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ATLAS ABC



Inaugural lecture

prof. ir. C.M. de Hoog

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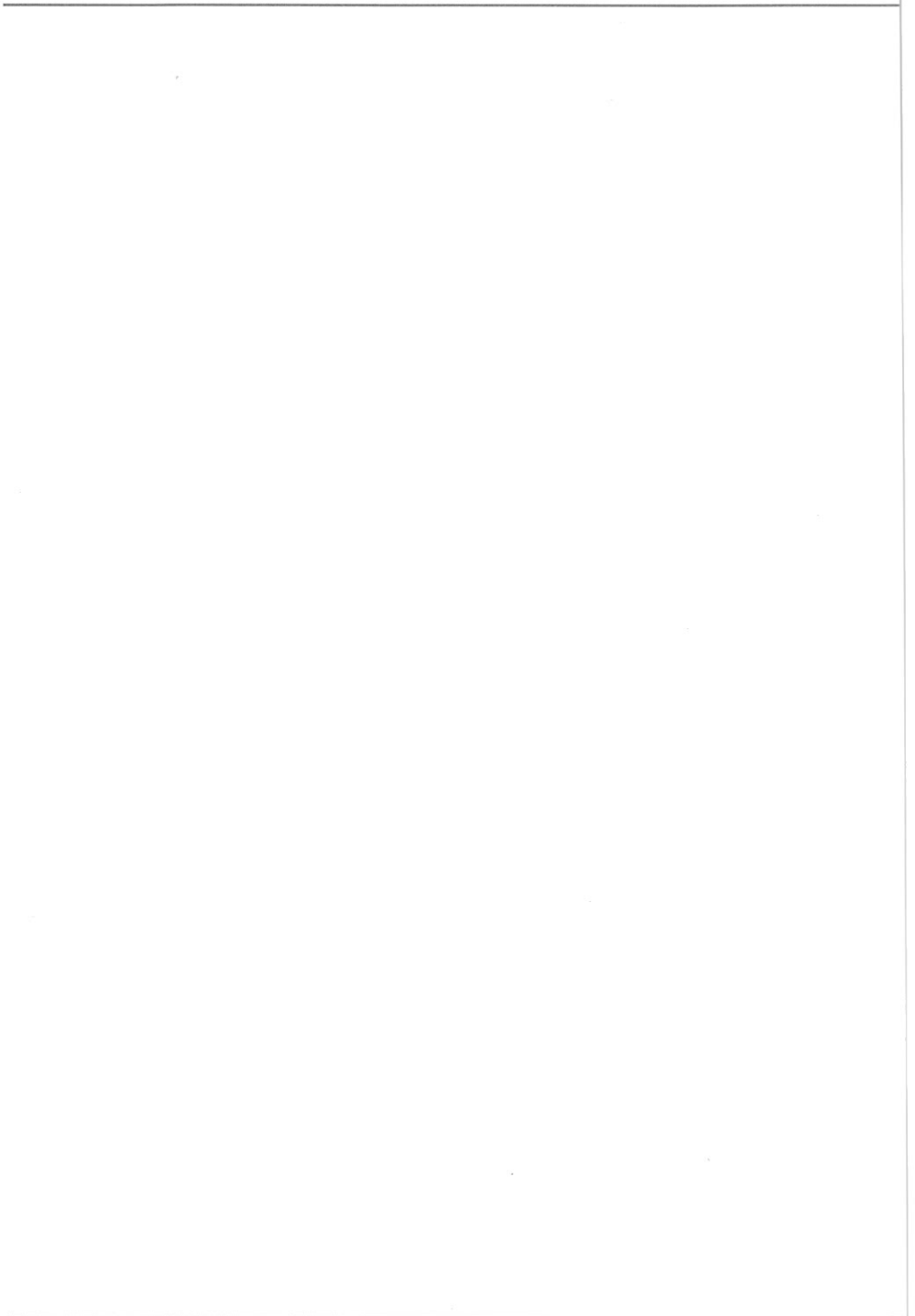
Delft, june 2009

Atlas ABC

Inaugural lecture

Given on 18 March to mark the acceptance of the Chair
of Urban and Regional Design at the Faculty of Architecture
of the Delft University of Technology

by Professor C.M. (Maurits) de Hoog



Atlas ABC

Rector Magnificus, members of the Executive Board, fellow professors, ladies and gentlemen,

It is a great privilege to stand before you as Professor of Urban and Regional Design. I follow in the footsteps of some very illustrious predecessors. It is now sixty years since the Faculty of Architecture introduced urbanism as a discipline in its own right. Its first professor was Cornelis van Eesteren. Like him, I gained much of my experience in Amsterdam, which is surely the best training ground there is. This lecture owes much to both Amsterdam and Van Eesteren.

This is not the first time that I have stood on this stage. I did so during one of the Cameretten cabaret festivals in the 1970s. I was not actually performing, you understand, but was a stagehand. It was my job to set up the scenery between acts. I discovered that the Delft audience can be very harsh in their criticism. Indeed, my favourite group was 'encouraged' to leave the stage by slow hand-clapping. I trust that there will be none of that today!

It was Rudy Uytenhaak who advised me that anyone spending a given period as a 'professor of practice' should have a firm objective in mind. His objective, in which he was entirely successful, was to produce the very interesting book, *Steden vol ruimte, kwaliteiten van dichtheid*, about ways of reconciling density with quality. For me too, working in Delft offers opportunities that I might not enjoy elsewhere, such as the chance to conduct specific research and to reflect on how our profession is practised. I think that three years will be enough time in which to explore some aspects in appropriate depth. My address today is therefore mainly concerned with the research that I am undertaking while occupying the professorial chair.

The title of this lecture is '*Atlas ABC*'. It is in three main parts. First, I shall say a few words about the word 'Atlas' in relation to our profession. I shall then go on to describe the background of the Atlas I am hoping to produce, and finally I shall offer an example of design research, which I term 'New Metropolitan Programmes: building blocks for the metropole'.



