A Significant Contribution to Knowledge

Radboud University Nijmegen
A SIGNIFICANT CONTRIBUTION TO KNOWLEDGE

The contribution to knowledge made by the Department of Spatial Planning at the Radboud University Nijmegen, the Netherlands in the 50 years of its existence, 1962-2013

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The idea for this book came from Hans Mastop. Initially, it was for a book about the lasting influence made on planning thinking by the department of spatial planning at Nijmegen in the first fifty years of its existence. Hans Mastop invited me to write this with him, and we began to explore how the idea could be worked out. When he had to withdraw for family and health reasons, I took the project over. It proved more difficult than I had expected, so I changed the aim of distinguishing ‘lasting influences’ to that of distinguishing ‘significant contributions to knowledge’ (not that that is easy!). Hans Mastop was able to provide useful comments on the later versions of the manuscript.

The structure used is described in the first chapter, and some of the key researchers currently working in the department have helped with distinguishing and describing the ‘significant contributions’ in their fields. These are:
- Stefanie Dühr (European spatial planning)
- Sander Meijerink (Water and governance)
- George de Kam (Housing and land for social housing)
- Rob van der Heijden and Karel Martens (Transport and mobility)
- Erwin van der Krabben (Land and property development)
- Arnoud Lagendijk (Policy transfers).

The last chapter ‘Continuing the contributions: the future’ has been written by Peter Ache. These texts have been edited and incorporated by me, and I am fully responsible for the contents of this book.

Other people have helped in other ways. Annelies Wesselink gave indispensable help in digging facts out of the archives and reports out of libraries: she was given much assistance by Willem van der Vegt, the archivist of the faculty. Niek Muller checked the chapter on the history of the department and helped to choose the illustrations. The Office of the Registrar of the Radboud University provided information about the PhD theses and the professors, past and present. Yvonne Cremers and Jol Beset from the secretariat together with Carin Coenders from the Nijmegen School of Management guided the final version through the stages of layout and printing.

A special word must be said about the photographs with which every chapter begins. These were all taken in or around Nijmegen in the first part of this fifty year period, and they have been chosen to illustrate, directly or indirectly, the subject of the relevant chapter. All except one come from the Fotocollectie Regionaal Archief Nijmegen, which is maintained by the Municipality of Nijmegen. I am extremely grateful for being allowed to use photos from this collection and thank expressly Henk Trapman from those archives for his assistance. The rights on some of the photos are held by others. In such cases I have obtained permission to reproduce the photos. Source and rights are stated for each photograph separately.

Barrie Needham
Nijmegen, August 2013
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1. INTRODUCTION AND METHOD OF WORKING

A girl undergoing a psychotechnical test in a consultancy for applied psychology (G.I.T.P.) in Nijmegen.

It illustrates how the author has puzzled to find a good structure for this book

1970

Source: Fotocollectie Regionaal Archief Nijmegen (F22018)
It can be expected of a university department of spatial planning that it do three things: it prepares people for the daily practice of spatial, or land-use, planning; it makes a direct contribution to that practice by offering advice to practitioners, politicians, and the public; and it improves the knowledge about, and the knowledge for, that practice. The department of spatial planning at the Radboud University Nijmegen (see footnote for how this department has been demarcated for the purposes of this study) has done all of those things since it started in 1962, and this study is about the third activity, which can be called ‘research’. It is an evaluation of the results of that research. It asks: what has that research contributed to knowledge?

This study is written in English, for it is expected that it will be of most interest to other academics in spatial planning, and most of these do not speak Dutch.

The focus on research does not mean that the contribution to education or the contribution to practice are considered of less importance. Moreover, there are close links between all three sorts of contribution. The education of students makes an indirect contribution to practice, students can contribute to knowledge through their final year Masters theses, new knowledge seeps through into practice, the lecturer is challenged by the students to refine his or her knowledge. Nevertheless, this study is about the research activities. The prime purpose of research is to add to knowledge. This study is about that addition.

The study is based on two premises. One is that research is carried out in order to make a contribution to knowledge. This might seem obvious, but nowadays the pressure on academics to get articles published seems to have elevated publishing itself to the aim of research. In this report, we have tried to distil out of the multitude of publications the content that was significant. The significance of a contribution can be assessed only by placing it in its context. A result achieved 30 years ago might have been received with acclaim, whereas the same result now is seen as doing nothing more than confirming that earlier result. The context necessary for assessing significance includes the state of practice (including the problems it faced) and the state of knowledge, both of them at the time when the research produced its results. This context is sketched briefly in the chapter on the history of the department, and is enlarged upon when necessary. It is more difficult to judge the significance of research results made recently than of those made in the past: so it is possible that this report underestimates the significance of some of the more recent work. Although the selection of what is significant has been made with great care, it necessarily reflects the judgment of the author (=BN).

