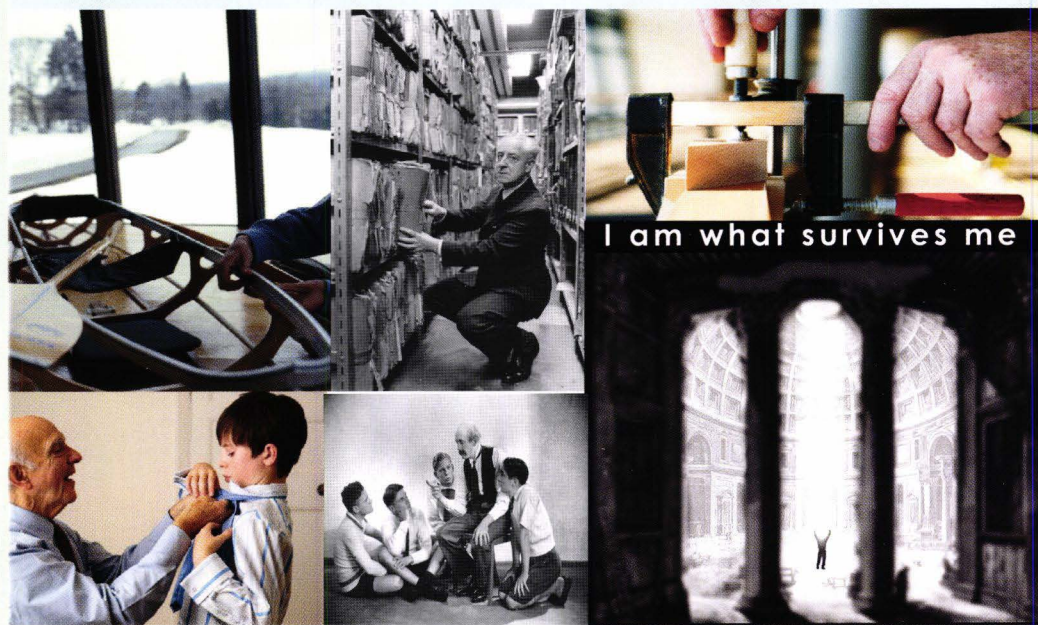
STOP
focussing on weaknesses!
physical abilities

healthcare is more than medicine



START
focussing on strenghts
mental abilities

once the eyes of the body don't see clearly anymore,
the vision of the spirit becomes sharp
Cicero



I am what survives me

you will possess. This knowledge is difficult to pass on to other people by books because it is "locked" inside persons.

Both knowledge types will get a place in the knowledge temple but it is the transfer of implicit knowledge in which the elderly can fulfil their role of the future.

Knowledge temple

Programme:

- Implicit knowledge transfer
- Brainstorm
- Workshops
- Discussions
- Using
- Training

- Sharing experience
- Implicit knowledge transfer
- Spaces for 2-12 persons
- Walk gardens
- Use gardens
- Experience theatre
- Testing rooms
- Meeting rooms

A leitmotiv of knowledge transfer is the social and spatial connection of those who are involved. This will be translated into: open, free space, informal and interactive. Of further importance is that groups aren't too large; a mentor-student relation of two persons up to groups of 10-12 persons. Within these groups a

KNOWLEDGE = POWER

explicit knowledge

books, databases, laws, objects, know-what



How to get it?

study, lecture, speeches

What space facilitates it?

library, self-study spaces, classrooms, archives

tacit knowledge

experience, intuition, crafts, expertise, know-how



How to get it?

workshops, discussion, mentor-apprentice, trying, sharing, training

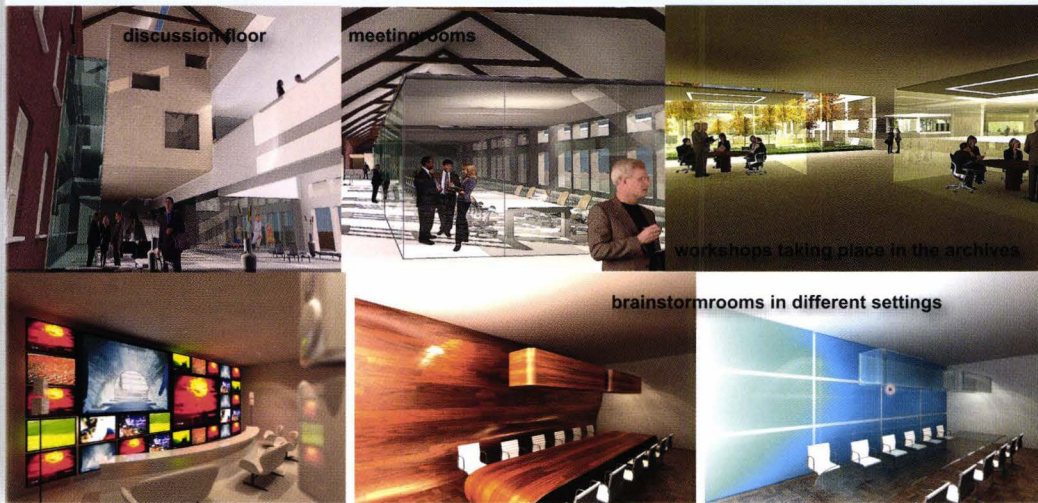
What space facilitates it?

grouprooms for 2-12 people, gardens to wander and practice, meetingplaces, theatre, testrooms, tactilerooms

CREATING a KNOWLEDGE TEMPLE



a glorious temple to honour our elderly and their strenghts. A phenomenon for knowledge in all its forms and qualities. Spaces filled with information, possibilities, skills and abilities. The "ill" ones rule the temple, fulfilling the successfull aging process, leaving their knowledge behind, the legacy of a culture.



relationship of trust and a mutual level of shared knowledge can evolve .

The programme of the knowledge temple will contain libraries, central archives of IJsselmeer, gardens for introspective considerations and also knowledge concerning nature, a theatre to translate firsthand experiences (from WW II for instance) into film or theatre to be seen by future generations, a school for drama and film, to harvest the tacit knowledge from the elderly, brainstorming rooms, meeting spaces, workshop spaces, etc.

Main purpose

The main purpose of the knowledge temple is twofold. On the one hand it is

the place where the moral dimensions of successful aging are truly fulfilled.

The elderly and ill play the ultimate and majestic role of their lifetimes in a space that honours them and that envelopes around their being.

One the other hand the knowledge temple is THE main place for our society to store and harvest knowledge in all its facets, like culture, wisdom and crafts, which would otherwise be extinguished from our society.

Motto Kennistempel
Main designer Björn Schoeberichts

Zorg voor jouw leven

We bring your healthcare as closely to you as possible.

Wherever you are, whatever you do.

The world has finally woken up. It has been a close call and we are not even halfway, but we no longer take Mother Earth for granted. With large investments in sustainable developments, cities have become less polluting and the surrounding land is slowly turning blue and green again.

Foreign cultures have blended in with the Dutch, and the existing social diversity has become even more obvious. The information age has facilitated a wide variety of networks and (sub)cultures in which people can follow their self-chosen path of life. Some people choose to live in homogenous groups, others prefer the richness of mixed cultures or hide in anonymity.

The Dutch economy runs smoothly. The economic differences between social groups have increased, but the Netherlands stays on track with its social history. People take care of each other and healthcare plays an important role in daily life.

With prosperity, new diseases have arrived, and in order not to disrupt the vulnerable and valuable healthcare system, prevention and easy access to healthcare have become very important. By discovering and curing diseases at an early stage, contagion is prevented. In this way people feel healthier, but also the cost benefits are evident.

With today's communication technology, you even can consult the doctor from within the privacy of your own home. The pill-man delivers pills as once upon a time the postman delivered post, or you print your own medication with the pill-printer. Health information is available to the wider public from the internet and experiences on diseases and hospitals are shared among patients. We have become better informed and more aware.

Healthcare has developed in a variety of appearances that are more adjusted to the different lifestyles that exist within society. Various market segments have developed, ranging from prevention to life-saving surgery and from alternative treatments to plastic surgery. This was to be expected, but the same healthcare is offered in many varieties to make a better match with a patient's needs.

The health system is fully integrated in our daily routine. It no longer disturbs your plans for the day, but is as easy as getting your daily groceries. Healthcare is put in the middle of society. Are you always on the road? At the next exit you will find a CURE2GO point. Is the neighbourhood the centre of your life? You can rely on the nearby Healthcare Centre in every district. The super-market, kindergarten and sport centre are around the corner and the mobile Surgery Unit frequently is available for surgery. With this, one can have surgery in the nearness of home, friends and family.

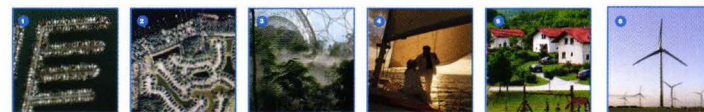
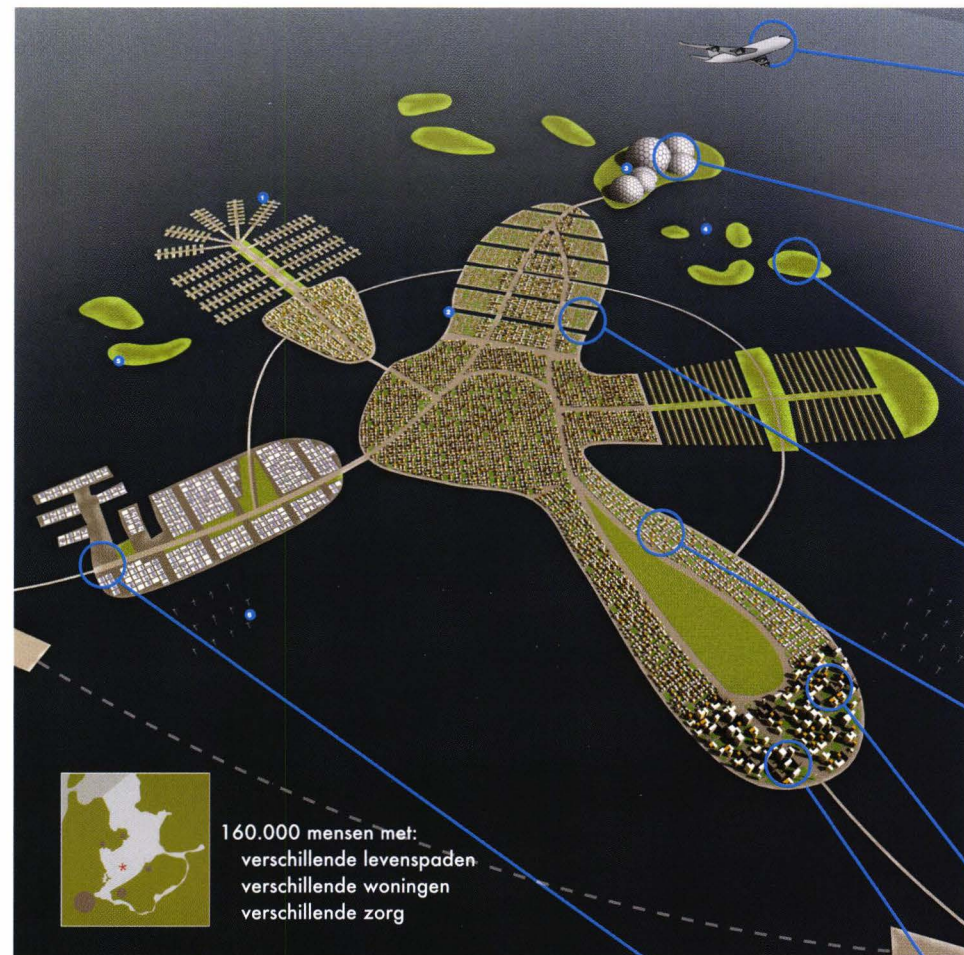
Only for specialized or very complex medical operations the City Clinic is needed, but here also the aim is to bring the patient as closely to home as possible. Where possible, the patient is transported to his home or to the nearest Healthcare Centre, where he can receive care from the personnel or friends or family.

Even though healthcare has developed to a very high level, the need for attention and affection cannot be neglected. Certain groups, such as the elderly, organize themselves and help each other with daily care. This is supported by controllable collective spaces that interconnect small groups of dwellings, facilitating people to trust each other. And when people trust each other, they might as well take care of each other.

Patients with limited mobility and interdependency, who need to recover from surgery or are in need of therapy, can

ZORG VOOR JOUW LEVEN

Wij brengen de zorg zo dicht mogelijk bij jou, waar je ook bent, wat je ook doet.



be hosted in Health Parks. Professional staff arranges all the necessary care and cure, depending on the patient's needs.

Over the past few decades, the need for mental care has been increasing. Some people who are suffering from serious mental disorders are a risk to themselves or their surroundings. They are looked after on care islands, where the surroundings are optimized to their needs and their living environment is not invaded by strangers. Also drug addicts or other people with mental problems can benefit from a satellite location. This will help them break the daily routine they need to change.

The shortage of qualified staff also has a positive side. Some surgery or treatments are much cheaper abroad. As a result, holiday and healthcare can be combined. Out of sight of the social group diseases can be cured, aesthetic imperfections can be corrected or mental problems can be treated. If care is inevitable, it will be as pleasant as a holiday!

The philosophy of the plan is to keep people as much as possible in their own living environment, while providing solutions for their health problems. If people need to be taken out of their living environment, all efforts are made to make this period enjoyable and match with

ZORG VOOR JOUW LEVEN

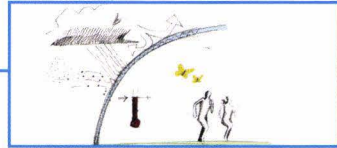


ZORGVAKANTIE

Alle plantbare zorg kan - indien gewenst - prima in het buitenland worden uitgevoerd: zorg met vakantiegevoel en een scherpe prijs voor perfecte kwaliteit. Een fijn klimaat met mooie omgeving zorgt voor een sneller herstel.



Ana-Maria Maissen: In Nederland is een schaarste aan goed gekwalificeerd personeel, maar de behandeling die ik moest ondergaan kon ook hier, in het zonnige buitenland. Al met al kost het niets extra, terwijl ik toch nog op vakantie kan. Het eten is hier heerlijk, en ik krijg extra voorrang bij het herstellen door het prettige klimaat. Mijn vriend is ook mee, dus alles gaat precies zoals ik al van plan was voor mijn vakantie!

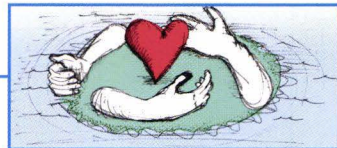


HEALTH PARCS

Het is prettig toeven in deze (tijdelijke) huisvesting. De patiënten krijgen (intensive) specifieke behandelingen en/of zorg. Vrienden/familie overnachten in het parkhotel. Bijv. Health Dome met subtropisch klimaat.



Catharina van der Hulst: Ik herstel hier van de ernstige ontstekingen die ik heb opgelopen bij mijn eendoog. Er is uitstekend personeel dat mijn gezondheid goed in de gaten houdt. Nu het wat beter gaat, zwem en sport ik weer wat om in een goede conditie te komen onder begeleiding van de fysiotherapeut. Mijn vrienden hoeft ik niet te missen want zij kan hier gewoon overnachten. Het is zo een feest!

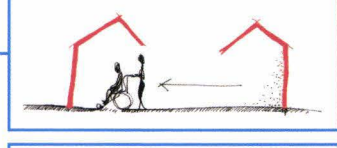


ZORG EILANDEN

Blijfsomplexe zorg met specifieke zorg. Mensen met een zware geestelijke handicap kunnen hier bijvoorbeeld beschermd zichzelf zijn of verslaafd kunnen worden beschermd tegen dat wat hen bedreigt.



Heel D.: Ik moet er echt mee opgehouwen, anders, kwam ik nooit meer uit de gaten. Mijn ex heeft me gered, maar ik weet niet of het nog een keer zo goed zal gaan. Ik droom er alles voor en dat was niet mis. Ik ben nu echt uit het circuit, en begin zometeen klaar te maken voor mijn werk. Jos helpt me dan met de computer en als papa of mama hem weer ophaalt, dan draaien ze meteen de nieuwe lamp er even in.



CARE2GETHER

Kleine besloten woongemeenschappen waar mensen vertrouwen kunnen opbouwen en elkaar zorg kunnen verlenen (selfcare). De woonvorm is hierop afgestemd (bijv. hofje) maar professionele (huis)zorg is ook beschikbaar.



Willeke van Es: Het is heel gezellig in ons hofje. Wij ouderen krijgen onze geliefden, maar we staan erin. Zo heb ik elke week boodschappen voor Els, terwijl zij mijn administratie doet. Geregeld komt ook mijn huisarts. Mijn zoon en zijn vrouw wonen ook in de stad en hebben dat wat bij voor elkaar of voor hun werk. Jos helpt me dan met de computer en als papa of mama hem weer ophaalt, dan draaien ze meteen de nieuwe lamp er even in.



BUURTZORGCENTRUM

Midden in de buurt vind je binnen je dagelijkse routine alle dagelijkse en (poliklinische) zorg. Met docking station voor mobiele Operatie Kamer en nazorghotel.

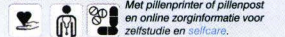


Joyce de Bijk: Ik ga daar zo mijn dochter op halen bij de kinderopvang, maar ik loop eerst even naar buiten. De dokter komt ook, maar ik heb het niet nodig. Laatst had mijn moeder dat ook en kon werd ze meteen opgenomen. Een dag later werd ze ontslagen in de regio. Oh, ze heeft hier een week geleefd, maar omdat ze zo dichtbij bleef, konden we haar elke dag bezoeken!

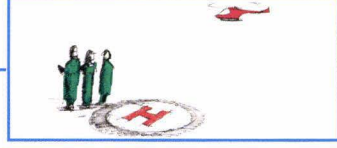


GEZOND@HOME

Met de e-dokter en de tele-zuster hoef je je huis niet meer uit voor dagelijkse zorg of doktersbezoek. Middels webcams en grote touchscreens schermen kan het digitale spreekuur worden bezocht en contact worden gehouden met zorgverleners, familie, vrienden en lotgenoten waar ook ter wereld.



George de Jong: Omdat ik het weer mis is met mijn neus, ben ik digitaal even bij de dokter langs geweest. Hij heeft mij medicijnen voorgeschreven, die ik met de pillendrucker direct heb uitgeprint. Dat is handig want ik ben niet meer zo goed ter been. De tele-zuster is via de webcam altijd online, dus als er iets mis gaat, dan ik moet alleen en komt ze meteen langs. Via de webcam spreek ik wel eens met mensen met dezelfde kwaal als ik. En ik pokers met mijn vrienden ook online!

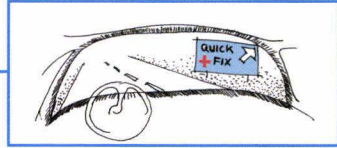


STADSKLINIEK

Uitsluitend voor specialistische en complexe ingrepen die hoge eisen stellen aan de Operatie Kamers en personeel. Gericht op zo snel mogelijke terugkeer in eigen leefomgeving. Met trauma-heli en intensive care.



Simone van der Elst: Ik zag die vrachtwagen te laat, en toen ik weer bijkwam, was ik hier gebracht met de traumaheli. Dat was schrikken, maar 't is nog meegevallen. Mijn vriend komt zo en dan gaan we naar huis. Het verloop ging goed, dus ik heb het naar het buurtzorgcentrum behaald voor comfort. Mijn dokter is digitaal, dus dat gaat makkelijk. Online kan ik documentatie over de complicaties ophalen.



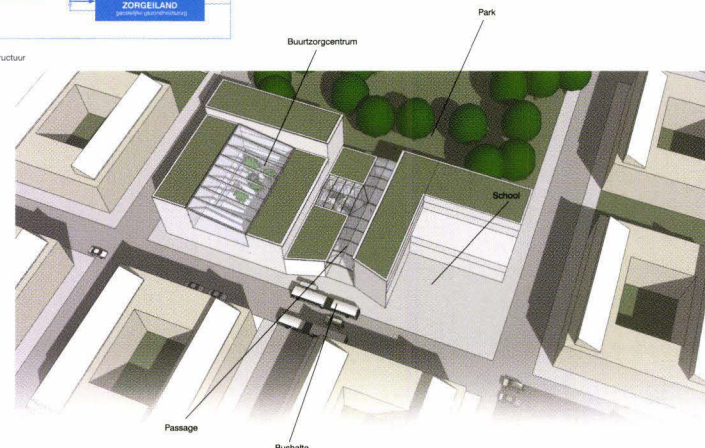
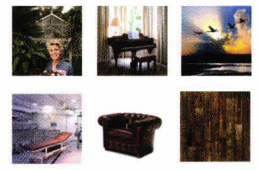
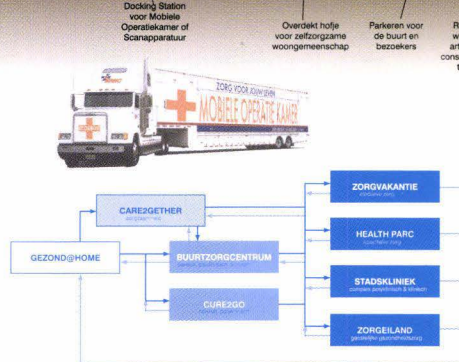
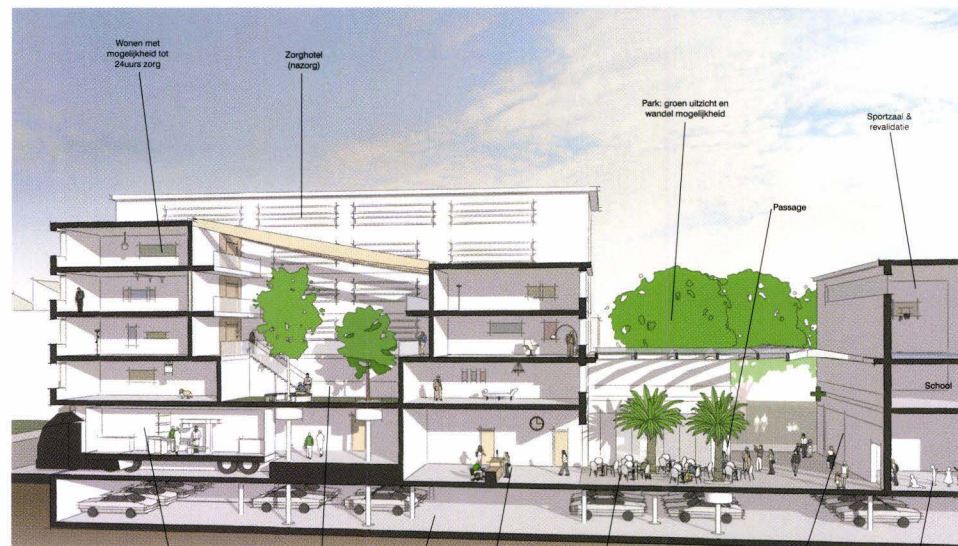
CURE2GO

Hypermoderne 'cure-on-the-go' punten aan de snelweg of infrastructurele knooppunten. Op vrijwel ieder moment kan je hier per direct terecht voor een tandarts, doktersconsult of poliklinische behandeling. De hotelkamers kunnen als rustruimte of tijdelijke werkplek worden gebruikt.