1. Atlas

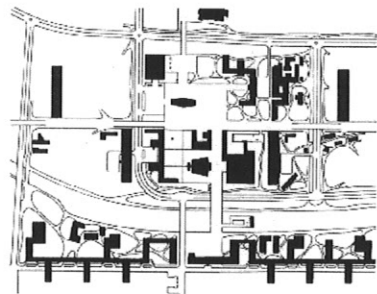
In 1570, the Flemish cartographer Abraham Ortelius published a book of maps. However, he did not use the word 'atlas'. It was another fifteen years before his compatriot Gerardus Mercator adopted that title for a similar work which bore the subtitle (in Latin), *Cosmographic Meditations on the Fabric of the World and the Figure of the Fabrick'd*.¹

Atlas, you will recall, was the Titan in Greek mythology who bore the celestial spheres on his shoulders. For some, he has become a metaphor for the intellectual who is oppressed by the weight of the world and can no longer function properly. I vehemently disagree. For me, an atlas actually opens up the world. I was left my first atlas by my grandfather when I was about ten years old. It was a historic and truly fascinating book. I would regularly delve into its pages, encouraged by an enthusiastic history teacher at school, and was engrossed by the maps which showed everything from the military campaigns of Frederik Hendrik to the distribution of world languages.

The word 'atlas' took on yet more significance when I was working here in Delft as student teaching assistant to Rein Geurtsen in the late seventies. It was he who initiated me into this profession, for which I remain extremely grateful to this day. Geurtsen introduced the term 'urban *design*' into the Netherlands in response to the standard term, urban *planning*. The latter implies reliance on facts and figures which dictate the form of the various programme components. Geurtsen wished to highlight a different approach, that of the designer who offers specific skills and attributes, including a sound knowledge of the city's past development and its design tradition.²

The 1970s saw a prolonged debate about urban design, in which Muratori

represented the rigid Italian school.³ He contrasted the retention of the city's existing qualities with the Modernist approach which had been common practice since the end of the Second World War. Modern architects and urban planners – or designers – regarded the historic city as an outdated phenomenon, one which should quickly make way for a shiny new city able to meet the demands of today. Colin Rowe illustrated the two, diametrically opposed, approaches using the maps of central Parma and of Le Corbusier's plan for the redevelopment of St. Dié-des-Vosges. The historic city versus the modern city.⁴



This, of course, is something of an exaggerated caricature. Nevertheless, many attractive cityscapes, including some in the Netherlands, were altered beyond recognition in the 1960s and 1970s, with entire neighbourhoods demolished for no good reason. When I started a work experience placement with the Nieuwmarkt Action Group in 1975, I was derided as a representative of a profession that had completely 'lost the plot'. And we all know what has since become of the Bijlmer district, the much-vaunted 'modern city' of its day.

Nevertheless, the contrast is not complete, and for two reasons. First, I do not regard modernism as a straightforward, black-and-white ideology which is repugnant through and through. I have, for example, been involved in the regeneration of the Jeruzalem district in Amsterdam. It was originally envisaged as the reconstruction era version of the pre-war 'garden suburbs' such as nearby Betondorp, to a design by Merkelbach in collaboration with Van Eesteren and Mulder of the city's spatial planning office. Mien Ruys and Aldo van Eyck were responsible for the design of the new courtyards. In contrast to the closed appearance of Betondorp, they adopted a green and open structure, using new materials and construction methods. The entire project radiated an irrepressible optimism. It is a remarkable neighbourhood, and well worth retaining. Sylvia Karres and Arie van der Neut are even now working on a plan which will strengthen the existing

qualities. So, the modernists have also been responsible for some good plans.



On the other hand, the historic city of Muratori and Rowe, Amsterdam's Nieuwmarkt and De Pijp, and the numerous other districts which campaigners sought to preserve in the 1970s are not 'natural phenomena'. They did not spring forth from nowhere, but are also extremely well designed.

In the late 1970s, the French architect Philippe Panerai published studies of the French bastide towns, and of Versailles.⁵ He described the planning concepts that had been applied, the new discoveries and approaches, and showed how each town is the product of a series of processes and interventions which rely on the original situation and on all successive interventions. That was a real eye opener!

Our Dutch tradition of urban design goes back to the sixteenth and seventeenth centuries, when the official surveyors and those responsible for fortifications became involved in the process. Here, the situation – the landscape – is not a permanent 'given'. Much of the country is man-made, and our topography continues to develop. The typical Dutch town or city is also not a 'natural phenomenon', with its roots in traditional assumptions. The city is a design object, and hence the subject of debate and opinion.

One approach that can help us to gain a better understanding of the city is the discipline that was dubbed 'morphological research' in the late 1970s. It provides an insight into the history and the dynamics of an area, it reveals the successive design interventions, and it shows both the successes, with the resulting urban qualities, and the failures. Morphological research therefore offers a framework and enables designers to adopt a specific standpoint in relation to both the situation and the design tradition. When Rein Geurtsen, Kees Thielen and I made our analysis of Dordrecht in 1982, we decided that there was only one word which would do justice to the product of our morphological research. That word is 'atlas'.



The urban designer and the urban explorer

The last Atlas I worked on was the 'Atlas Haven-Stad', completed two years ago.⁶ It represented the first step in the next phase of the redevelopment programme for the zone alongside the River IJ, between Amsterdam and Zaanstad. Unlike morphological atlases, the Atlas Haven-Stad represents the results of a particularly broad study which was not confined to the physical form of the harbour district. It is a survey and a 'mapping' in the literal sense; it charts an entirely new world, complete with grain lifts, coal silos, all-weather terminals and oil tanks. Alongside these spatial phenomena, however, the atlas also examines aspects such as the historic growth in transshipment volume, the location of direct and indirect employment and industry, the 'wet' and 'dry' areas, added value, spatial productivity, land ownership, water depth, traffic volumes, nuisance limits, soil contamination, siting of pipes and cables, natural qualities and even a smidgen of cultural history. The only true morphological component is a comparison of the spatial form of Amsterdam harbour with that of its competitors, Le Havre,

Antwerp, Rotterdam and Hamburg. Even harbours have to be designed. But the morphological component is by no means the most important. The Atlas as a whole represents a compilation of many different types of research finding. The more complex our projects become, and the greater the number of actors involved, so it becomes more important to record and present information in an accessible form, providing a common starting point for subsequent action.

I see a connection with one significant change in the way we practise our profession which has become manifest in recent decades. For a very long time, the emphasis in urban planning was the 'plan' itself. We dealt with allocation plans, zoning plans, structural plans, regional plans, and so on. At one time, there was even a national plan. And just as in any other type of plan, from a building plan to a holiday plan, the intention was that they should all be implemented. A plan offers a set of instructions, a blueprint for action: this is what we are going to do and how we are going to do it. In recent decades, however, there has been a shift from 'plans' to 'projects'. A project places the emphasis more on control: schedule, scope and budget must all be monitored and managed. Although expectations are not always met, the project is a good vehicle by which to get things done. The urban planner provides the overall design (and can therefore be more properly termed the 'urban designer'). He gives the project form, determining the materials and the detailing. He has an in-depth knowledge of sustainable materials. He knows how space can best be used and how space is affected by the buildings within it. He knows about the use of plants and greenery. He is also quite skilful at budgeting and at 'selling' the project to the client. Alongside this 'urban designer', I have seen another type of urbanism expert emerge in recent years. His primary domain is the preliminary process, and he is concerned with exploring and visualising possible future scenarios. He 'develops perspectives'. I like to think of this expert as the 'urban explorer'. Once the decision has been made to pursue a project, moving it from the ideas stage to implementation, the urban explorer steps aside in favour of the urban designer. At first sight, the work of the urban explorer seems very similar to that of the urban planner. The difference is in the tools of their trade. Planners use language; designers use maps, drawings and models. During the design phase, new combinations of urban elements and spaces emerge, forming new interrelationships which provide an impression of the possible future: how the neighbourhood, town or region might develop over time. During the past few decades, maps, drawings and models have proven themselves excellent communication tools within the general debate

about the future of the city.

The work of the urban explorer will be more consistent and more convincing if it shows a clear relationship with the social, economic and technological developments of the day, and is relevant to the choices that must be made. In considering the sustainable future of a harbour district, for example, the urban explorer must immerse himself in the transport sector. He must familiarise himself with the developments in that sector, and in the spatial-economic context in which it operates.

While the urban designer is first and foremost a designer, the urban explorer is more of a researcher. He must be comfortable working on a larger scale and with a longer timeframe. He must be able to develop a clear line of reasoning and reconcile his findings and recommendations with the societal positions. The Faculty of Industrial Design here at TU Delft refers to its graduates as 'academic designers'. I think this appellation also reflects the specialist nature and the added value of the university's Urban Planning programme... our 'designers' are also trained to be 'explorers'.

2. Atlas ABC

I now move to the second part of this lecture. As you will have gathered, I intend to produce a new atlas, which I shall call *Atlas ABC*. So, what does ABC stand for? Ten years ago, the 'Metropolitan Debate' was conducted here in the Netherlands under the leadership of Dirk Frieling. A foundation was formed and eventually became the basis of the Delta Metropole Association. That foundation had a Redesign Workgroup, comprising Dirk Sijmons, San Verschuuren and myself. We assessed and compared thirty plans for the Netherlands in terms of their design component, we classified them according to their adherence to the 'layered approach', and we produced a report entitled *Laagland* ('Lowlands').

Our conclusion was, and I quote:

In the context of the economic relationships in Europe, which are themselves developing at breakneck speed, the concept of a Randstad with wings or corridors is just one of several possible models for the future. If the central point is shifted from Zwammerdam to Son en Breugel, the resulting somewhat larger radius will include not only six of the seven major urban regions in the Netherlands, but also the Ruhr Valley and Cologne, Flanders and Brussels, and the Lille-Roubaix conurbation. A realignment of the relationships within the urbanised delta would seem to be the design challenge for the coming century.



We used a few sketches to illustrate the necessity of this switch: a scheme of the Randstad with the central point in Zwammerdam, and another one of the urbanised delta region, with its central point in Son en Breugel. Like my colleague Daan Zandbelt, I now intend to call this region 'ABC' rather than Laagland. ABC stands, quite simply, for the names of its three largest cities: Amsterdam, Brussels and Cologne. I wish to explore the development and the possible future of this region, my main aim being to clarify the position that Amsterdam and the Dutch Randstad will play within it.



ABC as 'megaregion'

ABC is a 'megaregion' or 'megapolis'. Depending on the exact delineation of its boundaries, it has a population of between forty and sixty million. In terms of economic clout, ABC is the world's fourth most influential region, after greater Tokyo, BosWash (the north-eastern corridor of the USA) and the Chicago-Pittsburgh metropolitan region.⁷

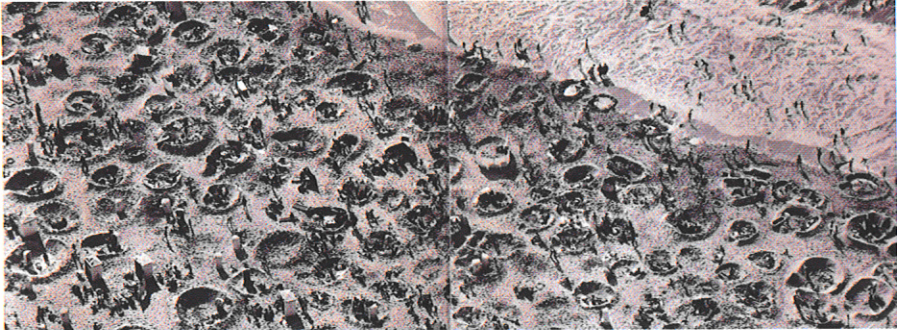
The position of the Netherlands, and in particular the Randstad, within this region is a significant factor in our national prosperity, with a substantial sales market for our products very close at hand. North Rhine-Westphalia is our most important trading partner, and we theirs. Next is Belgium. Our hubs serve the entire ABC region: the freight hub of Rotterdam harbour, the passenger hub of Schiphol and the information hub of the world's largest internet exchange in Amsterdam's Watergraafsmeer.

ABC has an interesting history and an equally interesting spatial form. It is an extremely extensive, diffuse region. It is an urbanised delta, a bottom-up society. Centuries ago, the economies of the Baltic and Mediterranean regions converged in the Low Countries, its cluster of towns forming an early 'commodities exchange'. Particularly prominent were the Hanseatic Towns along the rivers, later followed by cities such as Bruges, Antwerp and Amsterdam. The historian Fernand Braudel has described how these cities developed to become the global economic centres of the sixteenth and seventeenth centuries.⁸

From the early nineteenth century onwards, coal mining and steel production laid the basis for a new industrial economy of unprecedented proportions. The focus was no longer on the low-lying level part of the delta, but on the higher ground of the hinterland where it was relatively easy to find and retrieve fossil fuels and iron ore. Maps clearly show the emergence of a band of mining towns, stretching from northern France, through Wallonia and Zuid-Limburg into the Ruhr Valley. In Germany, industrialisation caused a radical shift in population patterns, with millions of people migrating from the hinterland into the Ruhr Valley throughout the nineteenth and early twentieth centuries. There was soon a very marked contrast between the low-lying valleys of the delta and these industrial towns.