Louis van Wilden: Als ik voor een 'quickfix' langs de dokter, dan tandarts of het ziekenhuis moet, wil ik daar niet een hele dag voor kwijt zijn. Ik ga dan buiten winkelen of tussen mijn etappes door naar het Cure2GO punt. Het gaat snel en ik hoef er niet eens zo lang te blijven. Als het nodig is, wordt ik meteen behandeld en kan ik direct weer aan de slag. En ondertussen krijgt mijn auto ook een check-up en wordt hij gewassen en volgtart.

ZORG VOOR JOUW LEVEN



the path of life of the patient. That is why we make the places where health-care is provided feel like home.

The philosophy and the design reflect the diversity of mankind. As we all differ by age, background and orientation in life, we do think different, we do live different, and we do have our preferences in care.

Motto Zorg voor jouw leven
Main designer Jelk Kruk
Firm SuperNova Studios
Team members Job Beerthuisen
Stephan Nierop
Marianca Boonk
Myrthe Schrijnemakers

Vital Wise Water

The design competition Healthcare 2025 poses the question to think about the organization of healthcare in a new city in 2025. This question comes about at a time when the aging population increases and a drastic shift is about to occur in relation to supply and demand. The patient evolves into a demanding careconsumer. It is also an era in which increasing attention will be paid to environmental pollution, climate change and the accompanying issues concerning energy resources. It is therefore unthinkable that in contemplating such a new city, the energy debate will not play a major role.

Care location

Within such a framework it is not opportune to sacrifice part of the IJsselmeer area, the Markermeer, for a city. The region is used by large parts of the country as a water buffer for agriculture and the environment, as well as for water supply and recreational purposes. Thinking in terms of climate change and shortage of energy the vision emerged that cities will develop at those places where primary, local and durable resources are at hand. There will also be increased demands concerning the reliability of the energy system.

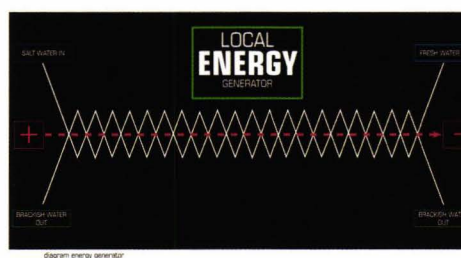
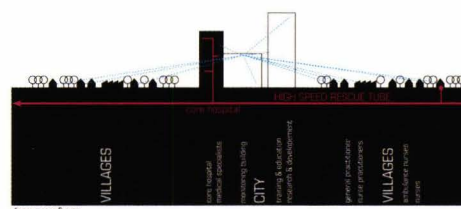
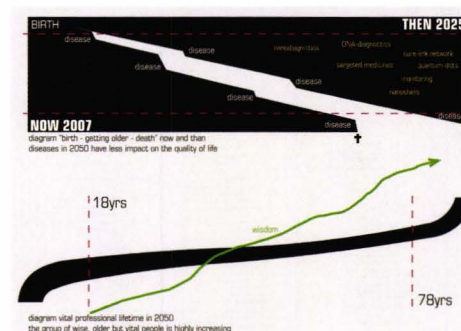
As a foundation and illustration of this energy vision we have thus decided to develop this city on the Afsluitdijk. This immense 30 kilometer long "infrastructure" is in need of thorough renovation, among other things due to the expected increase of sea levels. This project can be suitably combined with the creation of a city. More importantly, it enables the possibility to generate sustainable energy by combining fresh and salt water. Due to the strong linear base construction of the dyke and the continuous presence of the two resources along the entire length of that construction, it enables the decentralization of the entire energy system for the city. At a certain distance from each other large energy generators will be positioned, which for a small part will

supply primary energy on the one hand and serve as back-up storage for surrounding generators on the other. This extreme morphological context constitutes the basis for the city. By projecting our care vision of the future on such a banal shape the key aspects of future care are displayed in a strong and clear fashion.

Care vision

Our vision on healthcare in 2025 argues for a large investment in the areas of biomedical technology, biomedical nanotechnology, pharmaceuticals and medical science. We are for instance contemplating the use of targeted medicine and comparative developments in the field of genomics research. Nanotechnology - in the area of diagnostics - offers the opportunity to use miniaturisation, measurements on a tiny scale with smaller appliances, close to the body or even placed within the body. By positioning biomarkers the progress of an illness and the effects of treatments can be monitored. The next step will be control at a distance, which will become a reality in 2025. Telecare for example enables the monitoring of people's blood pressure or chronic diseases. There is high expectancy as this creates advanced care with less required jobs. A parallel leap in efficiency will be established by developments in early diagnostics.

We expect that healthcare in 2025 will be much more efficient. Illness will remain, though can be controlled, and chronic diseases will be managed at a distance without interference for the patient. Congenital defects will decrease and dying is regulated, as physical suffering will be reduced considerably. In general, suffering and ailments will have less and less impact on the quality of life. The large group of energetic elderly which will emerge will have a great impact on the organization of society; in this modern world with an increased focus on recreation and culture, the knowledge and wisdom of elderly people will be welcomed and used efficiently.



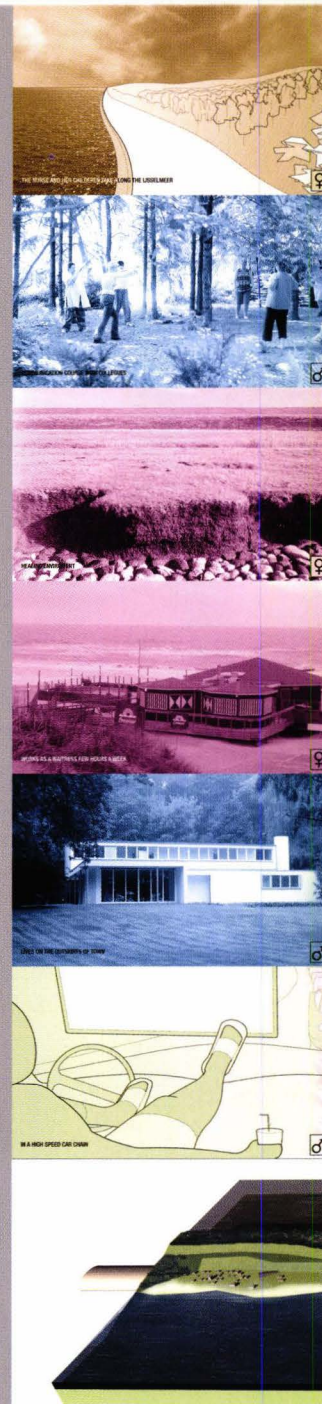
VITAL WISE WATER - 1

Care structure

The care structure within the aforementioned context will be characterized by a strong separation between cure and care and by centralization versus decentralization. The human measure reaches the highest level of attainability. The secondary care situation will mainly focus on ensuring rapid aftercare for the patient to enable recovery in a relaxed environment. This recovery situation will be scarce in the city centre but mainly exist in the village and domestic environment. Primary care, on the other hand, will be firmly centralized in the city centre. This reduces costs, is highly efficient and promotes intercollegiate

communication. In addition, the lines of communication with regard to research and development will be very short.

- 1) Primary 'non-specialist' care: general practitioners as the prime coordinators are scattered across the city. Their practices are positioned close to people and provide psychosocial welfare, nurse practitioners, midwives, disabled care and physiotherapy among others.
- 2) Secondary care: focus on ensuring rapid aftercare, supplied in the village and domestic environment.
- 3) Tertiary care: recovery, categorized institutions and aftercare are mainly provided in the home environment or in





CULTURE/LEISURE



EDUCATION



HEALTH CARE



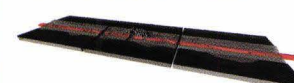
WORK



HOUSING

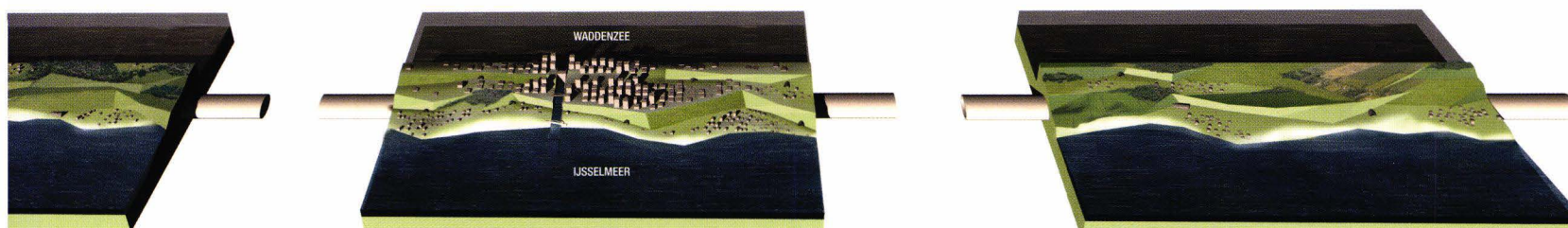


INFRASTRUCTURE



CHARACTERS

<p>Female, 18 years</p> <ul style="list-style-type: none"> Plays tennis in a public outdoor school Lives with her parents in a dwelling of the city centre Likes shopping Works a few hours a week as a waitress 	<p>Male, 71 years</p> <ul style="list-style-type: none"> Retired Worked as a financial adviser Likes classic music and sailing Has a high blood pressure Has blood pressure in some continuous monitoring Uses targeted medication, takes well Works a few hours in the week as an adviser Occasionally gives trainings for teachers
<p>Male, 39 years</p> <ul style="list-style-type: none"> Medical profession Works at the monitoring centre Married, two children Likes sports and helping his parents at the farm Great interest in home medicine and radio devices 	<p>Female, 45 years</p> <ul style="list-style-type: none"> House practitioner in a village Divorced, three children Takes care of a number of clients in the village Likes countryside and often takes a walk with her children Frequently attends courses to brush up her knowledge



VITAL WISE WATER - 2

VITAL WISE WATER - 3

small housing communities in a relaxed environment.

On the basis of this care structure a vision of the city design emerges. The city centre houses a number of high-quality and central care services, which blend in with living, working, shopping, culture, recreation and education. Outside the centre there is ample space for a village-type commuter environment with abundant room for sports and recreation. The landscape outside the centre is characterized by beaches, dunes and pastures.

The design of the strong linear shape of the city will hardly generate negative

effects as an advanced mobility system will compensate for the design factor. This system will be developed with a maximum rescue time of 15 minutes.

In conclusion, we believe that the developments in healthcare will be high-tech. At the same time care will become more tailor-made, with the individual at the core. The care system will be managed more efficiently by shorter lines of communication and few communication barriers. Society in 2025 will be characterized by intangible and abstract technological developments on the one hand and direct, transparent and compassionate care on the other.

Motto	<i>Vital Wise Water</i>
Main designer	<i>mw. ir. Branka Vuksanovic Duric</i> <i>dhr. ir. D.Lammers</i>
Firm	<i>van aken architecten</i>
Team members	<i>dhr. Ir. R. Ubachs</i> <i>dhr. Ir. J. Swinkels</i> <i>dhr. W. Gorter</i> <i>mw. J. Lommen</i> <i>dhr. Dr. G.J. Lammers</i> <i>dhr. J. Froidbise</i>

Isle Care

The Dutch condition

Dutch healthcare has shown an upward trend since 1848. What is striking about this trend is the distinction between several levels of healthcare. These levels coincide with a change in social views concerning healthcare and city planning, as well as with the gradual individualization of healthcare. The first level of healthcare concerns mass hygiene.

The second level addresses the suppression of large scale diseases and, thus, public health.

The third level concerns the patient. Prevention and early detection of all illnesses is used to avoid personal suffering. Finally the fourth level emphasizes the psyche. Besides perceptible diseases, also apparent shortcomings become part of healthcare.

Advancing medical insights and technological innovations have made development in healthcare possible, but they did not generate it. At the basis of the rising level of healthcare is the urge of society and the individual to live a healthy and carefree life. The ideal is elimination of all diseases.

Care Paradox

Failure of the human body, however, is eventually evident. There is a taboo on sickness and as a result, a healthcare phobia. The health one (still) has is considered obvious. A causal connection between syndrome and source is ignored. One smokes, but does not consider cancer. This denial also occurs on a scale of society. Many dependants on healthcare become isolated or dismissed from everyday life. Mental and psycho-geriatric patients, for example, are placed in institutions. The tendency is: as the sickness increases, the healthcare institution grows and is continuously placed further away from everyday life. This constitutes a paradox. Whereas the ideal of healthcare is the most favourable living condition, those who need healthcare are actually excluded from this living condition.

If more than a certain amount of care is needed, one becomes dependant on an institution. This way one rapidly strands in the care trap: whoever can only partly take care of himself, is placed in a home outside society, where one loses most of one's self-determination. On the one hand this causes care to disappear from neighbourhoods, while on the other all daily care in an institution is labelled as healthcare.

Towards humane and economical healthcare

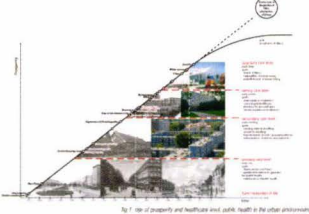
Healthcare expenses have been growing due to an increase in healthcare demand as a result of demographic changes and diminishing lethality of diseases. Also the psychological perceptions of illness and discomfort have changed. At this moment the Dutch government financially reacts to the increased healthcare expenses by changing its policy. In the AWBZ healthcare expenses are separated from housing expenses. The government policy also shifts from fully controlling to supervising the spending of funds within healthcare. An open market for healthcare insurance is stimulated in an attempt to cut costs and increase service. Those who demand care are thereby enabled to influence what healthcare is given. The current developments create opportunities for change in the healthcare system during the next 18 years.

Scholars argue that the social frame of mind of a community is determined by an oscillatory development that can be tied directly to the Kondratiev curve (an evidence based economic model used for development scenarios). This would imply a more socially aware community in 2025. This trend has to be combined with two other developments, growing individual self-determinacy and the diminishing influence of space on social structures due to growing physical and virtual mobility. This indicates a development towards a society in which people are more socially aware, primarily within their self-chosen social

Isle Care

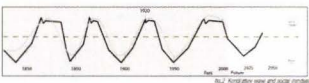
The Dutch condition
The Dutch healthcare has developed along a rising line since 1848, as it shows in figure 1. What is striking about this figure is the distinction of several levels of healthcare. These levels coincide with a change in social views concerning healthcare and city planning, as well as with the gradual individualization of healthcare. The first level of healthcare concerns mass hygiene. The second level addresses the suppression of large scale diseases and thereby public health. The third level concerns the patient. Prevention and early detection of all illnesses is used to avoid personal suffering. Finally the fourth level emphasizes the psyche. Besides perceptible diseases, also apparent shortcomings become part of healthcare. These shortcomings and diseases are no longer isolated as a result of this.

To make a clear representation of the level of healthcare and its part in society in 2025, it is of great importance to acknowledge the things that hinder the development which is described above. Advancing medical insights and technological innovations have indeed made possible development in healthcare, but they did not generate it. At the basis of the rising level of healthcare is the urge of society and the individual to live a healthy and carefree life. The ideal is elimination of all diseases.



Care Paradox
Failure of the human body, however, is eventually evident. There is a taboo on sickness and as a result, a healthcare phobia. The health one (still) has is considered obvious. A causal connection between syndrome and source is ignored. One smokes, but does not consider cancer. This denial also occurs on a scale of society. Many dependants on healthcare become isolated or dismissed from everyday life. Mental and psycho-geriatric patients, for example, are placed in institutions. The tendency is: as the sickness increases, the healthcare institution grows and is continuously placed further away from everyday life. This constitutes a paradox. Whereas the ideal of healthcare is the most favourable living condition, those who need healthcare are actually excluded from this living condition.

If more than a certain amount of care is needed, one becomes dependant on an institution. This way one rapidly strands in the care trap: whoever can only partly take care of himself, is placed in a home outside society, where one loses most of one's self-determination. On the one hand this causes care to disappear from neighbourhoods, while on the other all daily care in an institution is labelled as healthcare. The accumulation of these in need of care in institutions, the care coverage decreases and healthcare expenses are needed.



Towards a humane and economical healthcare
Healthcare expenses have been growing due to an increase in healthcare demand as a result of demographic changes and diminishing lethality of diseases. Also the psychological perceptions of illness and discomfort have changed. At this moment the Dutch government financially reacts to the increased healthcare expenses by changing its policy. In the AWBZ general law on special healthcare costs, healthcare expenses are separated from housing expenses. The government policy also shifts from fully controlling to supervising the spending of funds within healthcare. An open market for healthcare insurance is stimulated in an attempt to cut costs and increase service. Those who demand care are thereby enabled to influence what healthcare is given. These developments are favourable to the development of a humane and economical healthcare system. However, without the structure of the system could improve the quality of healthcare as well as address its financial problems. The current developments create opportunities for change in the healthcare system during the next 18 years.

Scholar argues that the social frame of mind of a community is determined by an oscillatory development that can be tied directly to the Kondratiev curve (an evidence based economic model used for development scenarios). This would imply a more socially aware community in 2025. This trend has to be combined with two other developments, growing individual self-determinacy and the diminishing influence of space on social structures due to growing physical and virtual mobility. This indicates a development towards a society in which people are more socially aware, primarily within their self-chosen social



Isle Care
We propose a healthcare system that accommodates the need for self-determinacy for every citizen including those in need of care. The new healthcare is organized with the client in mind, illness and care needs will be addressed in compliance with one's time schedule. In this way, the healthcare system will be organized to meet the needs of the individual, currently institutionalized care potential, 80% of all healthcare and 100% of all care in brought to every doorstep.

At the basis of the new city lie three different levels of healthcare. These levels are determined by the amount of people needed to insure their health. These levels are: 1. Mass hygiene (1848-1900), 2. Suppression of large scale diseases (1900-1950), 3. Patient care (1950-2000), and 4. Psyche (2000-2025). The first level of healthcare concerns mass hygiene. The second level addresses the suppression of large scale diseases and thereby public health. The third level concerns the patient. Prevention and early detection of all illnesses is used to avoid personal suffering. Finally the fourth level emphasizes the psyche. Besides perceptible diseases, also apparent shortcomings become part of healthcare. These shortcomings and diseases are no longer isolated as a result of this.

The components needed for a city with 160,000 inhabitants are laid out to their maximum spread showing the

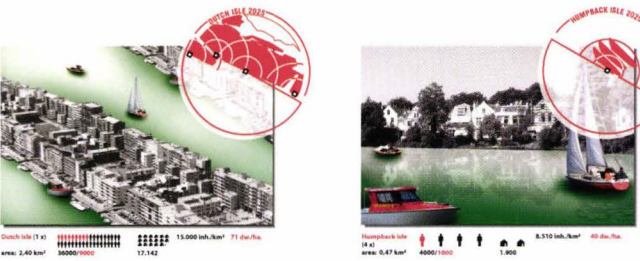
The integration of all healthcare within the neighbourhood, reduces the negative social effects of Block. Even when you is in need of full care this doesn't mean one is isolated from society. The current perception of people in care will change. The healthcare system and now eventually substitute their money concerning care for mental life with the acceptance of the fact that in order to stay healthy and live carefree, healthcare is required.



Figure 4: maximum healthcare coverage for 160,000 people projected in the Maphorism. Figure 4: maximum healthcare coverage for 160,000 people projected in the Maphorism. Figure 4: maximum healthcare coverage for 160,000 people projected in the Maphorism.



Figure 5: area covered by transport will half over water right half over land. Pictures below show possible habitats within transport reach.



groups but also of society as a whole, as long as this doesn't compromise one's individuality.

Isle Care

We propose a healthcare system that accommodates the need for self-determinacy, for every citizen including those in need of care. The new healthcare is organized with the client in mind, illness and care needs will be addressed in compliance with one's time schedule. By breaking down the healthcare system into its smallest feasible parts and by redirecting currently institutionalized care potential, 80% of all healthcare and 100% of all care are brought to every doorstep.

At the basis of the new city lie three different levels of healthcare. These levels are determined by the amount of people needed to insure their feasibility. Their disposition is derived from the maximum accepted travel time to and from clients. There are different care levels. The first care level ensures 80% of the healthcare needed by a community of 4000 people, its focus is oriented on first-line cure and care. The third care level has an emphasis on cure, and contains a higher level of technology and specialization. The components needed for a city with 160,000 inhabitants are laid out to their maximum spread showing the

Isle Care



Fig 7. *Chyplan*, healthcare coverage

Fig. 8. Cystoplasmic mobility over water.



Bay isle  4,301 inh./km² 20 dw./ha.
(5 x)  1,900
area: 0.93 km² 4000/11000

Manhattan isle
(4 x)
area: 0.14 km²

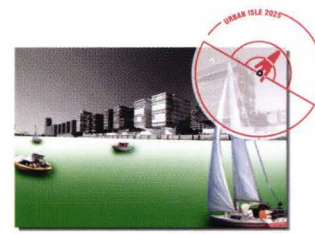
4000/1000

1,900

28,571 inh./km² 127 dw./ha.



Fig. 10: The backbone of the "transport". In this backstage area the internal communication with the different healthcare segments is ensured by shared facilities and by sharing the responsibility by emergency healthcare.



Pantopus **100** (3 x)   10 inh./km² 4 dw./ha.
area: 398 km² 4000/1000 1 900

Urban site (4 x)  23,529 inh./km² 112 dw./ha
area: 0.17 km² 4000/1000 1,900

vast area this care system will cover. The unique aspect of the immense water plane is used to the full extent within the mobility aspect of this organizational system. In a land based situation the same system will be more path oriented but will not necessarily be smaller. Within this area the city is designed, with units of 4000 people at its basis. You can live on your own isle in the middle of a sea and still have full healthcare coverage! At the heart of every 4000 people area lies a 'careport', an agglomeration of first-line healthcare facilities, each with its own identity. These facilities are self-reliant and deliver services 'in-shop'

as well as 'in-home'. The careport also houses a communal area, the backbone of the care system. In this backstage area the internal communication with the different healthcare segments is assured by sharing facilities and by sharing the responsibility for emergency healthcare.