Throughout the 1950s and 1960s, the post-war *Wirtschaftswunder* and the abstraction of oil and gas provided a further boost to ABC. As production in the uplands grew, there was a trickle-down effect whereby the cities elsewhere saw considerable growth, partly as the access points (the ports

of Amsterdam, Rotterdam, Antwerp and Zeebrugge) and partly as providers of products and services to address the relevant niche markets: ship-building, oil refinery, foodstuffs, electronics and 'agribusiness', for example.

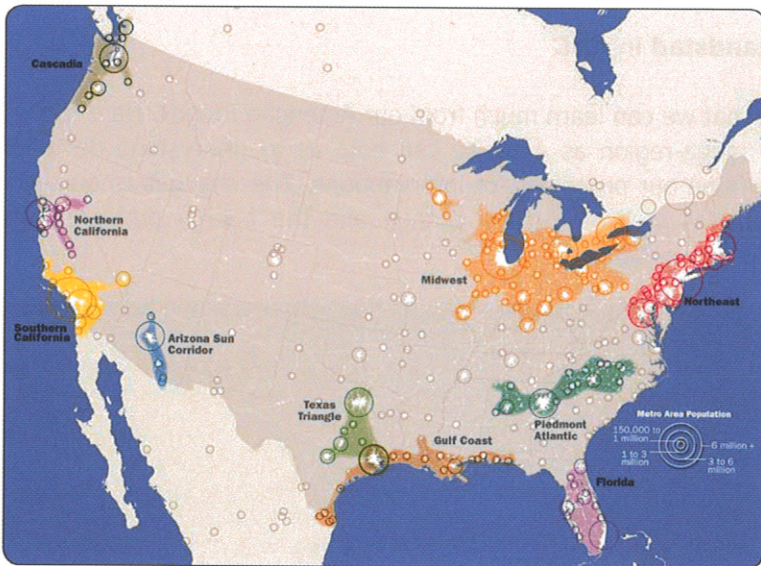


The coastline also acquired an entirely new profile as the main recreation area for the new centres of population, as we see in this photograph, taken in Noordwijk in 1958. This is certainly a very outdated image. Today, fifty years later, we live in an entirely different world. I am not referring to modern pastimes such as kitesurfing or lounging on the beach with an iPod, but to a much broader transformation.

The closure of the last coalmines – the Dutch Oranje-Nassau and Heerlen mines in 1974, the Ruhr region's Schachtanlage XII in 1986 and the Belgian Zolder mine in 1992, marked the end of the industrial era. In the early 1990s, partly due to globalisation and the advance of technology, and partly due to the reorganisation of the nineteenth-century nation states, ABC began to face entirely new challenges. The production apparatus has been transformed; coal and steel have been replaced by chemicals and knowledge. National markets which had long been protected, such as the energy market, are being rapidly integrated. The computer and the internet have come to play a key role. Brussels has become the capital city of an enlarged Europe with no internal borders and free movement of capital, people, goods and information. Following the fall of the Berlin Wall, the former West German government has moved out of Bonn to re-establish Berlin as the capital of a re-unified Germany. We now think nothing of flying to the other side of the world for our holidays. 'City-breaks' are extremely popular and are now more affordable due to the price war among travel operators. We see population ageing and a falling birth rate. Recently, the very foundations of our economy have been shaken. Mass unemployment looms once more, and we are searching for a way out of recession.

Megaregions: a new planning challenge

You no doubt followed last year's elections in the United States and the more recent discussion of Barack Obama's proposed investment package, totalling some 700 billion dollars. That investment is a direct result of discussions about the most desirable spatial-economic structure of the American metropolitan regions further to the *America 2050* programme.⁹ That programme was initiated by Robert Yaro, president of the Regional Plan Association and professor of City and Regional Planning Practice at Penn State University. It is primarily concerned with the future of the major conglomerations such as the 'northeast corridor', which extends between Boston and Washington on the eastern seaboard. In fact, ten such 'mega-regions' have been identified, and each has been considered individually within the *America 2050* debate.



In the first instance, the discussions centre on the concept of 'smart growth'. Concentration close to public transport connections would prevent excessive urban sprawl and the loss of landscape qualities. In the coastal regions, controlling the effects of climate change is also seen as an important issue,

with attention devoted not only to countering the threat to cities such as New Orleans and Florida, but also the threat to the unique ecology of the estuaries. The scale of the mega-region is also the most appropriate when considering ways to improve the connections between the regions and the smaller conglomerations. The Japanese *Shinkansen* ('bullet train') and the European network of high-speed rail links are often cited as examples. These themes played a prominent part in the 2008 presidential and congressional election campaigns, particularly those conducted by the Democrats. Eventually, the huge investment programme was announced to finance new and upgraded infrastructure: from coastal defences, bridges and reservoirs to wind turbines, metro systems and high speed shuttles. The USA's major canal-building project began in 1808 and the plans for the first interstate highways were unveiled exactly one hundred years later in 1908. It therefore seems appropriate that 2008 should be the year in which the next step – the development of the new mega-regions – was proposed. That proposal has since been adopted.

The Randstad in ABC

I think that we can learn much from our American friends. Here too, a study of the mega-region as a whole can help us to understand developments and to hone our proposals for interventions. The changes to our economic structure, as well as climate change and the energy problem, render a broader view essential.



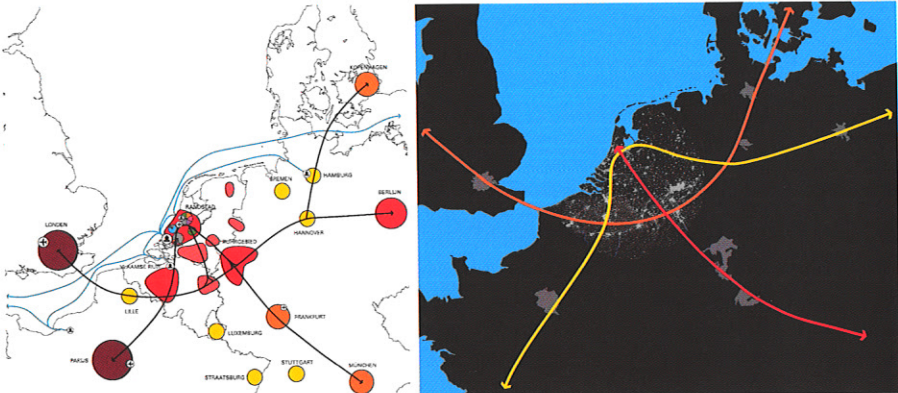
Water and climate

First, we must consider water management and climate change. How are we to keep our feet dry? Through my work on the 'Room for the River' Quality Team, I am aware of the dynamics of the river system, and I know that it is essential to prepare for the possibility of extremely high waters.¹⁰ Although the situation is a threat, it also presents an excellent opportunity to revise the form and significance of the river landscape and our riverside towns. The Delta Commission has made clear that the coastal region, the south-western delta and the IJsselmeer region must be included in this process.¹¹ The future of the Randstad is therefore directly reliant on the manner in which we address the water management issues of the entire region. We must not focus solely on the 'Green Heart', but must look at improvements elsewhere, such as along the coast. What would happen to our resorts if the coastline is extended by one-and-a-half kilometres, as the Delta Commission has proposed? Are we expected to trundle across all that sand in a buggy? (I've tried it – I didn't like it!) In one of our graduation workshops, we are now looking at options for the sustainable development of resorts such as Katwijk and Zandvoort. The first students to graduate on the basis of this project will do so this summer.



Networks

Next, it would be appropriate to review the layer of the networks. Since the 1980s, policy for the Randstad has included a 'mainport strategy'. Rotterdam is the largest seaport in ABC and Schiphol the largest airport. ABC, including Flanders and the Ruhr Valley, forms the catchment area for Schiphol. If all goes to plan, the HSL-Zuid high-speed rail link will become operational shortly, further reducing the journey time between Schiphol and Brussels. Remarkably, the plans for a similar high-speed link to the east were put 'on hold' several years ago. The Dutch government's policy document *Randstad 2040* is the first to suggest a full review of the network's development.¹² It also proposes the construction of new high-speed links to the Ruhr Valley, and to Eindhoven and Maastricht.



I believe that the route to the Ruhr Valley is essential and must be built. However, I also believe that the HSL-Zuid should be extended northwards, first to Almere en Lelystad, thus enabling Lelystad Airport to be developed as a satellite to Schiphol. The line should then be further extended, not to Groningen but to Twente, Hanover, Berlin and Moscow. The Randstad and Amsterdam would then occupy a far stronger position within the international network.

France is now experimenting with goods transport using its TGV network. In England, new commuter routes are being introduced, with Eurostar trains connecting Ebbsfleet, Folkestone, Ashford and Stratford with central London. These are shuttle trains: they do not run four times a day, but five times an *hour*. There would appear to be every opportunity to restructure commuter movements throughout the ABC region by similar means. I certainly hope that the Delta Metropole Association will be able to develop the 'Deltanet' further.

In England, the 2012 Olympic Games have prompted a significant upgrading of the intercity network. Bringing the Games to Amsterdam in 2028 would be a good idea. I am certainly looking forward to the hockey finals between the Netherlands and Germany!

Centres

There is no clear 'centre' within the ABC region. According to analyses and the authoritative journal *Forbes*, 22 of the world's largest companies were based in ABC in 2007.¹³ Eleven have their head office in the Randstad, six in and around Amsterdam, one in Rotterdam and four in The Hague. North Rhine-Westphalia is home to eight of the companies on the list, with one based in Cologne, three in Dusseldorf, two in Bonn and two in a more rural setting. Three of the company headquarters on the list are in Belgium and are also well distributed.

Brussels and Amsterdam have the most marked international orientation. Brussels has a particularly high profile as the *de facto* capital of the European Union and the location of the NATO Headquarters. Amsterdam is notable for its financial sector and high-end business services, but it is not the New York of the ABC region. Amsterdam is primarily a creative city, a city of interaction and exchange.

Various groups have felt the draw of the big cities in recent decades: young people and students who have become the new urbanites, recent graduates from other university cities, a varied immigrant community from both the western and non-western countries, shoppers from the region, day-trippers, foreign tourists, conference delegates and those attending various events. Within the ABC region, cities account for the highest hotel occupancy rates and the most international conferences (of non-governmental organisations).¹⁴



These maps are taken from *Nieuwe ritmes van de stad* ('New rhythms of the city'), a book about the usage of the city.¹⁵ It is by Rick Vermeulen and myself. The cover shows the 'Uitmarkt', the festival which opens Amsterdam's cultural season. Like the annual Gay Pride event, it is a party thrown by a 'community', in this case the city's theatre-makers', to which everyone is invited. An unbeatable formula!

Visitors have dramatically altered the character of the city in recent decades. If we count everyone who 'used' the city in one way or another in 2007, we find that Amsterdam has a population of eight million, rather than the official figure of just over 747,000. Moreover, that eight million includes only those Dutch visitors who come to the Amsterdam several times a year, and only those foreign tourists who visit more than once. These eight million people form a rich spectrum of different 'communities'. Their presence establishes the city as the main centre of the western metropole, and a vibrant hub within various global networks.

Asymmetry

In this context, it is time to abandon the constrictive symmetry of the Randstad. Auke van der Woud has demonstrated how national spatial policy has been based on a desire for symmetry since the nineteenth century, particularly in terms of the relationship between Amsterdam and Rotterdam.¹⁶ Both cities were given a canal to the sea and rapid hinterland connections. Both have a mainport and a light urban railway. When Rotterdam gained an expensive bridge, Amsterdam had to be given a longer tunnel.

It was Dirk Frieling who introduced the concept of the 'Delta Metropolis' and who called for greater cohesion between the large cities in the region between the North Sea Canal and *Nieuwe Waterweg*.¹⁷ Joost Schrijnen then proposed that this metropole should rely on two urban regions.¹⁸ The 'Daily Urban System' of the North and South Wings, having a radius of thirty kilometres, would bind the two flanks, Almere on the one side and the Drecht Towns on the other.

My hypothesis builds upon this idea.