The integration of all healthcare within the neighbourhood reduces the negative social side-effects of illness. Even when one is in need of full care this doesn't mean one is expelled from everyday life. The common presence of people in need of care will dissolve the healthcare phobia and may eventually substitute the

money consuming quest for eternal life with the acceptance of the fact that in order to stay healthy and live carefree, healthcare is required.

Motto	<i>Isle Care</i>
Main designer	<i>Paul M.P. Goltstein</i>
Team members	<i>Dirk H. van de Pol</i>
	<i>Betty F. Aarts</i>
	<i>Jeroen de Bos</i>
	<i>Dipl.-Ing. Doreen Feresztyn</i>
	<i>ir. Niels Olivier</i>
	<i>ir. Priscilla Esser</i>
	<i>Dhr. Ronald Hoppel</i>
	<i>Mr. Ed Maagdelijn</i>
	<i>Dhr. Mario Nossin</i>

A caring network

Dynamic network of care

The relation between hospitals and contemporary societies seems very intricate to describe, define and apply to hospital design. Societies keep dynamically changing and evolving, often beyond any pattern of reasonable prediction. So do hospitals, especially in times of digital revolution, when every week new, ground-breaking technologies appear, and each of them could potentially lead to a significant alteration of healthcare practice.

It is common to attempt to understand this intricate relation by identifying general trends and tendencies in healthcare and society, and proceeding from these trends to define a system for healthcare organization. From such systems, spatial requirements are normally derived for designing hospital and other healthcare buildings.

However, such trend-based approach has very significant shortcomings. It does not take into account the incredible speed by which trends change in contemporary societies. The recent boom of new digital technologies has resulted in such rapid changes in all aspects of our lives. We need a much more immediate and efficient way of dealing with those dynamic processes. This can only be achieved by independently addressing each distinguishable component of the hospital seen as a system, ranging from human specialists to healthcare technologies, and at the same time separately taking into consideration each individual person constituting the society and studying all their interrelations.

Therefore we have to accept the fact that hospitals can no longer operate as fixed institutions. They have to effectively work as a complex network of fully autonomous facilities, specialists and patients. A network that can continuously change, evolve and adapt dynamically. Designing a building to accommodate such a dynamic network is simply impossible in a traditional way.

However, new digital design, manufacturing and interaction technologies allow to approach the design itself as dynamic network, without the need of constraining the entire system by a fixed organizational construct, nor by a definite building form. The elements of the building will now be themselves active parts of the dynamic hospital and social system.

Distributed hospital - vision

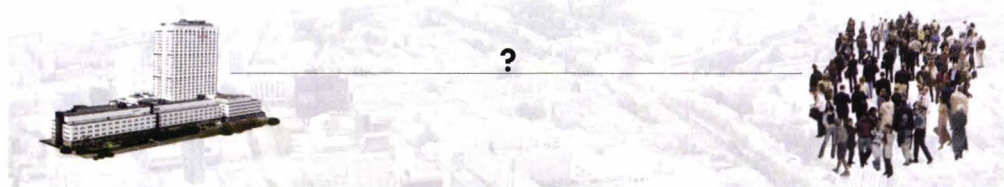
In 2025 hospitals as we know them will no longer exist. Traditional components of a hospital will further separate themselves spatially and organizationally. They will evolve in their functionality and nature to become highly autonomous. Yet, at the same time, they will be intensively, dynamically and instantly connected to each other and to their care-needing clients by digital means, forming a dynamic 'caring network'.

Personal monitoring devices, being an advancement of mobile phones and PDAs, will measure people's activities and report any kind of disorders. Dynamically assigned doctors assisted by intelligent diagnostic systems will be able to instantly and remotely advise their patients.

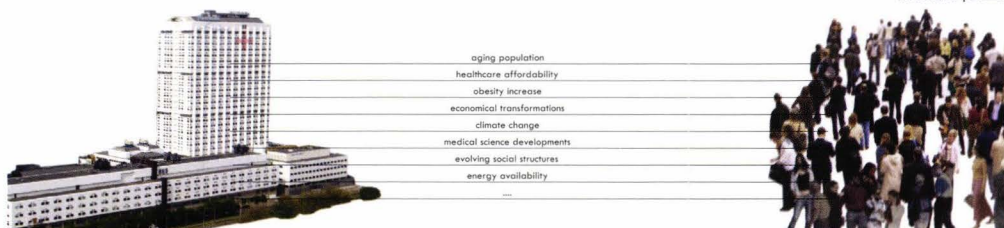
Specialized medical facilities and services will be flexibly distributed in urban and suburban centres to facilitate easy access for everyone. Market forces will dynamically drive either emergence or disappearance of those services. Among them genetic labs will provide new, remote and non-invasive ways of treating most of the diseases that today require long-lasting hospitalization. Not only remote diagnostics, but even remote operating rooms will be possible, providing patients with treatments by the best surgeons, regardless of the separating distance. Emergency and rescue stations will be more distributed as well, linked with a highly efficient patient transportation system. Centralized, concentrated hospitals

1.

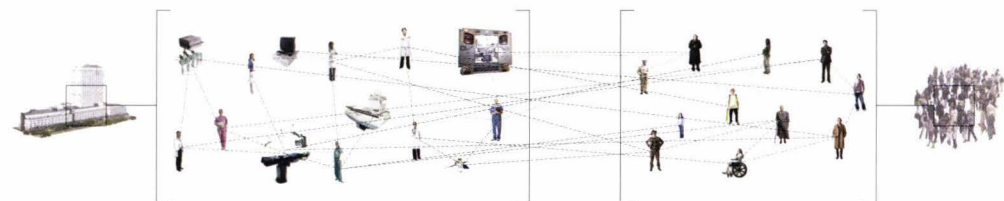
Dynamic Network of Care



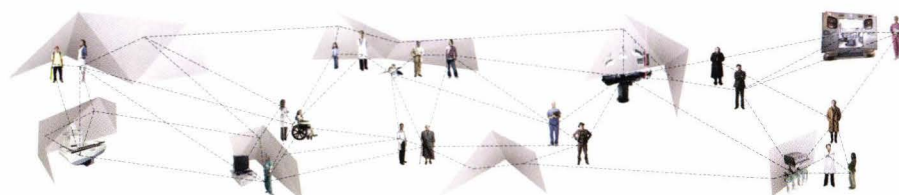
the relation between hospitals and contemporary societies seems very intricate to describe, define and apply to hospital design. societies keep dynamically changing and evolving, often beyond any patterns of reasonable prediction. so do hospitals as well, especially in times of digital revolution, when every week new, ground-breaking technologies appear, and each of them potentially may lead to a significant alteration of healthcare practice



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however, such trend-based approach has very significant shortcomings. It does not take into account the incredible speed at which trends change in contemporary societies. the recent boom of new digital technologies resulted in such rapid changes in all aspects of our lives. we need a much more immediate and efficient way of dealing with those dynamic processes. this can only be achieved by independently addressing each distinguishable component of the hospital seen as a system, ranging from human specialists to healthcare technologies, and at the same time separately taking into consideration each individual person constituting the society and studying all cross-relations between them



therefore we have to accept the fact that hospitals can no longer operate as fixed institutions. they have to effectively work as a complex network of fully autonomous facilities, specialists and patients. a network which can constantly change, evolve and adapt dynamically. designing a building to accommodate such a dynamic network is simply impossible in a traditional way. however, new digital design, manufacturing and interaction technologies allow to approach the design itself as dynamic network, without the need of constraining the entire system by a fixed organizational construct, nor by a definite building form. the elements of the building form will now become themselves a part of the dynamic hospital system

motto: a caring network

will disappear. Intensive care will be offered for both serious and light cases in hospital resorts, providing personalized service to patients. Hospital resorts will be classified like hotels with starts, providing basic to luxurious care levels for all sorts of patients. In all cases, the main goal of those institutions will be to serve and care for people in the most individualized way possible.

Architecture in constant dialogue

a 'dialogue' means constant interaction between parties. Architecture has always been interactive. Buildings have always been built in response to specific human

needs, they change over time and eventually they deteriorate or get demolished when they can't provide an answer anymore. With digital, mass customized production this process can be enormously accelerated. Whenever there is a need, building forms can be easily altered by adding or removing elements that can be produced almost instantaneously.

Some of those elements can stay flexible and keep changing in dimensions even after being assembled. In this way buildings can be able to immediately alter their shape within flexible boundaries of their formal topology. In order to fulfil their role as active parts

2.

Distributed Hospital - Vision



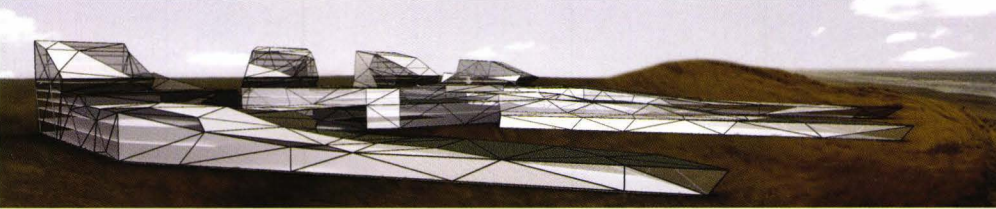
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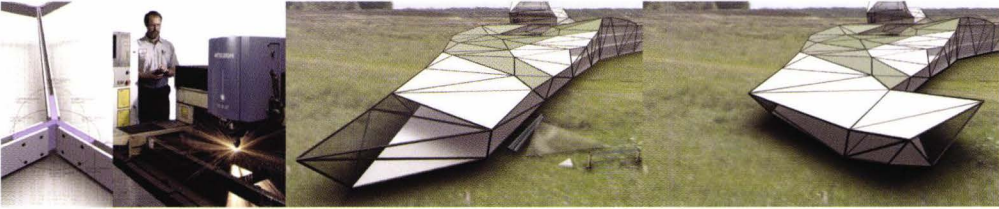


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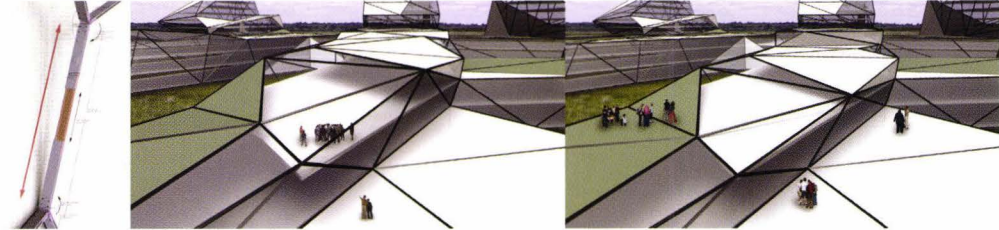
motto: a caring network

3.

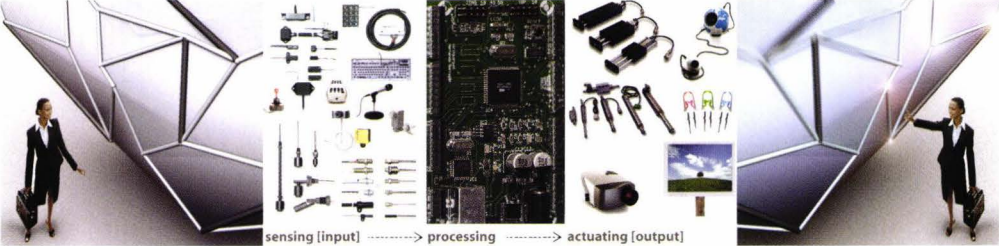
Architecture in Constant Dialogue



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in order to fulfill their role as active parts of the caring network, involved buildings need to be able to actively communicate and perform in relation to each other and to their users. to achieve this, their autonomous components can be extended with digital sensing, information processing and eventually dynamical performance capabilities



dynamic performance does not only mean movement. dialogic buildings will integrate all sorts of media, including video, light and sound. they will become a medium themselves in order to subtly assist people in their daily activities. such dynamic, ubiquitous architecture will be not just a mere background for people's activities. it will become an active partner in all aspects of their daily lives. it will have a substantial role in healthcare, adding a sub-system of active spatial nodes to its 'caring network'

motto: a caring network

of the caring network, involved buildings need to be able to actively communicate and perform in relation to each other and to their users. To achieve this, their autonomous components can be extended with digital sensing, information processing and eventually dynamical performance capabilities.

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activities. It will become an active partner in all aspects of their daily lives. It will have a substantial role in healthcare, adding a sub-system of active spatial nodes to its 'caring network'.

General Philosophy

Healthy living

Preventive medicine

Ease and Convenience

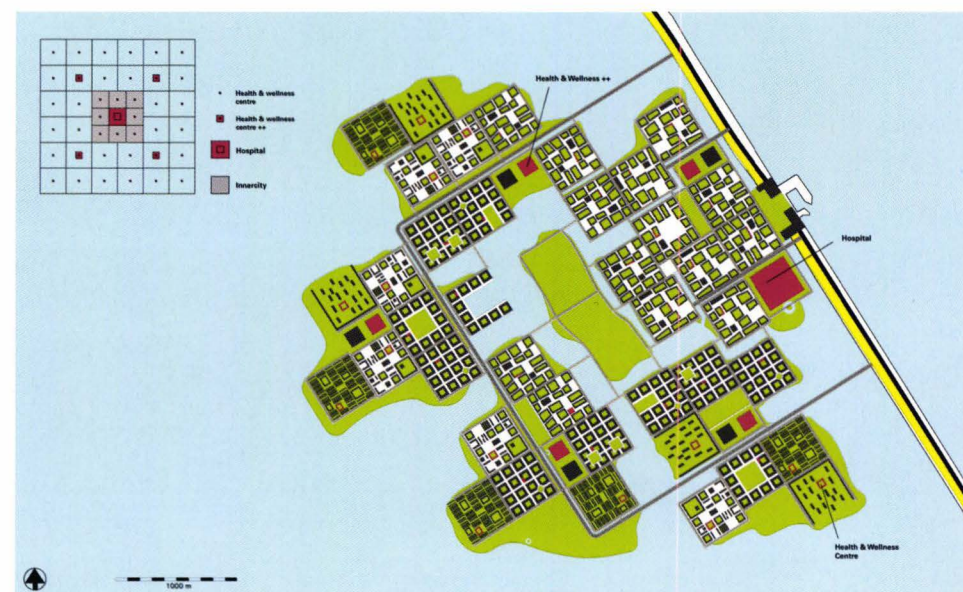
Markermond

happy feelings and healthy behaviour like sports, relaxation, fun and amusement.

A maximum convenient walking distance for daily needs of about 400 meters dictates a rational grid structure for the city of Markermond. Neighbourhoods consist of 4000 people, an efficient basis for providing primary health care. Therefore the density of the build environment is high, but it is justified by the high quality of the surrounding public areas, green (on roofs), and the proximity of water, which will contribute to the healing environment and durability of the city.

Cure in the City

Healthcare 2025: Buildings for the future

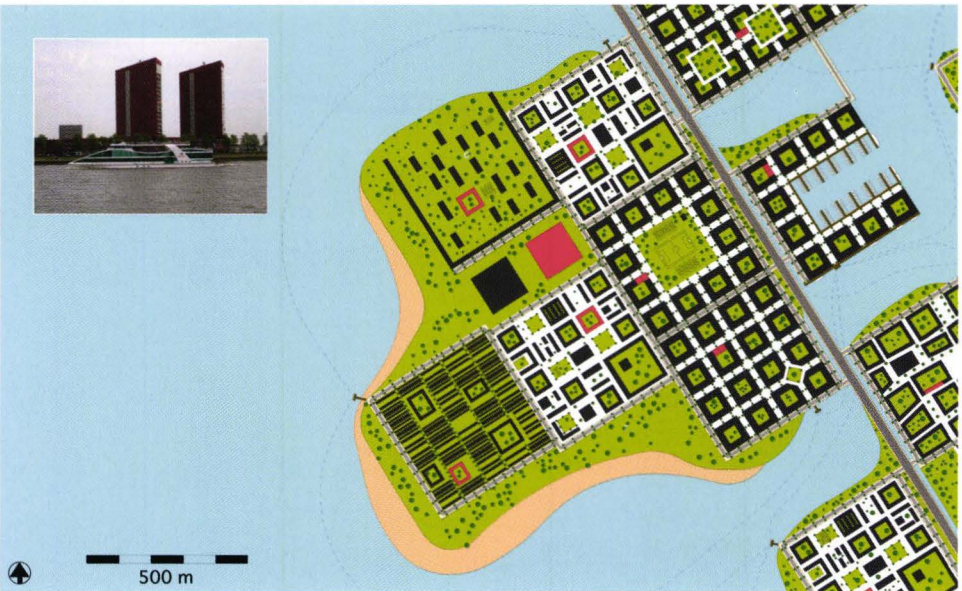
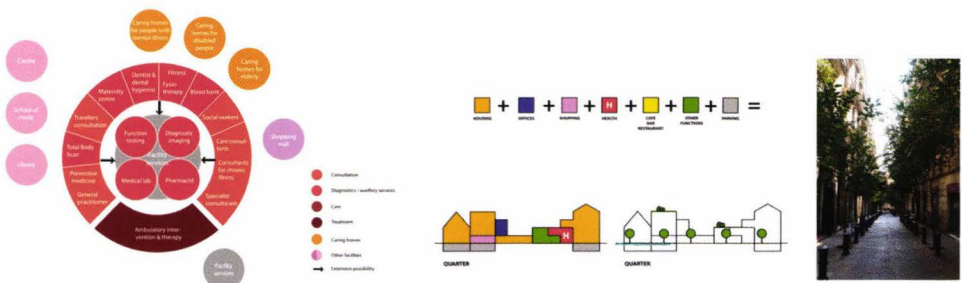


for consultation in the hospital, but this mostly takes place in HWCs.

In your own Quarter

Caring Homes

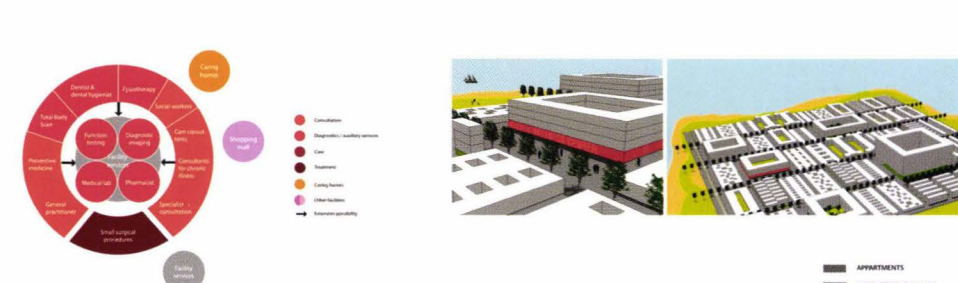
Health(y) around the block



Quarter

- Unnecessary transportation is minimized
- Most specialist care is present in your own quarter
- Stay in your own familiar area through all ages
- Live in your home, with customized support when needed

Health(y) around the block



Neighbourhood

- All daily needs within a stroll away
- Even your primary health care is just around the block
- For your convenience: It is integrated in your daily walk
- Your health is under control, with a digital pass

miliar surroundings of their own quarter, where they enjoy personalized care. Facilities for the disabled and mentally ill are very diverse. Some people live in privately owned, small complexes. These houses or communities are located in every quarter, integrated into urban living. ICT makes it possible to create a safe and healthy environment. Others prefer living in an institution, available on every island.

Cure

Larger HWCs, one in every quarter, have more diverse services including a maternity centre and traditional hospital care. Instead of consulting all patients at the

hospital, hospital professionals visit the HWC in the quarters where patients live. The hospital hires consulting rooms there. This helps to keep mobility in the city low, while care is more personal and takes place in a familiar environment. Rooms in this centre are multifunctional and used by several professionals during a week. The physical patient - doctor contact is still common but tele-consults can also take place supported by the digital care passport and EPD.

Healthcare around the block

All basic health services are combined in the neighbourhood's Health & Wellness

Centre. All services are available for prevention, first consultation, information, small procedures, standard treatment, etcetera. Your regular health check up and total body scan is organized there. Rooms are multi-functional and therefore the HWC is small and compact. It is combined with other functions like supermarkets and other retailers for one's daily needs. All buildings are flexible in use and therefore durable.

Motto	Health(y) Around The Block
Main designer	ir. H.A.M. Abels
Firm	IAA Architecten
Team members	Ir. R. Bruggink J. Lentferink Ir. J. Astrego P. Stenholm Msc Ing. F. Nijdeken Ir. R. Dooyeweerd Ir. M.B. Kroon

MEERmarken

Forced by increasing costs, the government has reset its goals in public health. New players are entering the healthcare market, targeting groups that are able to pay more for better healthcare. This generates a world of opportunities for healthcare providers. But what does this mean for all other people in need of care?

MEERmarken is a unique concept, a joint venture of government and market, NGOs and individuals. The aim is to create an environment where people can be in charge of their own health again. To create a society that cares.

MEERmarken is an archipelago city, consisting of almost self-sufficient island communities. (Auto)Mobility is restricted by bringing living and working back together again. Smart, environmentally-friendly technologies are used for small scale food production. The peace and quiet, the sense of space and place are the breeding ground for a wide range of care communities.

Some islands are completely focused on special care, but most of them are 'all inclusive' communities, where people take care of each other.

By co-funding innovative projects, the government strives to lower the needs for public healthcare and customizing the care provided. The money saved should lead not only to an affordable healthcare system, but most of all to the increase of the quality of life and care, since that is the governmental agenda.

Caring communities means personal care, on a day-to-day basis. It also means an increase of people making a living in the care 'business'. MEERmarken has made the most of these changed conditions. As you can read below:

Anne-Sophie (42):

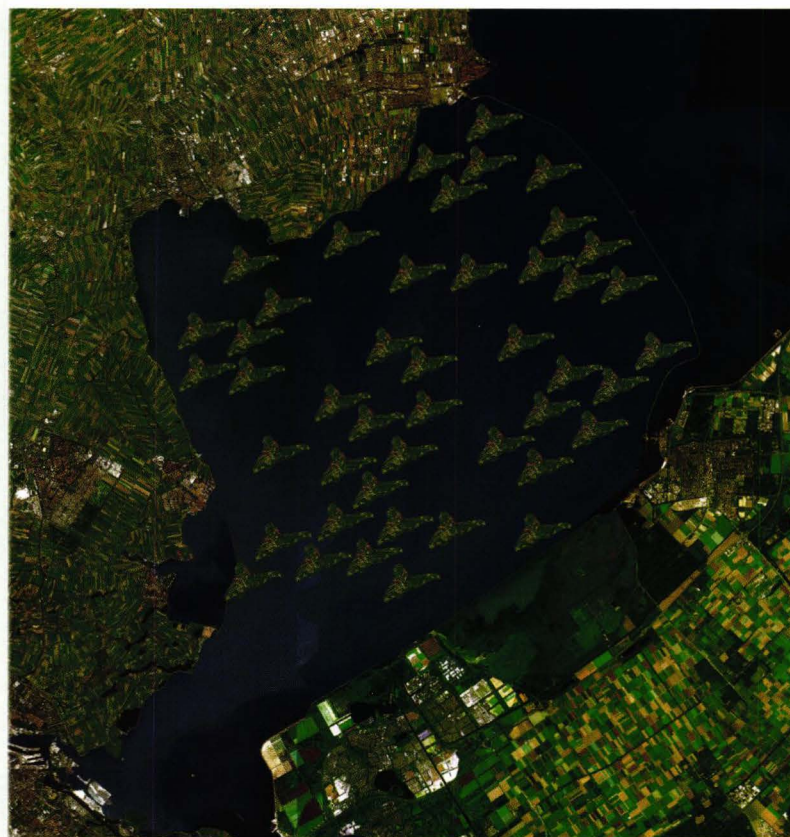
It feels familiar, just like old times. I do my rounds on my bicycle. An island like

Anne-Sophie (42):

It feels familiar, just like old times.