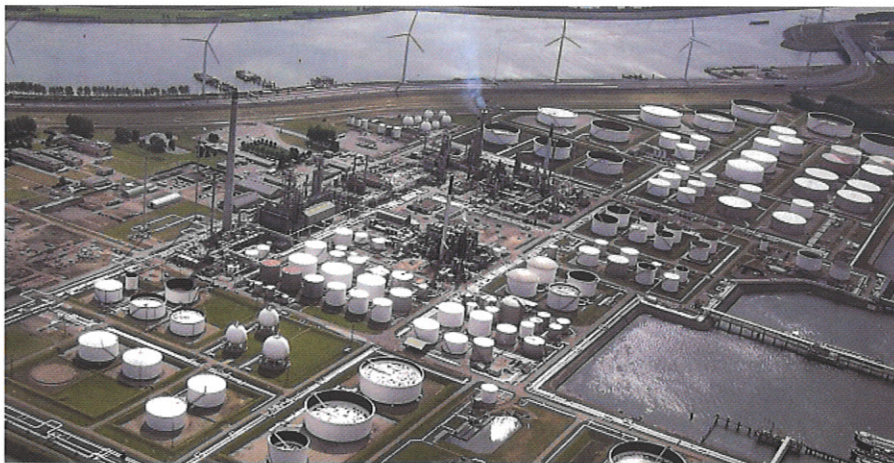
Increasingly, Amsterdam's main function is as the main city of the western metropole, not so much in terms of daily use, the commuter flows, but in more due to the weekly, monthly and annual rhythms created by the visitor flows. This is the role that we are to develop further in the years ahead.

So what about Rotterdam? Its prime position at present is as a link in the goods transport chain. However, the added value of handling containers and

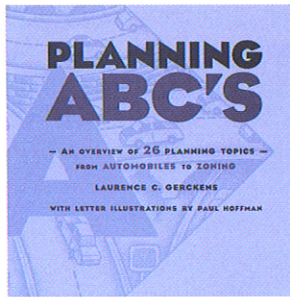
coal is not high. Rotterdam's economy is therefore not as secure as that of Amsterdam, a situation which calls for targeted policy.

I see three areas of opportunity, the first of which is energy. We must now prepare ourselves for the post-fossil fuel economy. Can the hundreds of hectares now given over to coal and oil storage be given a new function: the generation and storage of new energy?

Given the proximity of Westland with its many horticultural businesses, the south wing of the Randstad strikes me as the ideal location for the –main food distribution centre of the ABC region, akin to the Parisian *Rungis*. Perhaps we could link Bleiswijk to the HSL network so that the tomatoes and chicken fillets arrive in the Ruhr Valley while they can still be termed 'fresh produce'! Last but not least, the further development of the technology cluster which currently comprises TU Delft, TNO, Deltares and various other institutes would present yet more opportunities for the south wing of the Randstad.



My *Atlas ABC* can provide a better understanding of the position that the Netherlands, the Randstad and the other major Dutch cities could occupy in the ABC mega-region, showing their interrelationships, dynamics and potential. Believe me, it will be incredibly interesting to discover how many clothing stores there are in Amsterdam, Antwerp and Dusseldorf, where the gas substations are located, and what the projected high water levels are. To gather all this information will require the input of a huge number of people, starting with our friends at our sister universities in Dortmund and Leuven. I hope that my *Atlas ABC* – just like my grandfather's atlas – will open up a whole new world.



3. ABC – Building blocks for the metropole

This brings me to the third part of my lecture, *Building blocks for the metropole*. My proposition is that we must now make a crucial step in terms of planning at the regional level. In the twentieth century, planners and designers were primarily concerned with the growth and expansion of the cities. Their efforts were governed by the 'big numbers'. In the 1960s, for example, they had to contend with a projected population of twenty million. In the year 2000, during the 'VINEX' period, the target was to build one million new homes. Throughout the twentieth century, urban development was practically synonymous with public housing and the housebuilding programme. That trend can be traced back to Berlage, who subscribed to the view propounded by the German theorist A.E. Brinckmann: "*To build a city means to create space with housing material.*"¹⁹ I say that it is now time to abandon this idea.

Since the partial privatisation of the Dutch housing associations and the abolition of various grants and subsidies, the government's influence in public housing has decreased substantially. Rather than population growth, we now see an overall fall. Even in those regions which are still experiencing growth it seems wise to stop pursuing expansion. Rather, we should focus on the densification of the existing cities, multiple space usage and the transformation of under-utilised areas. We Dutch have been somewhat casual in our use of space. We must now be far more frugal with the landscape and the open space that remains.

The development of the metropole must therefore no longer rely on quantity but on *quality*. We must not be led by the big numbers, but by the 'urban elements', which number in the dozens rather than the millions. Waste management centres, coastal resorts, conference centres, data hubs, food distribution centres, wind farms, skating rinks, marinas – these are

the elements to which I refer. I think of them as the 'building blocks' of the metropole.

My proposed approach entails conducting design research at each of the levels of scale, looking at ways in which these urban elements can be incorporated or upgraded. I am not solely concerned with the location of the building blocks, but also with their quality and their character. After all, that is what will determine the attractiveness of the metropole.

We shall not be able to study all elements within the time available, but we will be able to experiment with a few selected building blocks. For example, my department has now joined the City of Amsterdam in a design research project looking at concepts for a large conference centre and a new outdoor venue for special events.

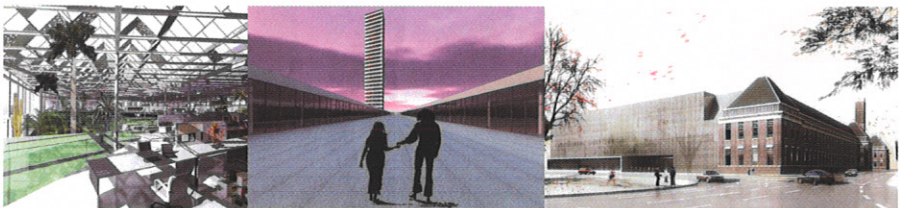
Another very important building block is the future of the Dutch universities, which are crucial. In the spatial context, I am primarily interested in the form of the university's campuses. This is the point with which I shall conclude this lecture.

University campuses

Our faculty suffered an enormous blow in the form of last year's fire. The building in which we had grown to maturity was destroyed overnight. Fortunately, all departments could eventually be reunited under one roof, and since December we have been together in the TU's old main building. A very satisfactory outcome.