I do my rounds on my bicycle. An island like this is not too big and it's really good for my health.

The advantage of doing house calls is that I get to know the people in their home situation. That's important because there are relatively more senior citizens and people with handicaps who choose to live in their own homes. The number of chronic patients is also growing and house calls give me some idea of how they cope on a daily basis. I have a good relationship with the other GPs. They're positive about this as well. I really feel part of this community. Most impressive here is the way we deal with illness and handicaps: a really sound approach.

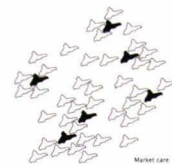


MEERmarken

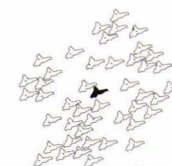
1



All islands of care
Community Island



Market care
Care islands



Care
Hospital island with local clinics
GP per island



MEERmarken public health:

We islanders are considered to be a bit strange. We have to admit that we do things differently. Not because we are different, but because in some sense we are all the same. We all live and live it. But most of all, we live it well. So we take charge of our lives and our health. We live a low impact life which attempts in all ways to cause as little destruction as possible: to ourselves and our environment. We don't believe in self-containment or isolation but we do believe in a self-sufficient way of life. This means we don't commute unless on a bicycle or over the internet. We don't ship our food in from the next continent but from the next island. Because we believe that even if things are cheaper in price, they carry a hidden cost. So we keep our costs down. Less cars, less fuel, less energy, less health problems. And we translate the money we save into time. Time spent with the people who need our support. We have sorted out that when we take care of each other, health care can become much cheaper. That's why we dare to say that:

MEERmarken is the only place that has a genuine public health system.

Because life can be hard sometimes. Especially when you become ill or have a disadvantage in health or capabilities. Then healthcare can become unaffordable and insufficient to get through each day. We focus on the day to day care that does not really need professional medical attention. And this has made us experienced in caregiving. To the point that we have made it a central industry. We love MEERmarken. So do the insurance companies. They give us a discount because of our life style and send people over to us so we can provide them with the care and help they need. And they love it here as much as we do. So they love to come back, even when they are as sound as a bell. Because we inspire people in taking responsibility for ourselves, our families and each other.

Our health care institutions can concentrate on the real important issues

and provide care in a setting that is qualitatively considered as the best. They are the white blood cells that spread through our community to attend to the medical issues that do require medical attention.

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Cheryl (39):

We had trouble finding a suitable place for our eldest son. He's 17 and a schizophrenic. We want him to be in a safe environment and as far as we're concerned, that's at home with us. But that would mean me giving up my job and I would really miss that as a welcome distraction from looking after my son. Besides, most houses for sale

are either unsuitable or we can't afford them.

We heard that one of the Meermarken islands was open to initiatives from individuals. It was almost too good to be true. We started looking for parents in a similar situation to see if we could set something up together.

We managed to get a ground lease for a very good price. We were allowed to build whatever we wanted, as long as it was environmentally-friendly. Isn't it just like paradise?

Now we take turns looking after the children and we fit our work schedules around it. To us, Meermarken is a god-send.

Jan (56):

I could see the benefit of this care island right away. Not that I haven't made my pile yet, don't get me wrong, but once a businessman, always a businessman. Now I arrange care holidays for people wanting to get out of the rat race or needing to recover after

a stint in hospital or from some serious medical treatment. Yes, a kind of health resort you might say. But everything is sustainable, or whatever they call it these days. Part of the profits flows back into the Meermarken Foundation, but I can live with that. In return, they have reserved a nice place for my retirement. I'll have a full view of the hospital from my roof terrace. They can just pull up in their emergency vessel to collect me, haha.

Kabir (18):

I never lasted very long anywhere, I always got into fights and stuff. Then they told me about this project. I think it's way cool here. I'm learning a proper trade, like, that not a lot of people can do now. I get a real kick out of that. The people here are kind of cool too, the way they deal with the elderly. Just like we're used to at home. Maybe I can get my mum and dad to come live here too.

Mrs Van Diepen (78):

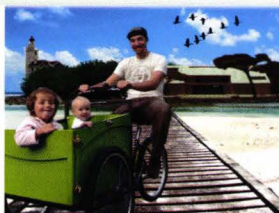
It's getting harder for me to look after myself. I'm becoming forgetful, they say. My daughter lives in Amsterdam

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MEERmarken

2



Apartment house



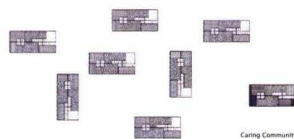
Apartment house



Apartment house



Apartment house



Caring Community

Mrs Van Diepen (78):

It's getting harder for me to look after myself. I'm becoming forgetful, they say. My daughter lives in Amsterdam and I wanted to move a little closer to her. I hardly ever got to see her because of her job. What she does for a living? I haven't the faintest idea. Some complicated word.

The big city is not my cup of tea. I used to spend all my time gardening.

But then she showed me a leaflet about this place. I mean, look around, isn't it gorgeous here? I and some other senior citizens live with a sort of foster family. I have my own room and my own things. I'm fine with them living off my money. They're really sweet to me. I'm just sorry my husband didn't live to see this. But you can't win them all. Sorry, why are you here again?

Kabir (18):

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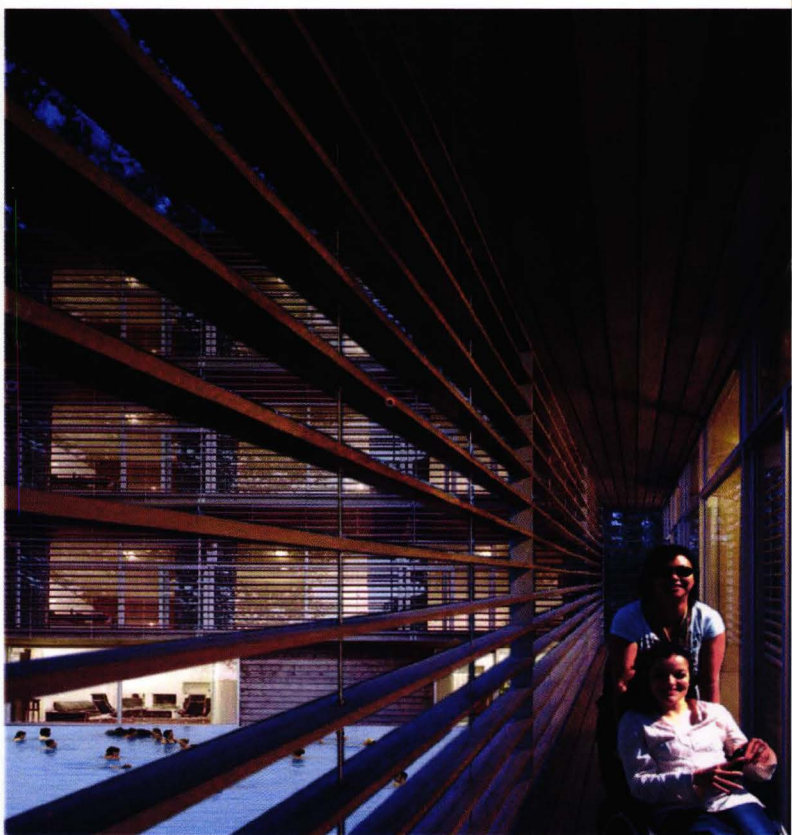
We expected MEERmarken to be special. That it would generate this much creativity and TLC has surprised us all.

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MEERmarken

3



base-type



studio



studio



studio



studio



studio



studio



studio



studio



studio



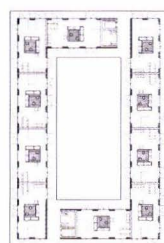
studio



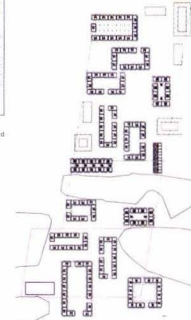
studio



studio



Treatment courtyard



Care unit building

Motto MEERmarken
Main designer Judith Korpershoek
Firm Architectenbureau K2
Team members Jan-Richard Kikkert
 Corrien den Boer
 Peik Li Pang
 Menno Veldman
 Christine Yadowsky
 Paul Boluijt
 Hilda van Berkel
 Janna Krediet
 Rein Ros
 P.W. Versluis
 Jos Visser
 Peter de Winter
 Jacqueline van den Wijngaard

Fac Unum Quotidie Quod Te Terreat

The Hospital for the Future

Our design for future healthcare is based on systems that will prevail 18 years from now. Technology will force changes in the delivery of care. Ultimately diagnostics will be of high resolution and speed. Molecular diagnostics will grow in importance and in use. Much of this activity, diagnosis, treatment and cure, will be home based.

The forces shaping healthcare are beyond our reach as individuals, the forces shaping our own well-being are not. Scientists explore the frontiers of biomedicine, and confirm the truism that health is easier to preserve than it is to repair. Again, this preservation will be done from the home.

The mapping of the human genome allows individuals to determine how they can benefit from a particular treatment or regime. Protein molecules are encoded by our DNA. When therapeutic cloning fulfils its early promise in our new Hospital, stem cells will help our bodies produce whatever proteins they lack. Diagnostic gene chips will identify existing symptoms and detect the underlying molecular processes that trigger disease, possibly years before any outward indications.

Rational design will create far more patient specific drugs and therapies. Our proposal assumes Gene therapies will be in clinical use in 2025.

In 2025, society will be far more conscious of healthcare and self help. Monitoring and assessing one's own medical condition will be universal. In the same way as they are becoming more educated about ecology, individuals will have the knowledge of basic medicine, and consequently will be more empowered. Through cell technology the patients will store all healthcare information relevant to themselves in their own body using a cell linked to their DNA information database.

The information is constantly updated,

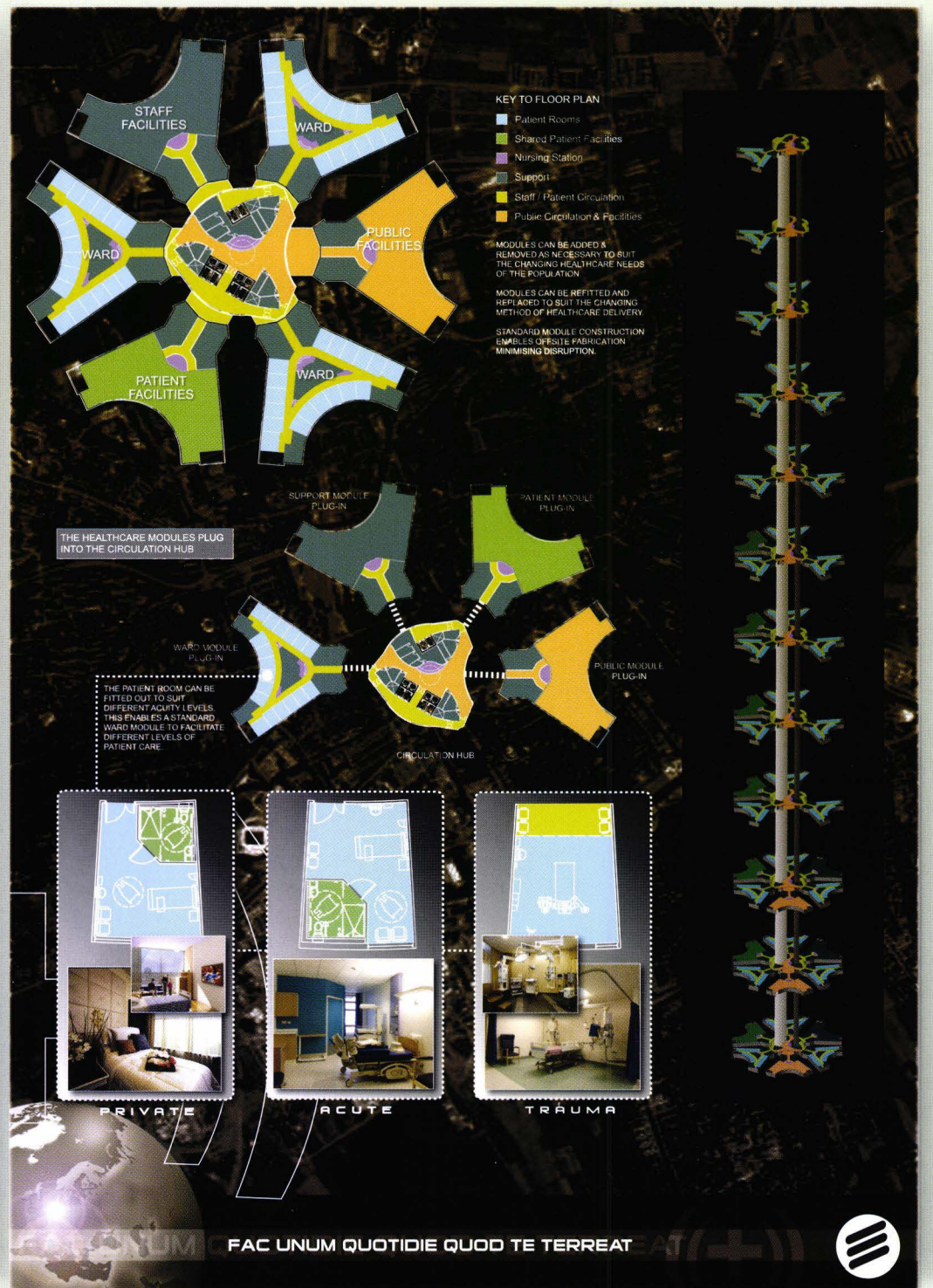
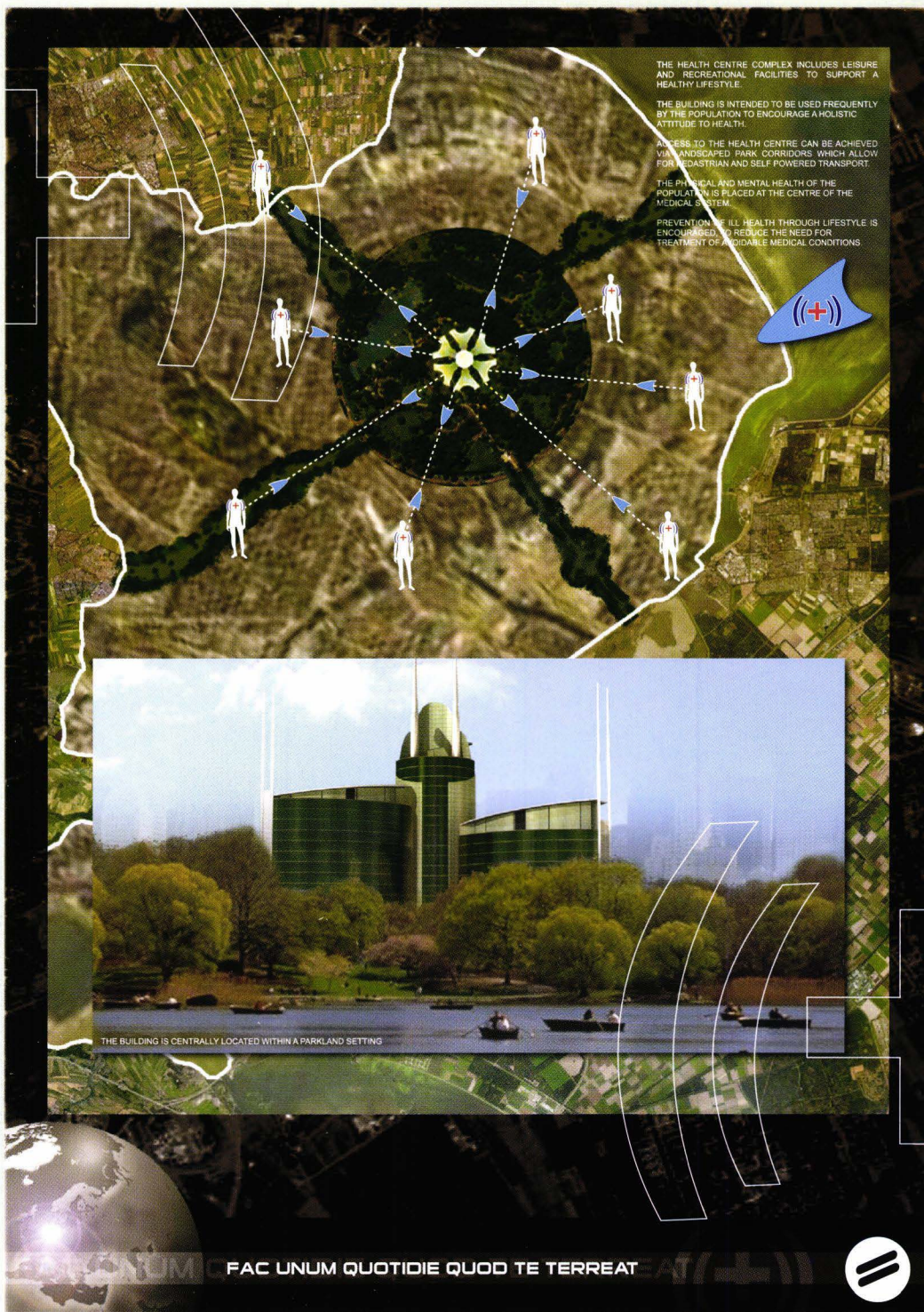
with secure access by the patient and the doctor. The Diagnostic and Treatment Centre (DTC) at the Hospital processes diagnoses and referral. Linking this to the Hospital makes treatment immediate. Visits to the surgery become unnecessary saving travel and waiting time. Activities carried out by the family at home could include Diagnostics, Midwifery, Childcare, Dietetics, Exercise regimes, Care of the Aged and Terminal Care.

Building and Resources

Healthcare resources will be a front-line issue in 2025. Virtually all skills, including nurses, technologists and physicians will be scarce. Demand will continue to rise. Predictability of workflow will become crucial. Current care is random, unpredictable and involves significant patient movement. Pressure to achieve positive outcomes forces capital reinvestment in infrastructure, largely due to fragmentation and departmentalization. Cost containment is essential.

Historically, the focus has been on capital programme cost containment. Compromises to capital programmes may actually increase operational costs. Focusing on understanding how the building can empower effective care rather than encumber it will deliver more cost effective solutions: The re-engineering efforts of recent years amplified this problem by emphasizing the pieces (cost centres or departments) rather than the whole. The impact a building has on care delivery is not considered, and this is a key cause of failure. Buildings either empower or encumber the activities they house.





Motto *Fac Unum Quotidie
Quod Te Terreat*

Main designer *Nick Leslie*

Firm *Jonathan Bailey Associates*

Team members *Ian Hunt
Renee Martin
David Chambers
Peter McGuckin
Gary Walters*

Nobody is perfect

The social structures of our society are about to change dramatically - what would be the best way to react to those changes?

It is widely assumed that the rate of elderly, ill, and handicapped people is rising intensely.

Because of financial and moral reasons it soon will no longer be possible to accommodate these people in foster homes. But how can we handle this new situation?

1. Concept

It is crucial that a new awareness should develop in our society – an awareness of the normalcy of illness.

– To be ill, to be different, to get older. It's all normal.

A functioning society should also take responsibility for itself. It should also take care of the people who will compensate for disappearing familiar structures.

As a result of the combination of essential professionalism and civic engagement a new implicitness of taking care of the ill, elderly or disabled can arise.

– The basic condition for this concept lies in the focus on the city as an area of social life, a city of contact and interaction. There are new places for communication.

The inhabitants leave their private homes, move through the city, meet other people. Anonymity shall be no more.

– The patients of today know what they want. They want to know what is going on inside their bodies, they want to be informed about their illnesses and about possibilities to cure them. In the future, it will be important that people have the chance to acquire all kind of information on their health, e.g. in medical information centres. Medical facilities should be easily accessible to everyone - and they should be as "transparent" as possible. Shame, fear, bias shall be no more.

Medical facilities have to be present and right in one's own neighbourhood, not

in a secluded area. This also works as prevention, as the presence of medical facilities in everyday life creates an awareness of the situation.

– The structures for medical science and healthcare must be able to adapt to new scientific findings and to changing requirements. Therefore, modifiable structures are designed to expand or to reduce the area of the facility. Replaceable modules must be designed. The connection with other commercial utilizations must be given.

With temporal leasing and renting in the neighbourhood, the facilities are able to react promptly to the given requirements.

– None of the facilities are isolated from the urban structure of the city. On the contrary: the medical and social facilities are placed right in the middle of it! Between shopping mall and coffeehouse...

Of particular importance are easy accessibility, urban presence and the ability to interact with other structures.

2. Care

New housing situations will enable people to live as long as possible in their own private homes. The new city will renounce foster homes. Care will be organized in smaller units, regardless of whether it is the care of the elderly, the ill, the dying or the disabled, regardless of which level of care is needed.

In a shared flat, not more than six people will be attended to. Professional aid will be supported by people in the neighbourhood. There is a "care box", which can be placed and used in the whole city.

It can be adapted to different urban designs and degrees of population. It is also possible to pile up the individual "boxes".

Very important is the connection with other elements of the city. The boxes extend into the street so that the occupants of the boxes become a 'direct' part of street life. Contact with public space is a basic condition to rebuild barriers between the people. The care flats

1 Healthcare 2025_Buildings for the future nobody is perfect

nobody is perfect



Hospital
Emergency, surgery, intensive care, diagnostics, operations, delivery
Between one and two beds per 1,000 inhabitants



Specialists
For specific illnesses like diabetes, rheumatism, dermatology, angina pectoris, etc.