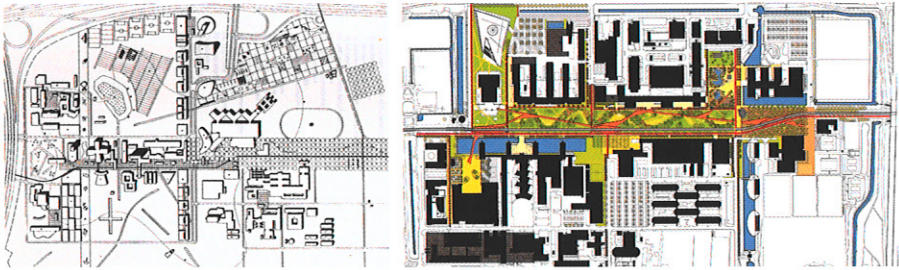
Just a few days ago, the results of a design competition for a new faculty building were presented at the Netherlands Architecture Institute in Rotterdam. The competition judges chose not to select a single outright winner, but three plans for three different locations.²⁰

The old building was a combination of low-rise and high-rise. Many of the competition entries were variations on this theme. The enormous glasshouse was selected as one of the winners. Another places the faculty in an extended avenue running through Mekelpark, while the third is an idea for the conversion of the existing main building, which would make the temporary location our permanent home.

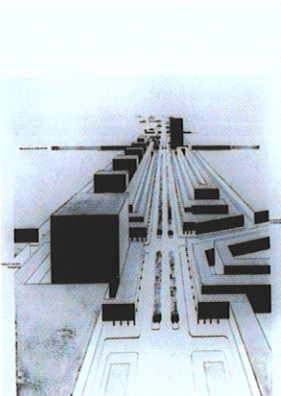
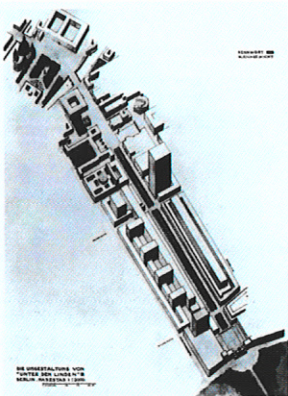


By awarding three 'first prizes', the judges were ignoring their remit and asked the question whether the Faculty of Architecture is in the right place, and whether the TU campus as a whole is ideally structured for the twenty-first century and beyond.

That question can also be asked of many other university campuses created in the 1960s. Universities in Eindhoven, Amsterdam and Tilburg have already decided to redesign their campuses in search of a more inviting and inspirational setting for learning and research. So far, Utrecht has made most progress, having opted for exciting new architecture, mixed functions and a very attractive central space.²¹



Just outside this building, the Mekelpark project is now well underway, to a design by Francien Houben of van Mecanoo Architects. The cars have been banished, new pathways laid, and lawns sown. The plan owes much to the traditional image of a university campus, with the buildings surrounding a central open area, the Campus Green. There are many attractive examples, especially in the United States. Nevertheless, I have to wonder if we shall ever succeed in making the TU campus an equally attractive environment.



The plan for the campus as we see it today dates from the 1950s and was produced by Van Eesteren, among others. As he was working on it, he was undoubtedly influenced by his own entry for the 1925 design contest for Berlin's *Unter den Linden*.²² He had proposed a radical modernisation of this broad boulevard which runs between the Berliner Stadtschloss and the Brandenburg Gate. While retaining historic buildings such as Humboldt University, the State Opera and the State Library, he also incorporated a line of new buildings along one side, with a particularly rhythmic element and one tall building opposite. Visual unity was provided by the lines of trees and the arcades of shops on either side. The theme of this entry was *Gleichgewicht*: 'balance'.

It is striking how similar the composition of the TU campus is to Van Eesteren's 1925 plan. Long, rhythmic buildings bordering a broad boulevard with one tall accent – Electro – in the middle. Ours was not to be a traditional park campus, but rather an urban campus.

There are two significant deviations from the Berlin design. Rather than a pedestrian boulevard we see a car park. And in the place of the arcades of shops, there are closed, unwelcoming facades. The Physics building has just one street door. This is not the way to create a vibrant city.

In response to the forbidding form of the other buildings, Van de Broek and Bakema's design for the Faculty of Architecture sought to bring the city inside the building. The public space became a wide corridor, the famous 'street'. In effect, the building turned its back on the city, and became its own little world. I'm sure we can do much better today!

To accompany the recent design contest, a number of 'thinktank' sessions were held under the leadership of Hans de Jonge.²³ These considered various aspects of the campus as a whole in considerable depth. Should all faculties be separate or combined as one? Or perhaps clusters of faculties and their associated R&D institutes? What about the other facilities, such as student housing, a cinema, sports centre, shops, a crèche and room for starter companies? What about accessibility and communication? Which campus concept would be most appropriate to the ambitions: the traditional park campus or the more integrated urban campus? Where are the examples from which to draw inspiration?

In fact, these questions must be applied to every 'building block of the metropole' at all levels of scale in the years ahead. What are the requirements? How is each building block to be incorporated into the relevant networks? What are the relevant spatial concepts, and what can we learn from examples elsewhere? In addition, the significance of each

building block to the metropole as a whole must be clearly defined. Here, we must consider employment, visitor numbers and added value, as well as image and attractiveness. If we then study the interrelationships in terms of the functional chains and spatial cohesion, I am confident that we shall gradually form a good picture of the strategic interventions required, and of the new generation of key projects which will bring the metropole to fruition.

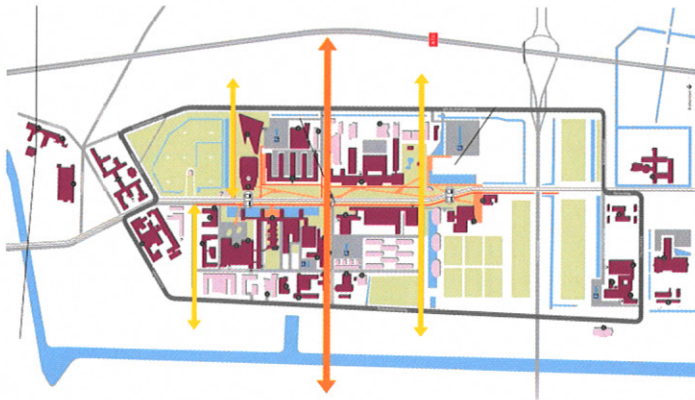
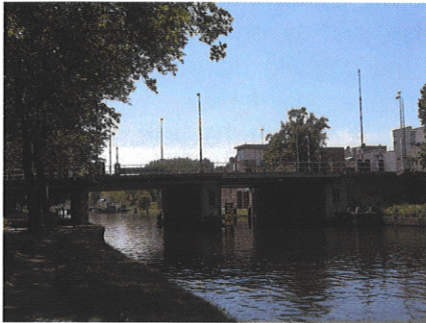


Returning to the Delft campus, I think it would be a good idea to take another close look at Berlin.

Unter den Linden stretches from the Berliner Dom cathedral to the Tiergarten. The boulevard itself connects these very significant elements, and what a marvellous contrast there is between the buildings and the trees. Seeing this, we realise what an enormous challenge we face in ensuring an appropriate differentiation between the central part of the campus and the southern part. Also our connection with the city could be vastly improved. I understand that the Sebastiaansbrug is to be modernised. Hopefully, the new version will no longer form such a barrier between the university district and the old city. Ideally, we should be prominently visible from Schieoever and the A13.

Perhaps the most important consideration is that Unter den Linden is part of the overall urban fabric of buildings and streets. It occupies a set position, the most prominent feature being an element which is perpendicular to the

boulevard itself, precisely where Van Eesteren had proposed to site a high-rise building. In our case, that is analogous to Electro. To create a true urban campus, we would have to incorporate many more perpendicular elements to our equivalent of Friedrichstrasse, a vibrant and lively street which would connect the campus across the Schie to Voorhof, and under the A13 to Delfgauw.



And the Faculty of Architecture itself? The main building forms an excellent link between the campus and the city, but I still think the best location would be at the crossroads of Unter den Linden and Friedrichstrasse!

Acknowledgements

Finally, there are several people whom I would like to thank for their help and support.

First, the members of the Executive Board for my application and my colleagues Henco Bekkering and Han Meyer, who have given me a very warm welcome. Daan Zandbelt acted as my guide through the groves of Academe. I also wish to thank Verena Balz, and the students in my Urban Landscapes graduation studio. Despite the ongoing diaspora, they have helped to maintain continuity and a very inspirational debate.

I have worked alongside many people in the past, at TU Delft, Villanova, De Hoog Ontwerp en Onderzoek, DRO Amsterdam, the Room for the River Quality Team, the Atelier Zuidplas, and so on, and all those people deserve my gratitude. Last but by no means least, I wish to thank my extended family with the core of my own ABC, Engelen, Calle and Samira. An inaugural lecture together with a book was quite a challenge, but you managed it. I am proud of you.

I have spoken.

- ¹ The original full title is *Atlas [sive] Cosmographiae Meditationes de Fabrica Mundi et Fabrica Figura*. There is still some dispute as to whether Mercator actually coined the term 'atlas'. There is another contender in the form of Antonio Lafreri, an Italian cartographer working in Rome. Around 1570, he began to publish unbound collections of maps which also came to be known as 'atlases'.
- ² Rein Geurtsen: *Locatie Delft Zuidpoort, stadsmorfologische atlas* (TU-Delft, Delft 1988).
- ³ Saverio Muratori: *Studi per una operante storia urbana di Venezia* (Rome 1959).
- ⁴ Colin Rowe, Fred Koetter: *Collage City* (MIT-press, Cambridge Massachusetts 1978).
- ⁵ Jean Castex, Patrick Celeste, Philippe Panerai: *Lecture d'une ville - Versailles* (Editions du Moniteur, Paris 1980); Divorine F., Gendre B., Panerai Ph.: *Les bastides d'Aquitaine, du Bas-Languedoc et du Béarn - essai sur la régularité* (AAM, Brussel 1985).
- ⁶ *Atlas Haven-Stad* (Dienst Ruimtelijke Ordening, Havenbedrijf Amsterdam, Amsterdam 2008).
- ⁷ Richard Florida, Tim Gulden, Charlotte Mellander: *The Rise of the Megaregion* (University of Toronto 2007).
- ⁸ Fernand Braudel: *Kanttekeningen bij 'Civilisation matérielle et capitalisme'* (translated in Dutch by Jos van Beeck, in: *Te Elfder Ure* 31, edition 26-2, SUN, Nijmegen 1982).
- ⁹ Petra Todorovic: *Megaregions, the Building Blocks of a National Infrastructure Plan* (Regional Plan Association, New York 2008).
- ¹⁰ See: www.ruimtevoorderivier.nl
- ¹¹ Deltacommissie: *Samen werken met water – een land dat leeft bouwt aan zijn toekomst* (Den Haag 2008).
- ¹² *Structuurvisie Randstad 2040* (Ministerie van VROM, Den Haag 2008).
- ¹³ *Forbes 2000 World Biggest Companies* (april 2008).
- ¹⁴ Amsterdam Toerisme en Congres Bureau: *Amsterdam Bezoekersprofiel, Bezoekersonderzoek Amsterdam 2008* (ATCB, Amsterdam 2008). International Congress and Convention Association: *Statistics report 2006. The international Association Meetings Market* (ICCA, Amsterdam 2007).
- ¹⁵ Maurits de Hoog, Rick Vermeulen: *New rhythms of the city, moulding the metropolis in Amsterdam* (Thoth, Bussum 2009).
- ¹⁶ Auke van der Woud: *Een nieuwe wereld, het ontstaan van het moderne Nederland* (Uitgeverij Bert Bakker, Amsterdam 2006).
- ¹⁷ Dirk Frieling ed.: *Het Metropolitan Debat* (Thoth, Bussum 1998).
- ¹⁸ Joost Schrijnen: *Land en Stad, creatie van een opgave* (TU-Delft, Delft 2005).
- ¹⁹ Berlage quoted Brinckmann's *Platz und Monument* in his 'Urbanism'-lectures in Delft en Dusseldorf in 1909. See Vincent van Rossem: *Berlage and the Culture of City Planning*, in: Sergio Polano ed.: *Hendrik Petrus Berlage Complete Works* (Rizzoli, New York 1988).
- ²⁰ *Jury Report Ideas competition 'Building for Bouwkunde'* (TU-Delft, Delft 2009).
- ²¹ The transformation of the Utrecht Uithof complex started on basis van het door Art Zaaijer in samenwerking met O.M.A. ontworpen *Masterplan Uithof 2000* (Rotterdam 1986).
- ²² Cornelis van Eesteren: competition design for the 'Umgestaltung' of Unter den Linden in Berlin, 1925, 1st prize.
- ²³ *Future Faculty*, Report Thinktank Architecture (TU-Delft, Delft 2009).