Polyclinic
Centre of diagnosis, test for health, supply and therapies, physiotherapy
1 unit per 25,000 inhabitants



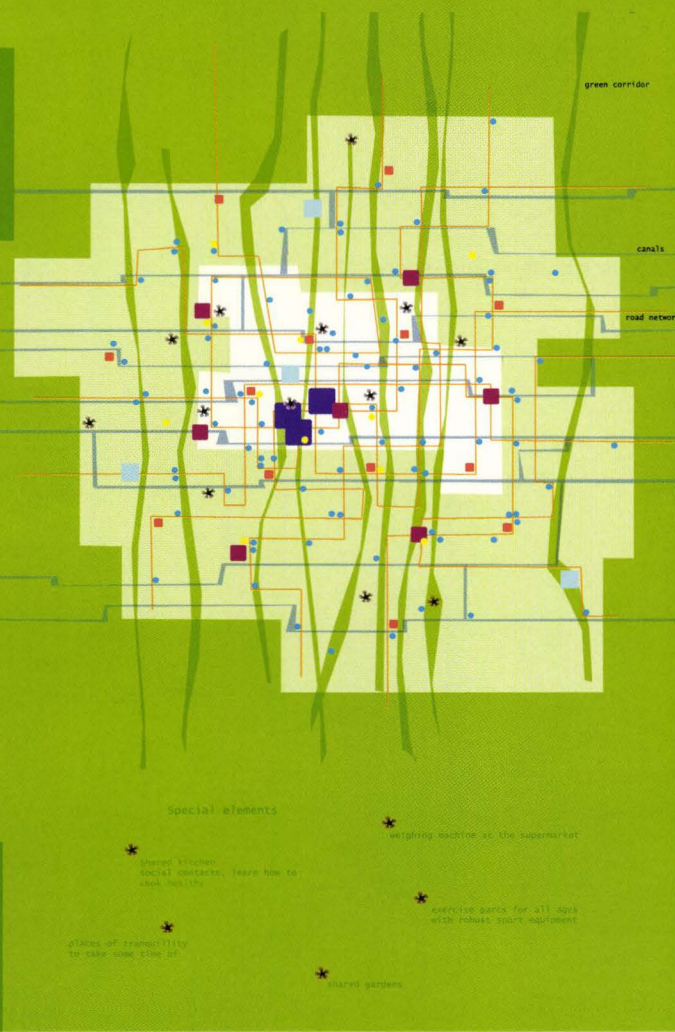
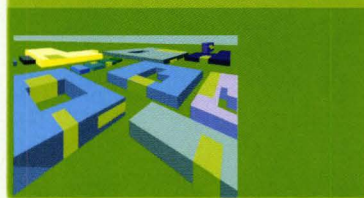
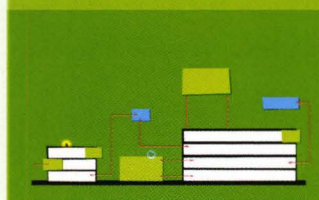
Preventive centres
To gain information on diseases, to be easily accessible for all



Care Flat share
For up to 6 persons in need of care
1 unit per 2,000 inhabitants
All care levels
Care accommodations combined with day care, social meeting points...



Ambulant nursing service
Patients, informal flexible structures
Health aid at home as well as in care flat share



should work as long-lasting meeting points for everybody.

3. Hospital

Anybody can fall ill one day. The hospitals belong to the city life, so that the fear of contact with the ill can be abolished. It is our aim to integrate the medical science into the city. The core hospital, the polyclinic, the preventive centres – all facilities are placed right in the middle of urban life: maybe right next to a shop and a café. No barriers. No limits.

The hospital can be adapted to be used by external parties, e.g. offices. The main part of the building consists of an

emergency area and rooms reserved for diagnostics. The rest of the structure should be planned with the focus on flexibility, in order to allow the hospital to lease certain parts of the building when they are not needed. Because of this composition of the building, interaction with its neighbourhood and the great transparency of the area should teach people to cope with the issue of illness. Fear will be reduced.

But not only will it be the ill who will profit from this new structure: there are also centres for prevention and information, at which the public can get hold of information on their specific health issues even before they are seeing a doctor.



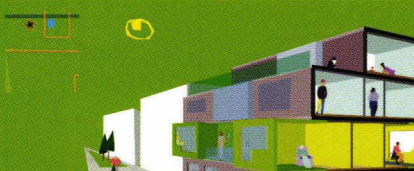
"Isn't this better, now that you can see the children playing on the street, you are already doing better!"



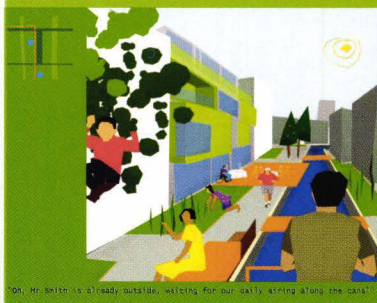
Care is organized to health communities. Nobody lives in a foster home. Professionals are supported by necessary resources.



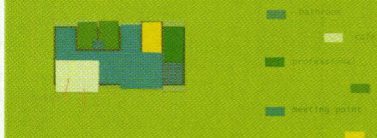
Care Flat shares the city, elderly, disabled, disabled people. Not more than a people's need of help.



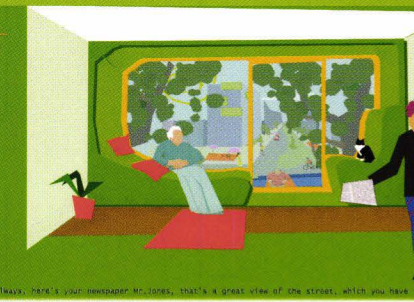
to pile up modules (of living, care, public space) are stacked upon each other. Three types: buildings in density, less density and sparsely covered areas. The facade can be replaced at will.



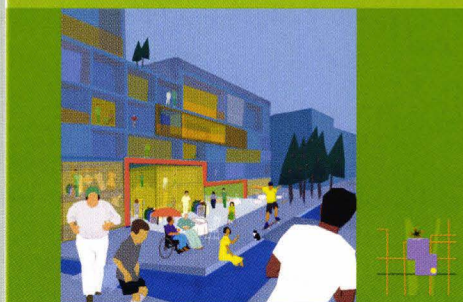
"Oh, Mr. Smith is already outside, waiting for our daily stroll along the canal!"



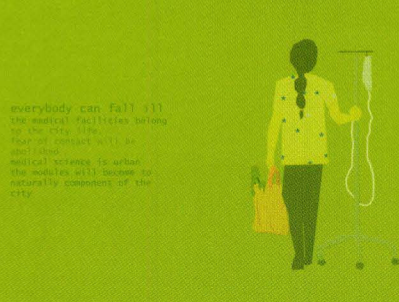
day care: a social centre for all, in people's on the street.



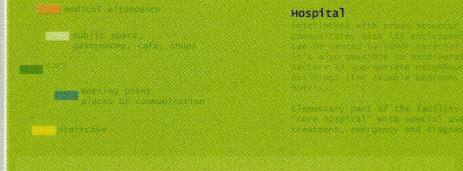
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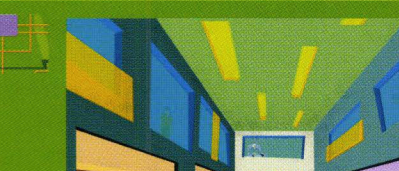
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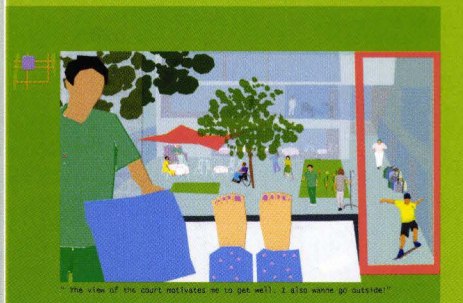
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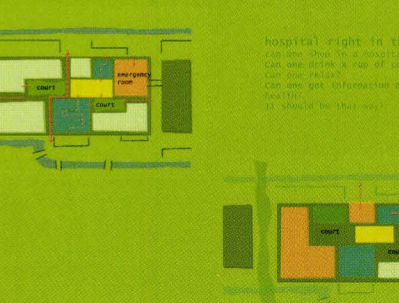
Medical attention, public space, emergency, care, shop, work, place of communication, staircase.



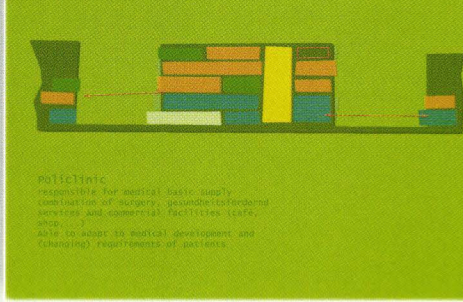
hospital right in the middle. Can we drink a cup of coffee? Can we get information about one's health? Is it possible to have a walk?



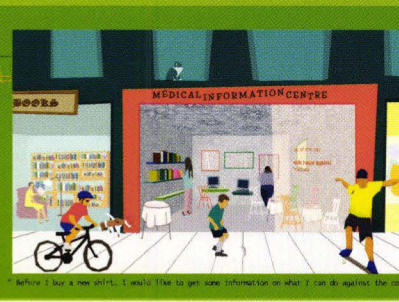
"The view of the court motivates me to get well. I also want to go outside!"



hospital right in the middle. Can we drink a cup of coffee? Can we get information about one's health? Is it possible to have a walk?



Politicized: responsible for medical care, supply, distribution of surgery, generalist/primary services and commercial facilities (cafe, shop, ...). Able to adapt to medical development and changing requirements of patients.



"Before I buy a new shirt, I would like to get some information on what I can do against the cold I have."

4. Urban space

The city is permeated by a network of roads, canals and green corridors, so that a number of places for relaxation are created. People will be motivated to leave their homes to relax outside. They will meet each other. They will care for each other. New facilities for the public are planned, which will aid the communication between people, which will help them to live a little bit better. An example is the idea of the "Shared Kitchen." Other facilities like activity parks provide robust sports equipment, which everyone, regardless of their age, can use. Places of tranquillity will help in taking some time off from the rush of

everyday life. Healthcare will be important as well for everyone. There could be scales in supermarkets or health tips in shop-windows. Everyone will have a chance to become active to improve their own health. Not everyone might succeed at it... Nobody is perfect.

Motto Nobody is perfect
Main designer Mr. Martin Morkramer
Firm Raumleipzig architekten
Team members Mrs. Sarka Voriskova
Mrs. Susanne Zoufahl
Mr. Urban Schnieper

Care in motion

Who knows what the future will bring. The invention of the steam engine, antibiotics and the introduction of the housing act all brought major change. And who could have foreseen the consequences of '9/11'? So what about healthcare in 2025, is it still affordable? Will we continue to liberalize the care system, or will we put a stop to it because we have become more socially aware? Will pensioners contribute to keep healthcare for the elderly affordable? How far advanced will our technology be? What will we think about ethnic issues in 2025? Will we have solved our energy problem and how will the state of our environment be?

We know some issues will cause problems for the healthcare system in the future. Aging of the population, the housing problem, global climate change, the demand for more energy, lack of efficiency and individualism in society. We need to focus on all these issues in the coming years.

Efficiency is a fashionable word but one that really matters. If we can work more efficiently we can economize. We shouldn't overdo it though. People still must be able to do their work. Efficiency should not be the objective.

In our present healthcare system, for example, we should try to get people diagnosed in one day and not undergo unnecessary tests. One should not have to travel up and down to several buildings to get diagnosed. This will save the patient a lot of time and also shortens the period of uncertainty. Early diagnoses are therefore important to be efficient. Another simple way of being efficient is to have people come in for an annual check-up. This way diseases can be diagnosed in early stages.

At the moment care stations are used only as a base for home care. If something is wrong with you, you want to be helped as soon as possible. This can be achieved by providing more extramural care by our present care stations. For example: with GPs, small ambulances and special equipped mo-

biles. This way it is easier to provide help in emergencies.

Hospital buildings can also be optimized. Most hospitals have very expensive ICUs, operating rooms, laboratories and so on, that aren't being used to the fullest. What if we can use all of these facilities 24 hours a day? Patients could still be diagnosed in an outpatient department (medi care) but major surgery and other specialist procedures will then only take place in large mega care hospitals. The core business of the hospital is the operating rooms and ICUs. Offices and facilities like restaurants, laboratories and so on, will be accommodated in separate buildings. This also requires a 24-hour care resort where patients can get well in a healthy homelike natural environment. This care resort has small units with living rooms where patients can feel at home. When a patient is able to go home, he/she can still be monitored if needed (home aid).

There is another large group of people who are in need of care: elderly, handicapped, youth and psychiatric patients. When they are no longer able to live independently, we need to build flexible units for these people to live in. We should let these people participate in our society and not exclude them. Embrace them and not put them away in large institutions. Therefore we should build small units, if needed in larger settings in the local community. These units must be adaptable so all kinds of people can live there.

More and more people want to be able to live in their own house for as long as possible. This increases the demand on extramural care. At the moment Care stations provide home care and when there are more adaptable houses, a larger group will benefit. Handicapped people for example can continue to live in their own homes with the help of caregivers and/or home care.

Good healthcare means taking care of each other. It seems we have all become

2007 2008 2009 2010 2011 2012 2013



aware of this despite our individualization. Taking care of each other also means taking care of the world we live in. Energy, environmental and mobility problems will continue to keep us busy in the near future. A large part of the world is divided because some have control over energy supplies while others have none. If we all work together and commit to only use clean energy such as wind, water, earth and the sun, the entire human race will benefit. Perhaps a solution for our environmental problem is near, and our energy problem can be solved in the coming years.

Time will tell.

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027

Care in motion

Insurance companies help prevent pollution

Insurance companies provide care and prevent the elderly an isolation. A basic insurance package will guarantee everyone social care for at least half an hour a day.

Stagnation population growth, solves housing problem

There is no longer a housing shortage due to stagnation of the population. This means there finally isn't a shortage in housing at the moment. House prices are down and therefore affordable for everyone now. Even the energy market is stabilized, due to the invention of Electri-Net. The overall costs of living and energy prices are now lower and therefore the much needed health care is now more affordable.

Housing for the handicapped serve as a model for the elderly

Everything that worked well for the handicapped care, now also applies for the elderly. Small scale investments in homes for the elderly have made most nursing and residential homes redundant. Out of date nursing-homes can easily be converted to student homes.

Electri-Net applicable in construction

Philips and Volvo have already solved a big part of the energy problem. Now it looks like Electri-Net can also be applied to roofing, walls and even windows.

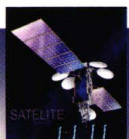
THINK YOU KNOW IT?

PV Energy solves traffic congestion

The ingenious photovoltaic energy raster "Electri-Net" that can be applied over asphalt is a great success. Philips and Volvo say they believe it has solved the problem with traffic congestion. Every vehicle can now be equipped with an energy receiver. The vehicles are automatically connected with a navigation system. A computer on board the vehicle directs the driver to the fastest destination as possible. Road verges are converted to transport zones. This way there is no more traffic congestion, because existing networks of roads are being used more efficiently. This also solves a great deal of problems concerning energy and erosion. The new system is payable by means of tax system that will be introduced shortly.

SOLAR ENERGY

MOTORWAY ELECTRI-NET



SATELLITE

Home-Aid, great success!

The Home-Aid is a mobile unit that monitors a patient at home. Home-Aid comes fully equipped and helps a patient to recover at home.

Elderly benefit social revolution

The social revolution that started in the Netherlands, is now taking place in most parts of Europe. It goes without saying this revolution changed the way of thinking. No more individualism due to liberalization like we had in the eighties of the 20th century. It seems we have come to the realization that we need the input and expertise of elderly people. Several schools and universities have already started programs where older people share and teach their knowledge to the younger generation. And in return, society takes care of its elderly just as naturally as it takes care of its children.

General hospitals redundant

General hospitals as we know them, no longer serve their purpose. After the enormous success of Home-Aid and the concept "Medi-Care" clinics, health care enters a new phase. All existing hospitals will be converted to Medi-Care clinics.

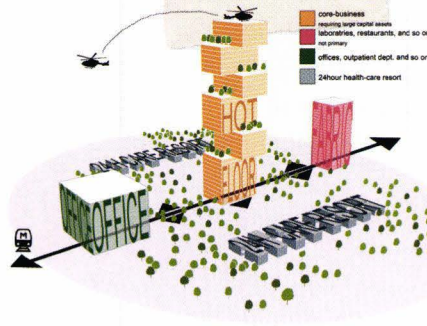
Adaptable housing pays off

100% of all houses/buildings had to be adaptable these last years. This housing act by Mr. Walker seems to have paid off. Housing associations and developers have been obliged to follow strict rules and now a great deal of house planning is adaptable. For those who need extra care, there are also homes with 24-hour care-resorts.

Medi-care clinics, small in size, big in service

The so called "Medi-Care" clinics are booming. When the first one opened in 2017, some sceptic said it would not work. But after only four years every one agrees it is a huge success. Whether you need to get your eyes checked, have some simple blood work done or need a plaster for a broken bone, Medi-Care clinics provide the care. It is also a base of operations for care providers. They work from within the community and provide general support as well as health care. And for those unable to come to a Medi-Care clinic, there's also the Medi-Care mobile. The Medi-Care mobile is equipped to do blood work, perform eye tests and even has orthopaedics on board. Today every neighbourhood has its own Medi-Care mobile.

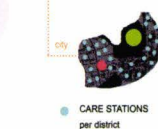
These Medi-Care clinics may be small in size but have proven to be big in service.



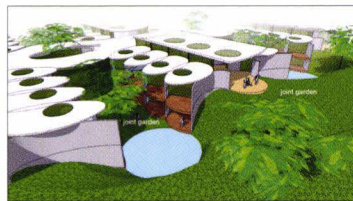
MEGA CARE HOSPITALS according to the population density



MEDI CARE CLINIC per city or region



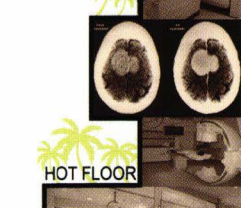
CARE STATIONS per district



Completion final MEGA hospital

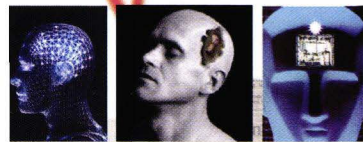
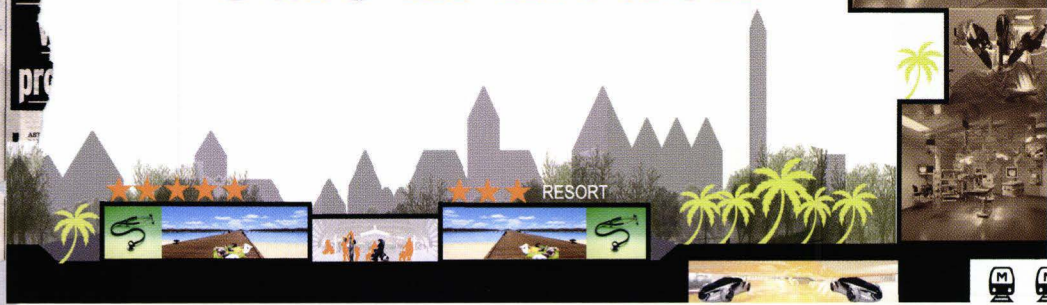
Today Mrs. Baker of the Department of Health said she was pleased the final MEGA hospital was completed. Now every Dutch province has its own huge specialized hospital. Like all the MEGA hospitals, this one also has a section with a 24-hour care-resort.

MEGA hospitals are known for their first-rate health care as well as for their ground-breaking and innovative medical technology. Working closely together with other hospitals world-wide, it's even possible to perform surgical procedures over the internet. MEGA hospitals are highly efficient and all operating rooms and intensive care units are working 24 hours a day. Of course most of us already have a "health chip" these days so that it is quite easy to get diagnosed in a Medi-Care clinics. If you need more specialized care, you will be brought to a MEGA hospital for treatment.



HOT FLOOR

Care in motion



Health chip diagnoses diseases.

It is now no longer necessary to visit your GP if you don't feel well. The new and improved health chip diagnoses diseases. The health chip that has been available since 2015 now also detects an illness in very early stages.

Introduction health chip now factual

A patient's information is now always available with the introduction of the health chip. If needed one can make a scan at home and send the information over the internet. This makes it easy for doctors to diagnose and monitor the patient from a distance. The health chip can tell when a person's condition is life threatening and care will be provided by the nearest care station.



Health chip your health first

General practitioners need training after discovery health chip

Who would have thought there would no longer be any general practitioners? These former GP's now all work either as a doctor in a Medi-Care clinic or as a care provider and consultant at a care station.



Physician Training

No more need for annual check-up

The annual check-up introduced only three years ago by the Minister of health and the insurance companies, are no longer necessary. Since every new born has a so called "health chip" implanted, there is no longer the need for an annual check-up. Not even for those who had the implantation later in life, a spokesman said today.

Motto Care in motion
Main designer Dhr. B.J.M. Huiskes
Dhr. J.H.F. van den Dobbelsteen
Firm Leijh, Kappelhoff, Seckel, van den Dobbelsteen architecten
Team members Mevr. Kinsiz
Mevr. C.G.J. Kamphuis
Dhr. E.J. Beeren
Mevr. N.A. Hartgers
Mevr. W.M. Overboom
Dhr. M.J.M. Nuyens

Square City

The name "Square city" contains the core of the design. The design concerns the meeting and the square where this takes place. "Square" also meets "common"; Square City is a city for everybody. The design originates from a philosophy in which a city, a health centre, and living centre are envisioned.

A living centre is a new form of residential complex, where people can live and get care 24 hours a day. To let people come into contact with each other, special meeting locations have been created at all levels. This design has been implemented at the health centre and the city. Downsizing is a valid method to ensure privacy and intimacy. The health centre is smaller than a normal hospital and the city has been subdivided into smaller cores of 15,000 inhabitants.

The city

The city has to be in balance with 4 opposites to satisfy all needs: Nature - culture and private - public.

People have changing needs for privacy and contact with others. This city will revolve around a combination in which availability of resources and compactness will be intertwined. Everyone wants the resources to be available in their own neighbourhood. All resources must have a certain basis in order to exist. Due to a high density, certain resources can lie in the city. This urbanization leads to the repression of nature, but this must also become integrated within the city.

The islands complete the circle between Almere, Square city and Amsterdam. In the Northeast there is a thinly populated area, resulting in a unique nature reserve between the Waterland and the Flevopolder.

Energy resources

The need for energy will increase and the capability to produce energy must be incorporated into the design of a city.

For example, cooling elements in a pile foundation can retain warmth from the ground. Solar tubes can be placed in the pavement. Turbines can obtain energy from the recycling of rainwater and windmills can be a recurring element in the foundation of the city. By spreading out small projects throughout the city, disturbance to the population will be limited.

The location of the islands in the "funnel" of the Markermeer compared to the IJmeer offers the possibility to generate energy in a unique manner. The IJmeer must deal with rising water levels during violent storms from the Northeast. The islands must be protected by a high dyke. If a number of bays are created before the dyke, they will overflow with water during a storm. Wind mills can then pump the water into a large basin. After the storm a turbine can be operated with the energy produced by the water in the basins.

Another aspect is the growing group of people over the age of 85, who will need extra attention. Due to the decreased mobility of these people, accessibility of resources will become more difficult.

The elderly become more dependent on healthcare. The intensity of the care, collective or individual, generally determines whether the provided care is essentially collected or delivered.

The Health Centre

The care in "Square city" is regulated by the health centre. This lies centrally near the main infrastructure. The health centre has been transformed into a polyclinic; a centre in which care is provided for the city. People can come here for questions concerning their health. Several specialists have consulting hours in the health centre and they can use the facilities incorporated within the centre, such as the operating room or diagnostic capabilities. The specialist can also have his own practice somewhere else.

THE CITY

SQUARE CITY



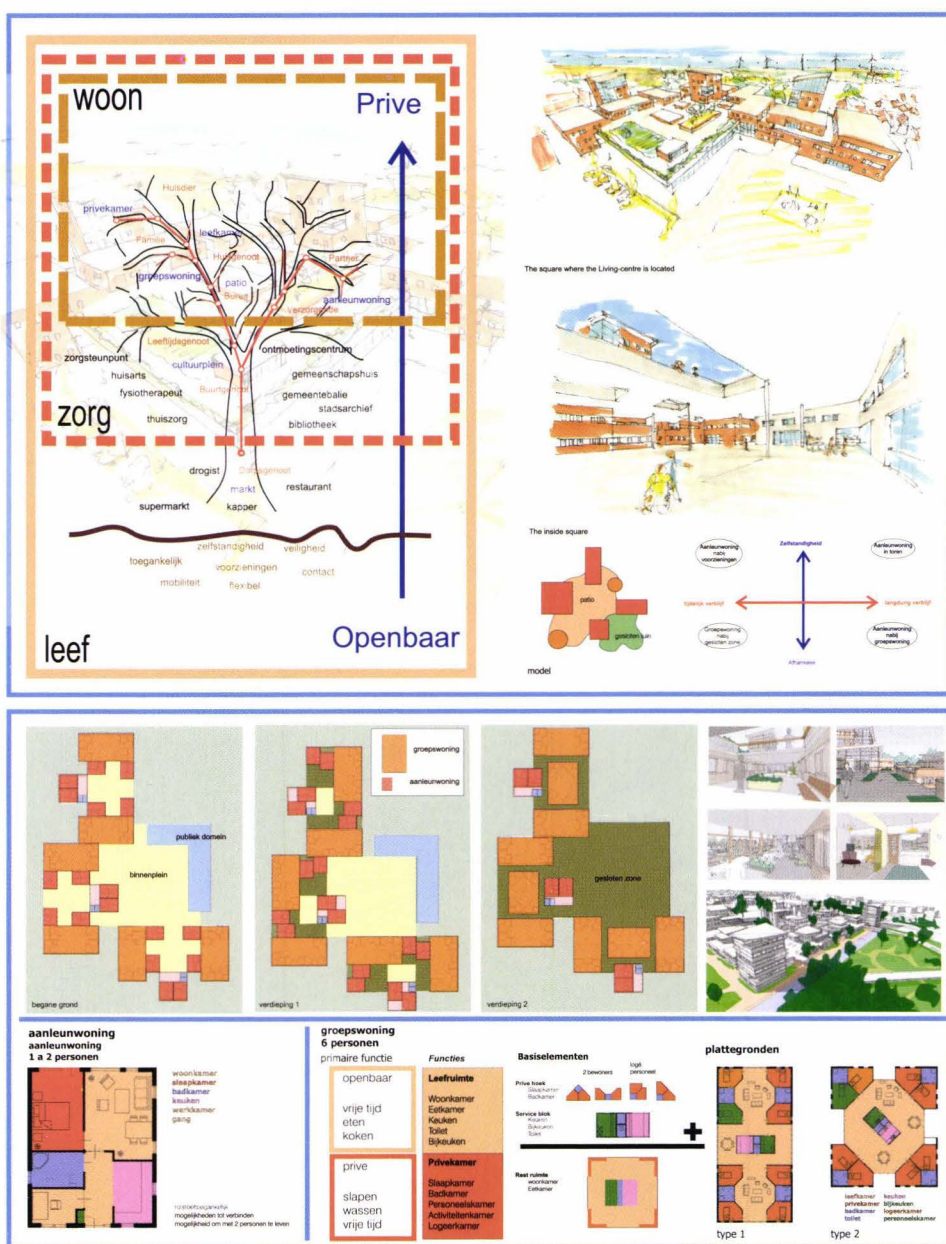
The core functions of the health centre are: polyclinic, emergency aid, pharmacy, research and laboratory, operation rooms, recovery and Intensive Care. Patients, who are treated by a specialist and are operated on, recover post-operatively on day-care wards. Patients reliant on longer care get help on the flex-ward, an intermediate between the health centre and the living quarters where patients can further recover.

The basic task is to provide information concerning the health issues of the patient.

Another task is to coordinate the healthcare of the many healthcare centres that are spread throughout the city. A healthcare coordinator coordinates and guides healthcare professionals who provide various resources in the neighbourhood, such as home care, adaptations in one's home, activity accompaniment, passenger transport and placement within special housing within the living quarters.

The Living Centre

The living centre is composed of two types: an adjoining service flat and a group house. Whether someone gets a



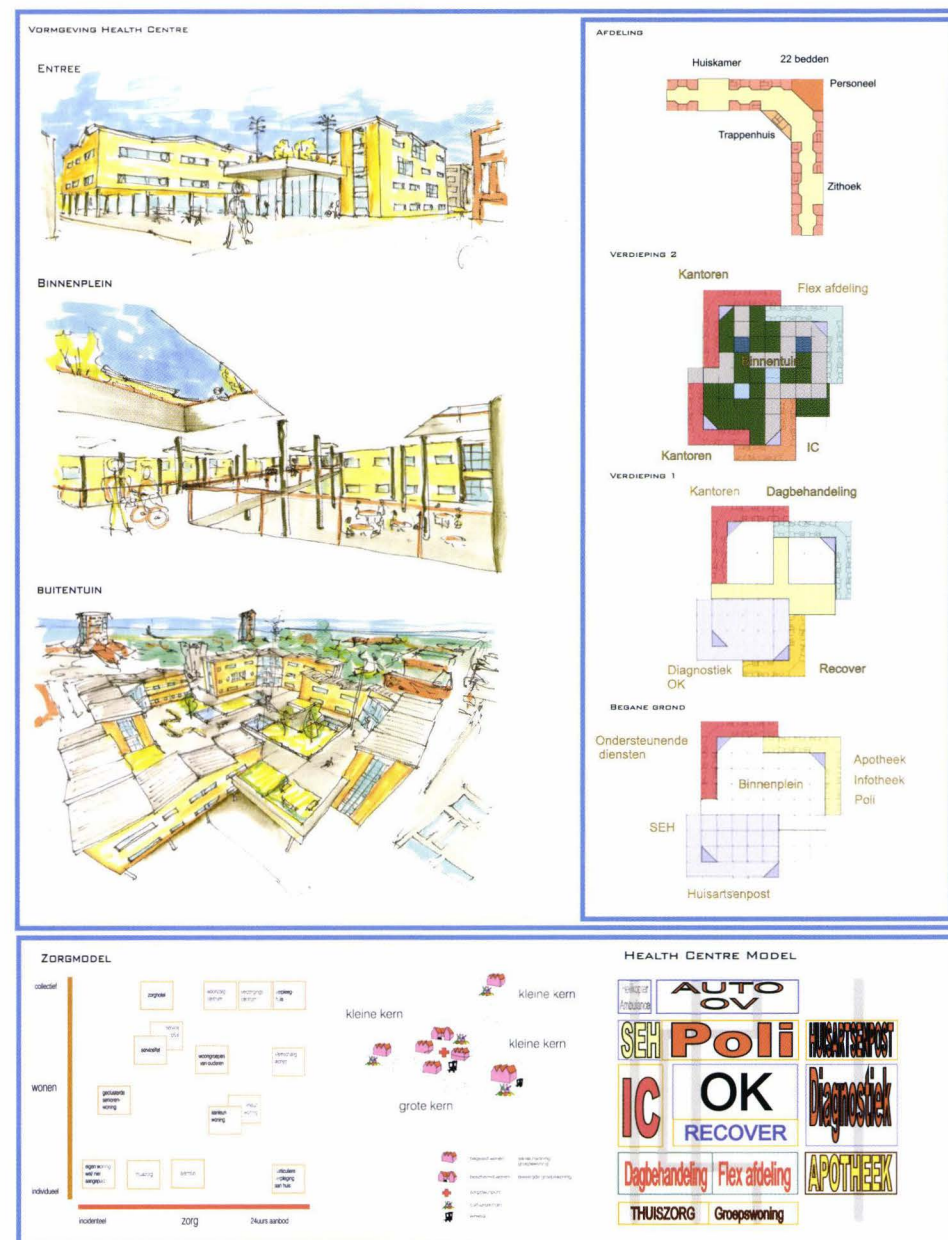
home in the living centre depends on the care needed and how long he is going to stay. There are two alternatives for each type: short term and long term. Each group house type is connected to two adjoining service flats, type long term. The staff in the group house is responsible for the care for the people in the adjoining service flat. People who are living in the group house, type short term, need more domestic aid. After surgery people can revalidate in a group house.

The adjoining service flat, type short term, is located in the tower. People who

are staying in the tower need aid from time to time. They stay for a short period and will return to their own house when they are recovered.

The group house, type long term, is located at the roof garden and is a closed area. People, who live here, are demented elderly and need intensive care. They have the possibility to go outside and make contact with other people.

The living centre revolves around contact with other people. All home types are located around a patio and this patio is connected to a square.



The square is a centre of the neighbourhood, where the occupants and neighbours can meet. The general practitioner, the dentist, in short all kinds of care facilities are located at the square. It also houses local facilities and social services.

The square forms the heart of the district and, thus, the heart of the city.

Red Point

Urban concept

This is a new island in Markenmeer designed to maximize beachfront living as Holland gets hot! Back in the 10s Dutch Architects mastered fin-de-siècle Ironic modernism. They explored and reiterated the spatial plasticity of the rectilinear. But where can you let your hair down. Where can you go to escape the shadows of ING and ABN - Who made homeowners the offers they could not refuse?

The only thing about 2025 we know for sure is that it will be hotter.

When it is hot, the best place to go is the beach. Markenmeer is less than 4.00 m deep, and it will be great if only the Dutch admit Holland could be fun ... the Florida of the northwest of Europe. Oh, if only Oud, Rietveld and Mondriaan had danced on the hot sands of Curacao! The beach is always the best place to be, it is the target for all development, and it is where residential, retail and recreation intermix informally, intentionally and dynamically.

We look to contemporary man-made city islands - Miami / Miami Beach and Dubai are fabulous amalgamations of global commerce and sporting lifestyle. The only physical essential is that the proposed reclamation is shaped to maximize its perimeter relative to its land area. The only planning instrument needed is a utility infrastructure and road width sizing to promote perimeter beachfront development. Our proposals assume a sub-urban / neighbourhood of around 20,000 residents, of whom 5,000 or more will be of non-Dutch origin. Each will have a primary care centre co-located with mixed retail, leisure, education and business developments.

Healthcare delivery

Health facilities will not be stand-alone buildings. They will occupy leased space in private developments. In every way we believe healthcare delivery facilities

must be more than just convenient: they must be integrated into aspirational lifestyles. Epidemiological statistics are frightening. Medical progress cures more people of diseases of all kinds but discovers new ones we did not know were there. As people live longer they need more not less healthcare. Change will remain a constant. All healthcare delivery buildings must either be adaptable and easily serviced, or easily disposed of. The three levels are:

The healthcare delivery system: exists in a larger network of specialist teaching hospitals and is sized to 160,000 people but assumes 100% electronic patient records, professional management, healthy life education, prevention regimes. All facilities are beachfront, co-located with retail and educational buildings for efficient public transport, conveniently integrated into daily life.

Primary care centres: providing family doctor consultation, testing and treatment. May have day beds for procedure recovery, may have mental health day programmes, and provide optical and dental Clinic services, all housed in rented space in mixed-use Centres.

Tele care systems: the hospital at home Monitor people's activity and body performance and their home environments. All monitors and sensors are wi-fi linked to hospital consultants and/or primary care centres, paramedics and/or emergency services. Patient vital signs automatically update their electronic medical records. This is a major increase in efficiency and in quality of information.

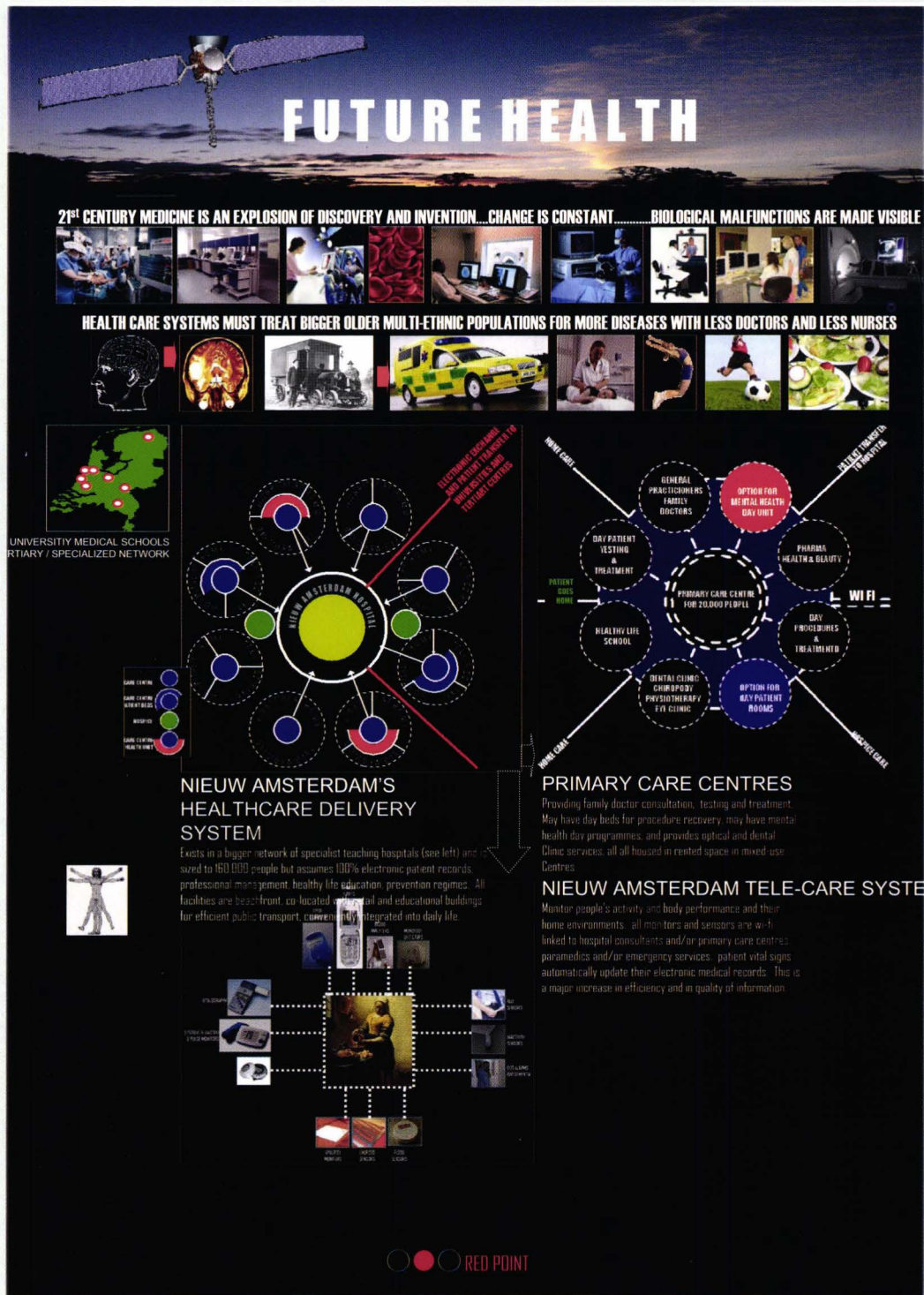
The hospital

The hospital is built at the top of a typical reclamation dyke, orientation to southeast. All support functions - food service, sterile supply etc. are at level -1, the general level of Nieuw Amsterdam island.



At level 0 the emergency, diagnostic and treatment functions are all housed in 6.00m high single storey modular constructions. Ceiling heights will vary. Most of this is column-free so that there is minimum obstruction to the routing of pipes, cables and ducts. The principle underlying the plan is absolute clarity of internal circulation - and the reduction of internal signage. Navigation is based on basic architectural features with clear intrinsic meaning: axial circulation is within a 9.00m high atrium. Here everyone can find reception and check-in desks, coffee-shops, pharmacy, convenience shops, hairdresser, chiropodists, business of-

fices, insurance advice, religious support etc. At this point the hospital shares features with small shopping centres or very small airports. Outpatient clinics are housed in the beachfront / ocean view wings. Waiting is in a wide glazed concourse with 100% view through the external arcade, across a grass bank sloping down to the water. The roof of the outpatient clinic is an open terrace for everyone who wants fresh air. Two floors of inpatient nursing are raised 6.00m higher. The roof and soffit of these floors are formed into an aerofoil cross-section to intensify wind speed and direction. All night time lighting can be powered



by three wind-turbines with 7.00m radius propeller blades. The turbine towers are vertical aerofoils too. Plans indicate directions that individual parts of the building can expand in the future - Red Point's scheme is flexible and sustainable, using basic architectural principles to sustain a planned 75-year future. This building must be replaced before 2100.

Motto *Red Point*
Main designer *Ann Noble*
Team members *Phil Gusack*
Ann Noble

Healthcare in the world is evolving. By the time the changes of social life, increasing requirements of society, technological developments and changes in the demographical structure of society force us to rethink healthcare and its policies. With the new era there is a growing awareness that healthcare should not be viewed simply as an expense. Investment in healthcare and a healthy population also has other important consequences for society and the economy. Without a doubt, changes in healthcare of the population will lead to a new breed of healthcare facilities. For the proposed city the healthcare facilities are designed as components of the whole. The healthcare facilities are decomposed to partitions depending on their specifications and functions varying from neighbouring health organizations (called preliminary healthcare) to specialized research hospitals (called main healthcare). By the mean time all these facilities proposed to be in contact with each other physically and technologically (data transfer) which can be called as medical line. We called this approach "Green Line". The design of the green lines for the city is important to the fast and exact health approach. These green lines are offered to be living parts of the city in which lots of different activities can take place and different age groups of people can participate. The essential point for the green lines is accessibility.

The future healthcare will be an important part of the daily life. People can easily access it while walking around green lines. Elderly homes are designed for elderly who compose the larger part of the city population. Thus it is obvious that older people who are living in elderly homes can check up regularly without detaching their daily life routine. With the development of IT technologies obviously the speed and accurateness of diagnosis is increasing daily. But the design of the environment of healthcare is still the key point of healing. Besides urban scale, the healthcare facilities are designed based on human

scale within a liveable environment. Entrances and exits of the buildings should offer an ease of access and transportation. One of the main points of developed design is based on this approach. Besides, healthcare facilities are designed for spatial changes and adaptations. In other words, healthcare facilities are flexible and adaptable. Hence, in our design, a hospital module is developed. Exploring various units of healthcare facilities which not only meet today's spatial and technological requirements but also meet future necessities, the concept called "Modulhos" is designed. With 8x8 meter dimensions of axis, Modulhos is produced as a system which can easily be adapted to evolutions of future building construction and spatial and technological developments. A plan is developed for accessibility for all people from young to elderly and from healthy to disabled. All the floors are connected to each other by ramps with a 4% slope. These ramps also allow an indoor transportation system to access the floors very rapidly and easily. The intersecting parts of building surfaces are designed as building cores including

sanitary systems, stairs and shafts. The design of the building aims to connect all floor planes to the ground continuously, so the roof of the building is designed as a part of the outside walkway aiming to make a connection between ground floor and other spaces directly. In the near future, the world will be face to face with an energy and water crisis. It is well known today that global warming will have consequences for rural and urban planning, as well as for architecture. It is obvious that the design approach for sustainable architecture will create a more liveable world for next generations. From a sustainability point of view, the design of future healthcare facilities proposed to be developed on the principles of 4 R: Reuse, Recycle, Renewable, and Reduce. The basic points of 4 R considered for the design are listed below:

REDUCE: minimum energy use, minimum CO₂ emissions and minimum ozone depletion by passive design strategies as;

- Maximum solar control considering acceptable solar gain by true orienta-

tion, awnings and blinds.

- Thermal insulation both for opaque surfaces (cellulosic insulation which is highly recycled with minimum embodied energy) and transparent surfaces (transparent insulation materials i.e. aerogels) where necessary.
- Thermal mass particularly for spaces occupied 24 hours (i.e. Patient rooms, elderly house, etc.)
- Double skin facade with maximum solar control and natural ventilation opportunity.

REUSE: careful application of waste management strategies particularly waste water reuse possibilities.

RECYCLE: material selection will be done carefully considering the manufacturing process of the materials the base of which is recycled or the ones that will be recycled afterwards.

RENEWABLE: Primary Energy sources are the sun (photovoltaic cells for electricity and solar panels for domestic hot water where necessary), biofuel (biomass) and geothermal energy (an

HOW DO YOU DESIGN A HEALTHCARE CENTRE FOR THE YEAR 2025 ?

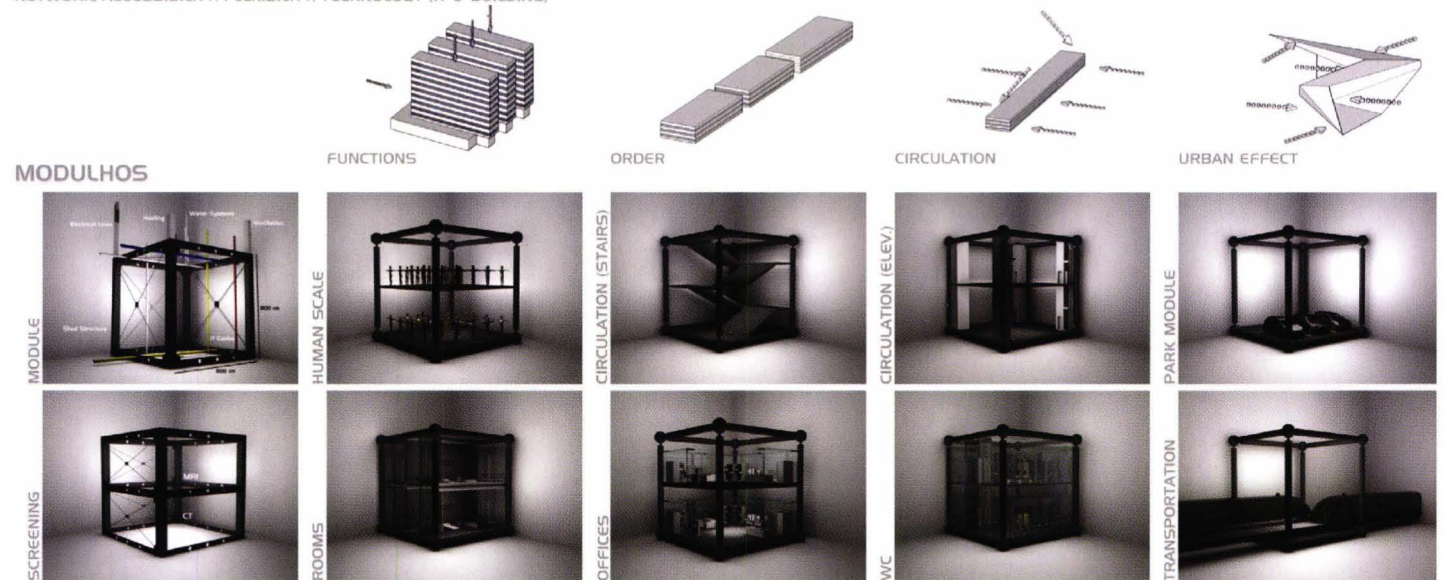
IDEAS

URBAN RELATED HUMAN SCALE, DECENTRALIZATION, GREEN LINE

CONCEPT

NETWORK, ACCESSIBILITY, FLEXIBILITY, TECHNOLOGY (IT & BUILDING)

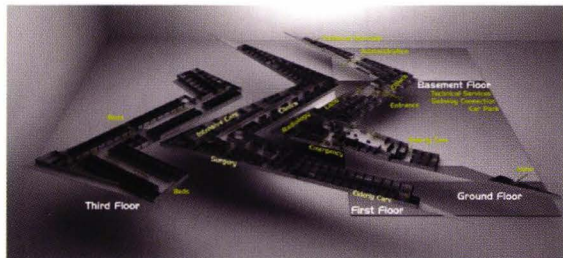
MODULHOS



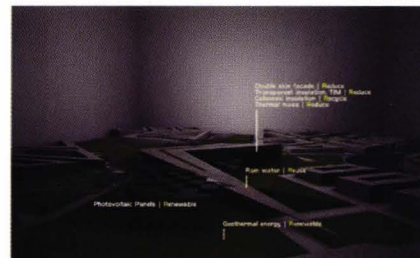
HEALTHCARE 2025
BUILDINGS FOR THE FUTURE



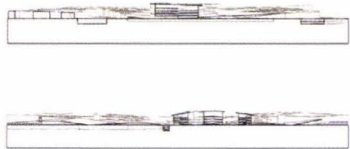
SITE PLAN



PLAN SCHEMES



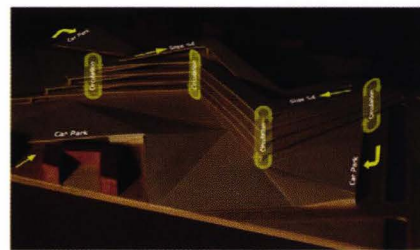
4 R CONCEPT



SECTIONS



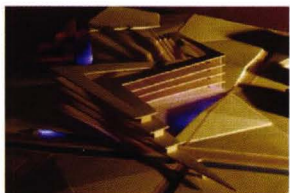
ENTRANCES



CIRCULATIONS



HEALTHCARE 2025
BUILDINGS FOR THE FUTURE



HEALTHCARE 2025
BUILDINGS FOR THE FUTURE

environmental energy technology called a heat pump system installed to extract heat from ground water and soil itself both for heating and cooling).

It should be noted that the design has "Principles of Occupancy Comfort" based on a high level of comfort offered to occupants, while reducing energy consumption. The applications for occupancy comfort are as follows:

Indoor air quality - fresh air supply mainly by natural ventilation
Mean radiant temperature in comfort band - optimization of internal gains and heat loss as a result of a careful design of transparent surfaces and thermal mass, night cooling will be effective if necessary.

Daylighting - each space planned / organized to use daylight opportunity effectively (light shelves and moveable blinds for indirect lighting)

Noise control - specially designed (with acoustic glasses and air gap) double skin facade preventing from outside noise, sound insulation applied to the spaces where necessary for indoor control of noise.

Consequently, the basic objective of the design is to develop a new, sustainable approach to the traditional way of healthcare design by offering highly flexible, accessible and mutable spaces on a human scale together with recreational activities, rehabilitation and healthcare facilities integrated with each other and with urban life that has natural patterns.

Motto 29934

Main designer Timuçin Harputlugil

Team members Gülsu Ulukavak Harputlugil

Serkan Yetgin

Rabia Akgül

Onur Ataç

3 Propositions for Healthcare and City 2025

As an architect interested in urban design issues, I propose a study of the interaction of healthcare buildings and the environment. My propositions are extensions of this exploration on the scale of the clinic, the hospital, and the community as a whole.

Traditionally, hospitals have existed in opposition to their host cities. Their form has often been the result of years of additions and renovations, resulting in large, ugly, foreboding buildings that do not lift the spirit.

New research points to a few opportunities to re-evaluate this building type and its interaction with its setting and the community. First, research has begun to provide positive links between environment and healthcare outcomes. Connection to nature, daylight and fresh air have been shown to have a positive effect on patient outcomes.

Contrary to this, research has also shown that large busy hospitals tend to provide the best healthcare. The concentration of specialists who refine their skills results in far greater patient satisfaction.

Also, current trends in healthcare design strongly favour a more home-like setting, especially for inpatients. Single-patient rooms have been shown to reduce hospital-acquired infections, and decrease the patient's average length of stay.

proposition 1

The Virtual Hospital

To begin to unify these competing interests, first I propose that the large mega-hospital of the past is unnecessary, cumbersome, and actually hinders the flexibility of the healthcare infrastructure to adapt to change over time. Instead, I propose that for a city of 160,000 citizens, a minimum of three smaller hospitals is a better solution. Services can be grouped so that one hospital focuses on heart care, another on women's and children's care, while another focuses on medical or surgi-

cal specialisms. Research has shown that smaller community hospitals can effectively compete if they specialize. Specialization by hospital allows for the concentration of patients necessary to maintain and build the skills of medical specialists. The next step in this proposal is to study the interaction between the hospital and the environment. I propose urban-friendly forms that are easily legible by patients. Research has shown that courtyards allow for the efficient introduction of daylight into all areas of the hospital, and so this arrangement is favoured in this proposal. Each department has generous glazing on at least two edges, allowing for deep penetration of natural light - even into areas such as radiology and surgery. The overall ambience of the hospital should be like a fine hotel or resort rather than an institution.

proposition 2

Community-Based Clinics

The neighbourhood provides yet more opportunities for healthcare and healthy lifestyles. I propose that each neigh-

bourhood be provided with at least one full-service outpatient clinic within a reasonable walking distance from nearby homes. These clinics would serve as the destination for most citizens seeking healthcare. Minimum staffing should include at least one general practitioner, a pharmacist and a psychologist. Rotating specialists (such as orthopaedic surgeons, cardiologists, internists, etc.) would provide appointments in the neighbourhood clinic for consultation and diagnosis purposes. If patients then require a higher level of care, that same physician would treat them at the nearby community hospital.

proposition 3

Environment Promotes Health

Connection to nature is vital, so I propose the city itself be designed to maximize the opportunity for meaningful connections to natural areas. I propose that the city be bisected by parks, recreational areas and canals so that every citizen lives at short walking distance from some open, natural space. These spaces can then be programmed to pro-

vide activities that promote healthier lifestyles. Research has shown that people who live healthy lifestyles have greatly reduced risk of heart disease, diabetes, and certain types of cancer. They also experience fewer problems associated with aging. All of this means that for a certain investment in recreation and fitness, the Netherlands can expect a return on this investment to include lower healthcare costs over the lifespan of its citizens.

This investment is so worthy, that I propose other interventions into the urban environment.

I recommend reducing the role of the automobile by building denser cities and providing generous sidewalks and bike paths. If all the necessary amenities are available within a short walking distance, citizens will have little reason to drive. This proposal not only reduces dependence on fossil fuel-powered transit, but increases the health of the population overall. Research has shown that people living in dense urban environments use, per capita, far less petrol per person than those living in auto-dependent cities.

3 PROPOSITIONS FOR HEALTHCARE AND CITY 2025: Cities Designed to Promote Citizens' Health and Wellness

1 The Virtual Hospital

1 The Virtual Hospital

Decentralized to Multiple Campuses

2 Community-based Clinics

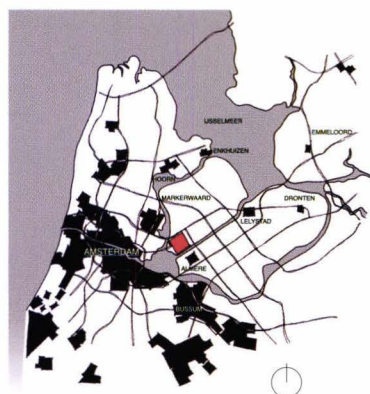
2.A Medical, Surgical, and Mental Care in Neighborhoods

Community-based Outpatient Care for Routine Physical & Mental Health Needs
One Full-service Clinic Within 10 Minute Walking Distance From Any Home

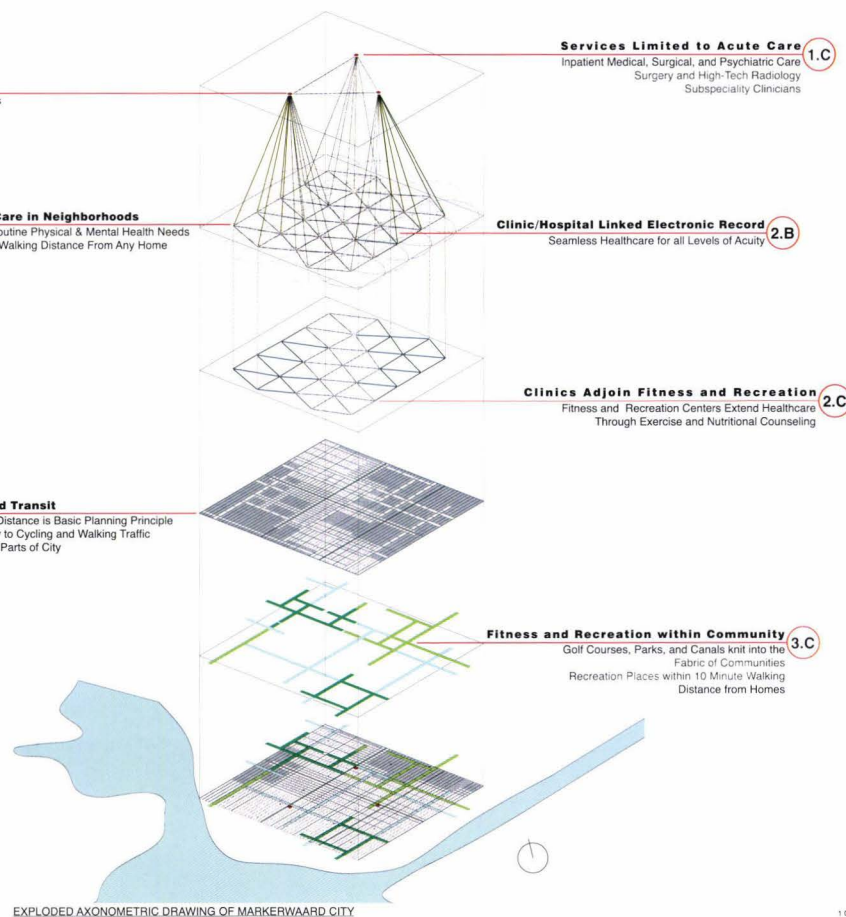
3 Environment Promotes Health

3.B Human-Powered Transit

10 Minute Walking Distance is Basic Planning Principle
Streets Give Priority to Cycling and Walking Traffic
Bike Roads Link All Parts of City



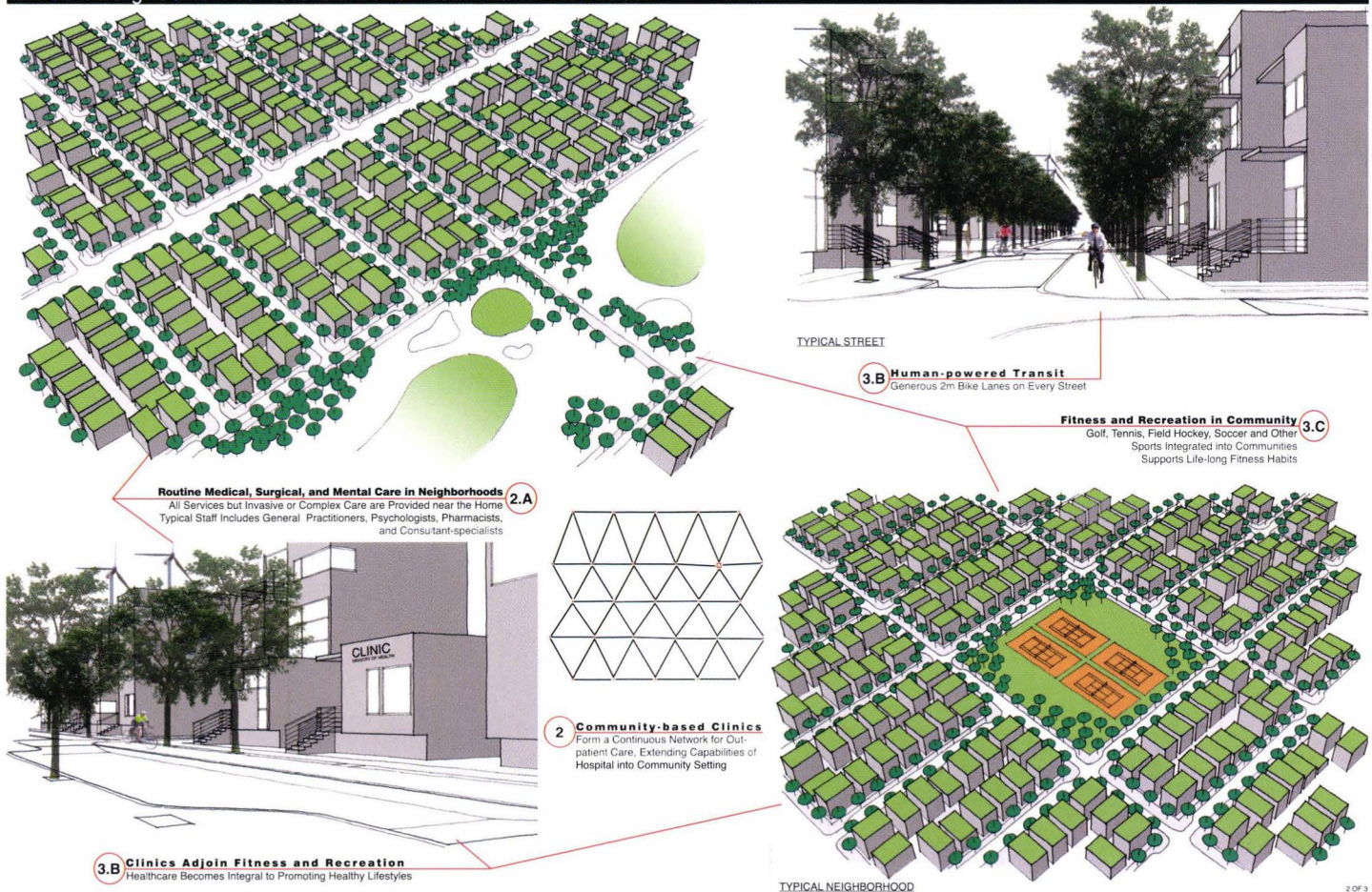
REGIONAL PLAN OF MARKERWAARD AND SURROUNDINGS



EXPLODED AXONOMETRIC DRAWING OF MARKERWAARD CITY

3 PROPOSITIONS FOR HEALTHCARE AND CITY 2025:

Cities Designed to Promote Citizens' Health and Wellness

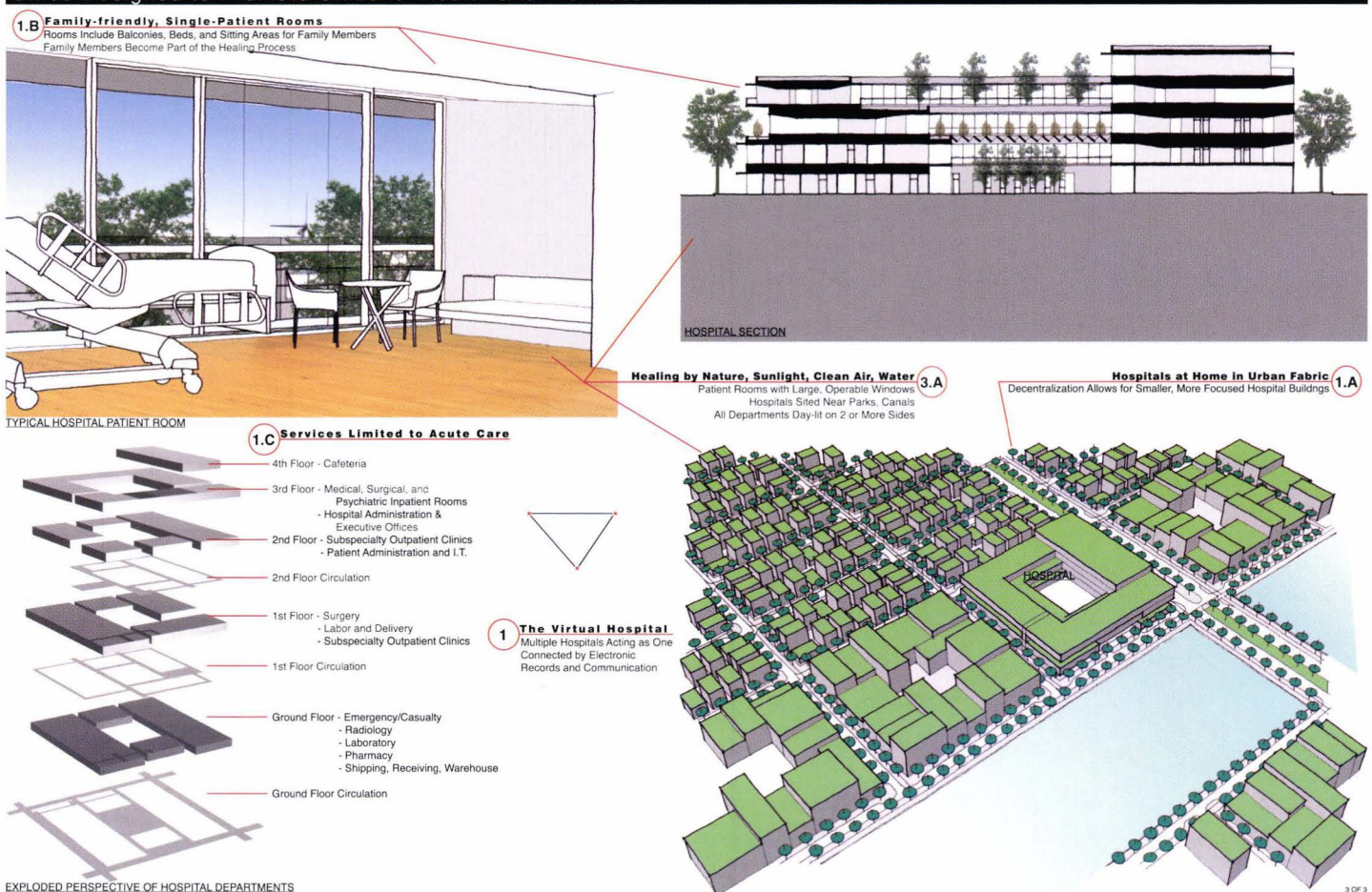


Conclusion

The goal of this entry is to propose some new vision of healthcare where access to the network is both universal and convenient. Emphasis is placed on lifestyle and community health because research has shown that preventative healthcare is far cheaper than acute, hospital-based healthcare. Every opportunity to use the environment for health and healing should be maximized. Hospitals become neighbourhood-friendly destinations for only the most critical of patients, and should offer a resort-like, relaxing atmosphere that seeks to treat the whole person.

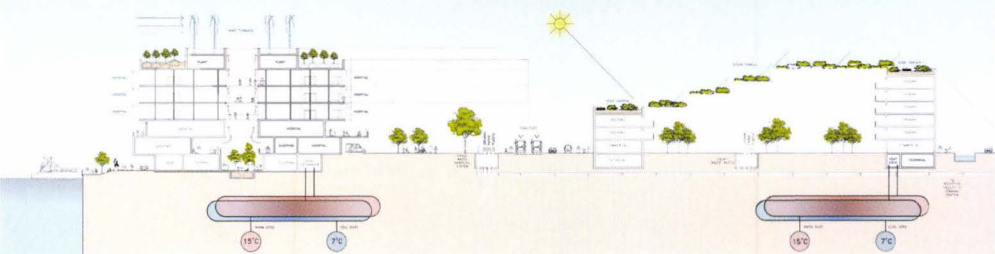
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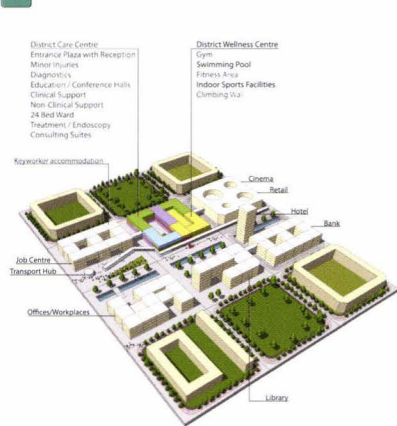


Motto 3 Propositions for Healthcare and City 2025

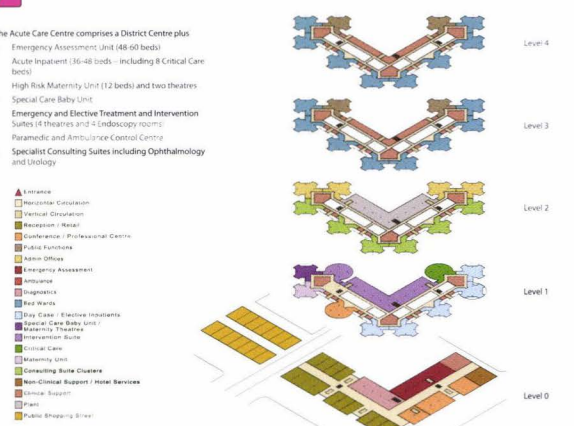
Main designer Christopher Pechacek



District Health Centre



Acute Care Centre



maximizing natural daylight, sunshine and cross-ventilation. All rooftops provide horticultural land for each block and the space under communal gardens houses essential vehicles, stores and workshops. Shared car pools are available in the commercial centre. *The district 'Wellness Hotel'* Each Wellness Hotel (District Health Centre) serves one district, comprising nine neighbourhoods with a catchment population of 40,000 people and puts all their health, social and leisure needs within 15-20 minutes of their home. Co-located are the cinema and arts centre, local police and emergency services, recreation and leisure including fitness,

together with a commercial and retail centre, fully supported by a transport intersection for light rail (tram), neighbourhood bus, road & water taxi. Mental health centres for adults and elderly assessment and treatment are based here with outreach clinics at neighbourhood level. Inpatient facilities are integrated alongside the primary care services in typically 8-10 bed "houses" per age group in each of the four districts. *Acute care and wellness:* At the city centre, a significantly downsized acute care hub is co-located with one district Wellness Hotel, sharing support facilities and ensuring flexibility in case of a major incident. Only the most difficult

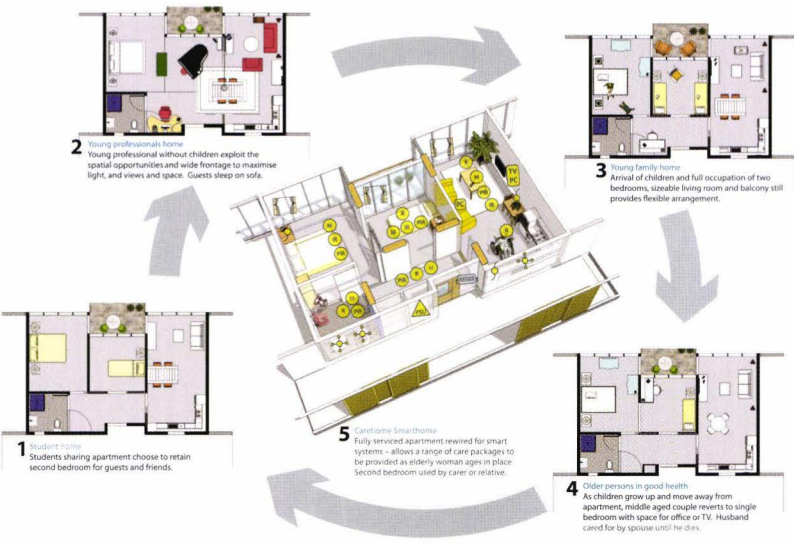
Flexible Care at home

"Home-Care" will be the cornerstone of the new system. Capital resources are re-distributed into the general housing stock to enable the care of the aging population at home. An educated and older population are more convenient with health and social care issues.

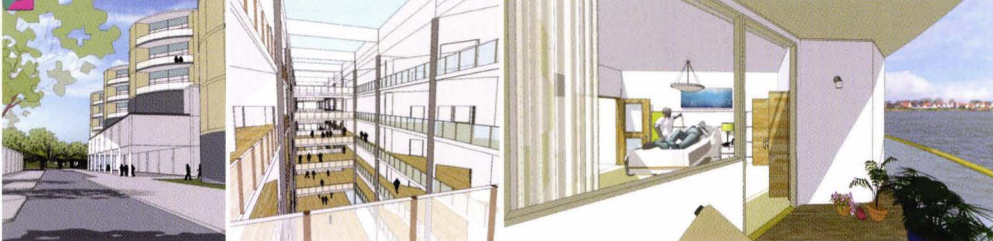
- 21m² flexible apartment with balcony
- Designed for adaptable lifecycle allowing older people to remain at home when ill health would otherwise cause hospitalisation
- Main bedroom and accessible bathroom sized to minimum hospital space standards
- Kitchen is adaptable for wheelchair user requirements
- Sliding doors are standard
- Construction designed to hoists and support rails
- Wide frontage maximises daylight and ventilation

Typically, each urban block would contain between 40 and 50 units of this type.

- 1 Ceiling Rise
- 2 Multi-Sensor
- 3 Infra Red Sensor
- 4 Movement Sensor
- 5 Personal Computer
- 6 Television + Personal Computer combination
- 7 Domestic Appliance
- 8 Water Control
- 9 Heating Control
- 10 Door Motor
- 11 Curtain Motor
- 12 Power Supply Unit



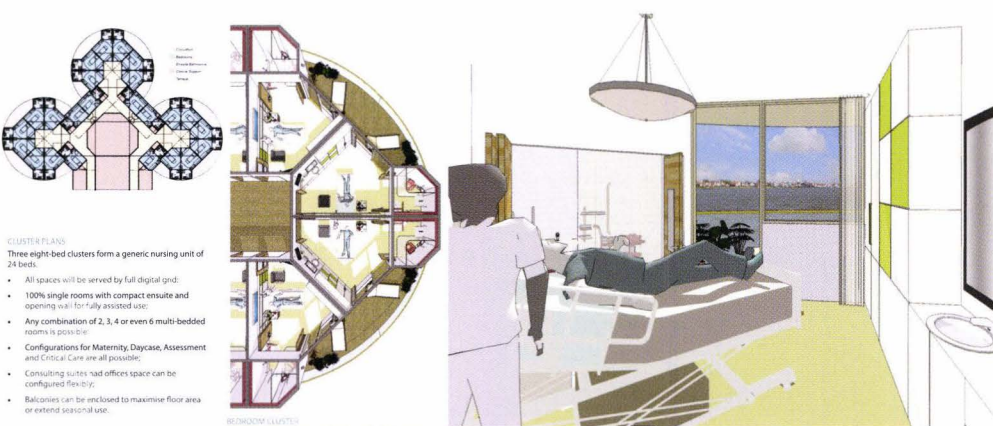
Acute Care Centre



The acute care centre is fully immersed into a green and urban fabric.

Simple spatial organisation assists wayfinding and fills interior with natural light and ventilation.

Natural daylight and exposure to the sunlight and fresh air is vital to patient recovery.



CLUSTER PLANS

Three eight-bed clusters form a generic nursing unit of 24 beds.

- All spaces will be served by full digital grid.
- 100% single rooms with compact ensuite and opening up for fully assisted use.
- Any combination of 2, 3, 4 or even 6 multi-bedded rooms is possible.
- Configurations for Maternity, Daycase, Assessment and Critical Care are all possible.
- Consulting suites had offices space can be configured flexibly.
- Balconies can be enclosed to maximise floor area or extend seasonal use.

3-bed cluster with nurse workstation and clinical support space, external ensuite pods and balconies.

Single bedroom interior view.

cases or emergencies need be admitted here. This is a centre of health education and training where a social and professional milieu exists. Here, skills develop through mutual face-to-face support.

Conclusion

The health of Hygiopolis is built on, and wholly integrated with the city's infrastructure. We have made a place where healthcare is accessible, available, continuous, comprehensive, and tied into the fabric of life, from cradle to grave.

Motto	Hygiopolis
Main designer	Christiaan Hiemstra
Firm	MAAP Architects
Team members	Elizabeth Blundell Thomas Lindner Sonja Malm Tomasz Sachanowicz Mungo Smith Bob Wills Michel Trocme Andy Ford John Legge Andy Black

A Green Archipelago

Act of stealth

Care is unavoidably connected with Mortality. The fashion to nurse ourselves more & more sophisticatedly, invisibly, technologically, etc., only tries to disguise this fact. The intensity of our lives already in itself is an attempt to reduce our mortality to a footnote.

Care became an act of stealth: the reduction of the impact of care in our endlessly extending life, has taken away the direct relationship of our lives with death. In the future care should be reconnected with the tangibility of our lives.

More than 50 percent of the world-population live in the city. This entity positions itself towards the landscape as its human counterpart. Reflecting on the city is therefore more than necessary, as it essentially is reflecting on a conscious way of human occupation of space. Reflecting on care (in the near future) coincides by consequence with rethinking the contemporary city. In the future, care and the city will overlap.

This provides us with an enormous opportunity: a chance to impose a conscience on the gigantic problem of our contemporary urban landscape of sprawl. Urbanism itself seems to have lost this conscience. Care might well be our last chance.

Recently, healthcare has become more and more sophisticated. The machines and big mono-functional buildings of the last era have mostly been replaced by home care and intelligent gizmos. This is a fascinating evolution; care seems to have left the machine-age. Machine-like functional logics have evaporated. Meanwhile, the architecture of the city has proved to be a solid base for a qualitative space, disconnected from its inherent functional logic.

Healthcare, also in 2025, is to be understood as two very different spheres:

'cure' and 'care'. 'Cure' incarnates in most cases into a temporary treatment for a selective group with often a technological element; the result is supposed to be a cured person. Care, on the other hand, slowly became the conditio-sine-qua-non of our endlessly extending life.

Due to the technological progress, 'cure' became a set of tools and actions, a couple of specific drugs, a limited amount of spaces for very specific treatments. 'Care' on the other hand, has a much more factual and spatial element; it can be translated into a specific search for a precise and qualitative living environment. These environments are essentially collective: swimming pools, vast green spaces, beautiful squares, sport facilities... These spatial typologies create an opportunity for care to play in the city of the near future. In our endlessly individualized urban environment the collective spaces allow us to live the life of citizens. In the future care and the city will coincide.

Idyll of air and green

(A) Green Archipelago is a project for 4 inhabited forests on the Lake of Marken. These forests are island cities, which – in the tradition of the Greek Polis – accommodate a maximum of 40,000 inhabitants.

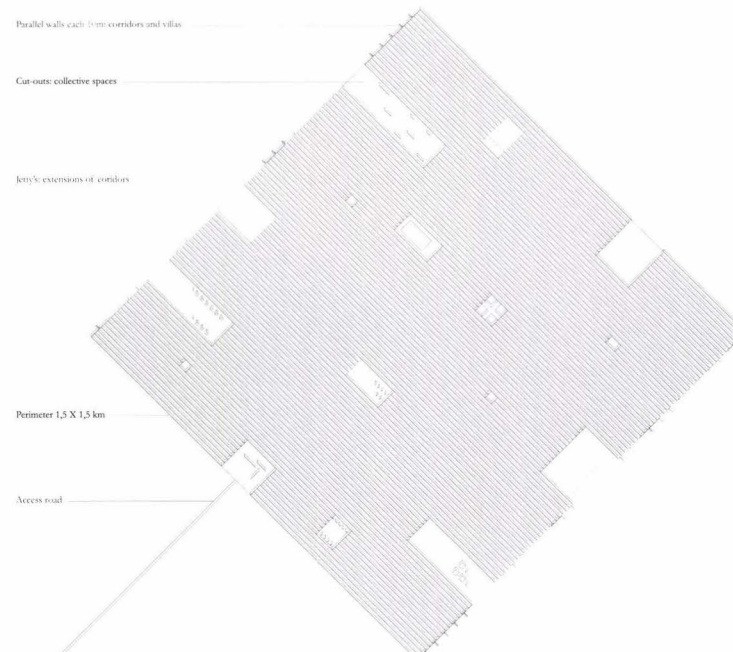
Each island is covered by a grid of trees, 10 meters apart from one another. They define the forest. On the surface of the forest parallel walls, 3.3 meters high, define long, low, parallel spaces. This is a base structure for patio villas and corridors. The patio villa is the most dense variant of groundfloor living: the peaceful idyll of air and green in its most simple form. The project doesn't aspire a relationship between inhabitant and visitor in this structure. Houses fit this structure to their own merits.

Large cut-outs from this ground layer of forest and walls define the collec-



A Green Archipelago

Archipelago in Lake Marken



tive spaces. It is in these spaces that the demands of healthcare, which are intrinsically spatial, are organized: a quiet garden with apple-trees, an indoor swimming pool, a square surrounded by commercial & public services... These are the key spaces of the collective consciousness. Thus this city is essentially shaped by the collective.

A Green Archipelago

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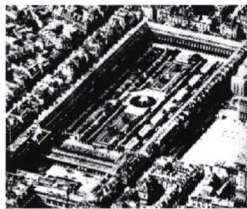


Photo: Rocco Pini

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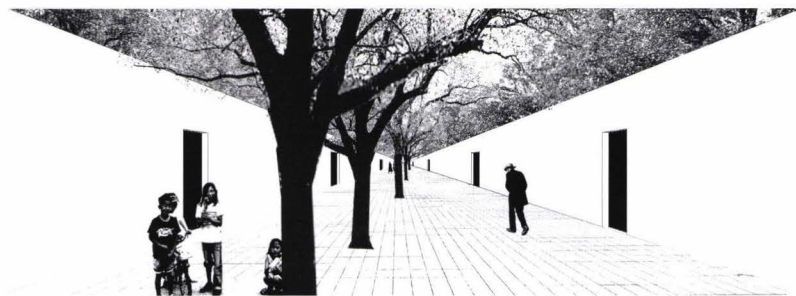
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A Green Archipelago

A City of Walls



Man sagt: der Tod kommt gewiss, aber vorläufig noch nicht. Mit diesem "aber..." spricht das Man dem Tod die Gewissheit ab.
Martin Heidegger, Sein und Zeit zweiter Abschnitt, erstes Kapitel - §52. Das alltägliche Sein zum Ende und der volle existenziale Begriff des Todes

2. (A) Green Archipelago is a project for 4 inhabited forests on the Lake of Marken. These forests are island cities, which - in the tradition of the Greek Polis - accommodate a maximum of 40,000 inhabitants.

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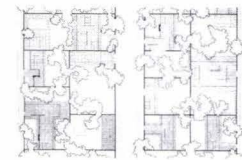
Sketch 2001

floor-living: the peaceful idyll of air and green in its most simple form. The project doesn't aspire a relationship between inhabitant and visitor in this structure. Houses fit this structure to their own merits.

Large cut-outs from this ground layer of forest and walls define the collective spaces. It is in these spaces that the demands of healthcare, which are intrinsically spatial, are organized: A quiet garden with apple-trees, an indoor swimming pool, a square surrounded by commercial & public services... These are the key spaces of the collective consciousness. Thus this city is essentially shaped by the collective.

"I'm making a tour on Lake Marken, along the different island cities also, like green fata morgana's, seem to dislodge my feeling of time and space. Every island is different, and every island is the same. The restricted confines of the islands in the vast, immeasurable space of the lake evoke powerful emotions: feelings of loss, melancholy. I see what has passed. A web of recollections unfolds. In this melancholic state of mind, I become aware of my mortality as a final border. I realize that I am being increasingly defined by my own mortality. A mortality, which I encounter everywhere in everything."

While walking on these city islands, I come across walls. These walls stir my curiosity and hence disturb the sinister monotony of my thoughts. What lies beyond them? There's something puzzling. I find a door and I enter a large space, where others reside. The space envelops me, and for a moment I feel part of something big. Here I experience some consolation. Death no longer seems only loss, it is a call for care, as a search for the most satisfying use of time. I realize that mortality is a form of finiteness, also in the sense of limitedness. Here, I share this emotion with the others: Each is limited on its own."



Typology of patio villa (Mare Van Der Buijs)

"I'm taking a tour of Markermeer, along the different island cities which, like green fata morganas, seem to dislodge my feeling of time and space. Every island is different, and every island is the same. The restricted confines of the islands in the vast, immeasurable space of the lake evoke powerful emotions: feelings of loss, melancholy. I see what has passed. A web of recollections unfolds. In this melancholic state of mind, I become aware of my mortality as a final border. I realize that I am being increasingly defined by my own mortality. A mortality, which I encounter everywhere in everything."

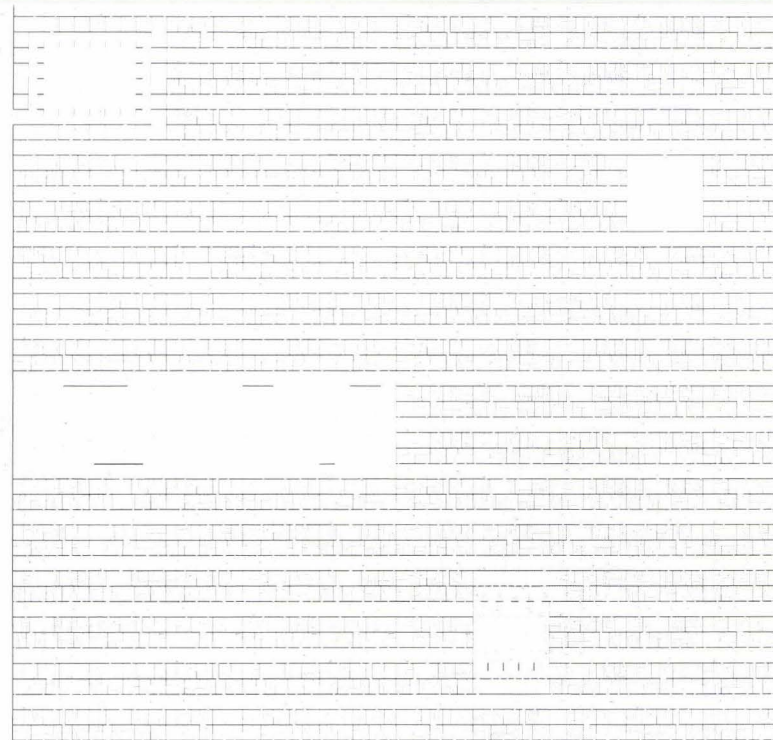
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Sanatorium

Hidden park

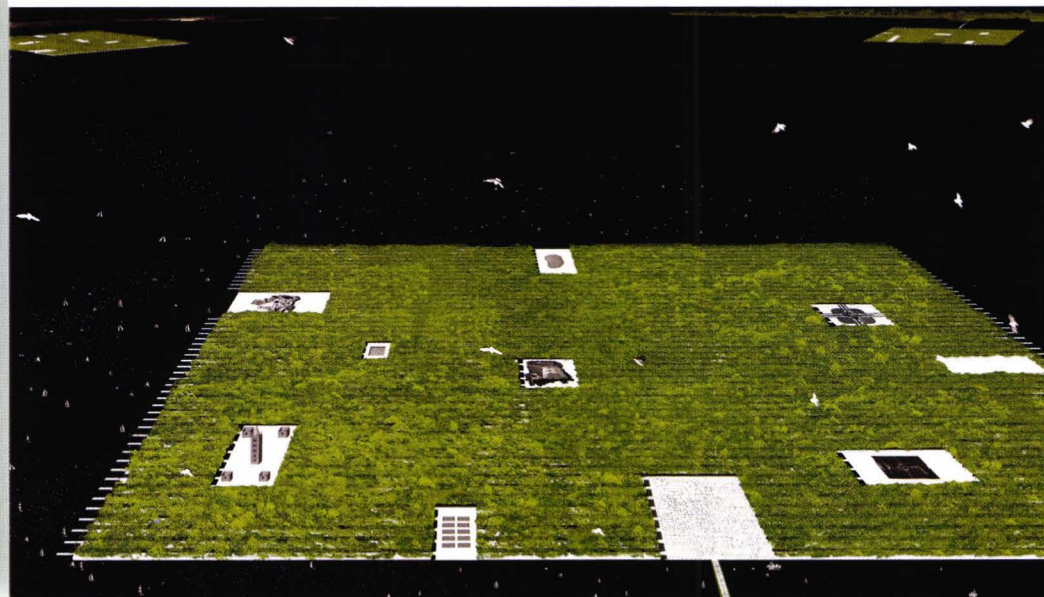
Public square with sporting facilities

Swimming pool



A Green Archipelago

Birds eye view of the Archipelago



Motto	A Green Archipelago
Main designer	Office Kersten Geers David van Severen
Team members	Kersten Geers David van Severen Hans Westerveld



List of entries

- 01 - **Common Care & Cure, Common Privacy**
- 02 - **Health to the People**
- 03 - **Strip City 2025**
- 04 - **CIT-Y**
- 05 - **MASM**
- 06 - **Blooming up**
- 07 - **CARE-4U**
- 08 - **Fair Care, Care Fair**
- 09 - **Markerwerf**
- 10 - **Well Come City**
- 11 - **... is half the solution**
- 12 - **Carefree 2025 Markerdam**
- 13 - **We Care**
- 14 - **Holon**
- 15 - **City without a Care**
- 16 - **Networking islands**
- 17 - **LEEF! - gelukkig zijn, bewegen en ontmoeten in een gezonde stad**
- 18 - **Geheel en al**
- 19 - **Postcode 1572**
- 20 - **Healthdome.org**
- 21 - **Take '25**
- 22 - **Access to FLOAD**
- 23 - **I XVII XVII I**
- 24 - **BRIDGE-N**
- 25 - **Blue Heart**
- 26 - **Big Bang**
- 27 - **zorgenLoos living**
- 28 - **New Marken**
- 29 - **Water of Life**
- 30 - **Marker islands, landscape for a healthy lifestyle**
- 31 - **Kennistempel**
- 32 - **Zorg voor jouw leven**
- 33 - **Vital Wise Water**
- 34 - **Isle Care**
- 35 - **A Caring Network**
- 36 - **Health(y) Around The Block**
- 37 - **MEERmarken**
- 38 - **Fac Unum Quotidie Quod Te Terreat**
- 39 - **Nobody is perfect**
- 40 - **Care in motion**
- 41 - **Square City**
- 42 - **Red Point**
- 43 - **29934 Buildings for the future**
- 44 - **3 Propositions for Healthcare and City 2025**
- 45 - **Hygiopolis**
- 46 - **A Green Archipelago**

Colofon

Healthcare 2025: Buildings *for the future*

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Healthcare in Europe is changing. Many countries are introducing reforms, and creating more competition and an open healthcare market. Product pricing is becoming normal; in some cases, such as the Netherlands, capital costs are becoming a component of charges. Experiments with public/private cooperation in healthcare are also becoming commonplace. Alongside reforms to the healthcare system, the health of the world's population is transforming due to changes in lifestyles, increasing prosperity and climate change.

*In this book the results are presented of the architectural competition **'Healthcare 2025: Buildings for the Future'**. This competition was organized by the Netherlands Board for Healthcare Institutions (het Bouwcollege) to invite architects and students of architecture to develop and sketch ideas for new healthcare arrangements in 2025, to be built in a new city of 160.000 inhabitants that is to arise on (imaginary) new land in the Dutch inland sea IJsselmeer.*

According to the jury two prize winners succeeded best in translating their ideas into an attractive architectural design for the healthcare facilities.

The book presents an overview of the variety of ideas and models for future healthcare that can be found in the 46 entries to the competition, and their spatial translation into architectural design. In a catalogue all entries are presented with panels and texts.

The Bouwcollege hopes this book will contribute to innovative thinking about healthcare.

Netherlands Board for Healthcare Institutions