The second premise is that there can be a theory of spatial planning. Spatial planning is familiar with, and it uses, what are called ‘planning theories’, but these are often partial, or general and not adapted to spatial planning. This study rests upon that premise in two ways. It is claimed that one of the contributions from Nijmegen is a theory of spatial planning.
And in this report, that theory has been used to structure many of the contributions made by the department. In the last ten or so years, with the retirement of many staff members of long standing and with the recruitment of academics from outside, research lines have been developed in the department which have not been derived from this theory. This becomes apparent on reading this book, especially the later chapters: the ideas underlying the research have become more diverse. It is possible that a new Nijmegen 'paradigm' will arise: but that is not inevitable, for the current Nijmegen academics might not have that as their ambition.

The method used
Research results are propagated through academic publications, and the publications included for this study are the following:
- PhD theses written under the supervision, exclusive or shared, of professors of the department, or by staff members of the department under supervision from outside the department;
- publications in refereed academic journals, written entirely or partly by academics within the department;
- academic books and monographs, written or edited, entirely or partly, by academics within the department;
- most of the inaugural lectures given by professors in the department.
In addition, occasional reference is made to some reports of commissioned research, as they show how academic results can work through to practical advice. And text books written, entirely or partly, by academics within the department are included, as they are a direct contribution from research to teaching, and often to practice as well.

It follows from the focus on contributions to knowledge that this report does not include anything about research in progress but with results which have not yet been published, nor anything about financial support won for research, about international co-operation in research projects, about membership of advisory bodies, etc.

The results are listed in appendix 3: the list has been compiled mainly from the periodic evaluations made by the faculty, and it is as complete as was reasonably possible. Most of the evaluations consulted were of the faculty research programmes: these programmes are listed in appendix 1. In another appendix, number 2, all PhD theses are summarised briefly.

This gives no more than a selection of the research results. In particular, contributions to books edited by others have not been included, nor have publications in professional or more popular journals. The academics who have worked in the department in the last 50 years might be disappointed to find that some of their ‘darlings have been killed’ - that is, some of their cherished publications have been omitted. But for practical reasons a selection had to be made, and the restriction to PhD theses, publications in academic journals, and books / monographs is a common way of selecting the most important academic results. Nevertheless, it must be
recognised that results which have a significant effect on *practice* can be overlooked by this selection.

Publications are included up to the end of July 2013. This makes the period studied a little longer than the first fifty years.

An invaluable additional source was the publication (Dekker et al. 1993) written for the departure of Professor Wissink in 1992. This covers the first thirty years of the department. It concentrates on the work of Wissink and includes more than research. Nevertheless, it provided very useful information about research in the first 30 of the 50 years studied here, including the first 20 years when no lists of publications were made.

**Structuring the contributions to knowledge**

Spatial planning has no generally recognised body of knowledge, and this is often reflected in the research carried out within university departments of that discipline. Even within one department, the research is usually very varied, which makes it difficult to give an overview of it. For Nijmegen, this is perhaps easier, because in that department there has been developed – certainly during the first forty years – a theory of spatial planning. This approach to planning has directed much of the research. So the interrelated concepts of which the theory consists have been used here to structure the various contributions to knowledge made within the department. This has resulted in the following ‘bundles of knowledge’:

- A practical theory of spatial planning
- Realising spatial planning policy
- Land and property development
- The effectiveness and efficiency of spatial planning
- Making spatial policy
- Evaluating spatial planning
- National systems for spatial planning
- The importance of framing, perception, discourse and cultural variety
- Understanding policy change and policy transfer
- European spatial planning
- Housing policy and housing land
- Transport and mobility
- Water and governance
- Some particular land uses

There is a final chapter, written by the current ‘core’ professor, on the contributions which he would like the department to make in the near future.

There are some research results listed in appendix 3 which fall into none of those clusters and which are not discussed or mentioned further. This in no way implies a criticism of the value or quality or relevance of such incidental research.
These are the three tasks which any university department should fulfil. Sometimes a fourth task is added: acting as a repository for the knowledge.

The Department of Spatial Planning at the Radboud University Nijmegen is demarcated for this purpose as follows. Gerrit Wissink was appointed as first professor in November 1962. For convenience we date the beginning of a department from January 1963. For decades, universities had organisational entities called 'vakgroepen': and a 'vakgroep planologie' was established in Nijmegen. That organisational form has been replaced several times with other entities; now there is a 'leerstoelgroep', the group under the responsibility of the 'core professor' – see chapter 2 – of spatial planning. The contributions to knowledge studied here are those made by academics working within the 'vakgroep' or the 'leerstoelgroep'. In the last 10 to 15 years the academics thus distinguished have worked increasingly with academics from other groups within the faculty, which makes the decision to restrict this study to 'the department of spatial planning' a little arbitrary. Nevertheless, in order to write a history of this department over the last 50 years, a distinction had to be made.

Recently, it has become policy that Masters theses should be chosen so as to contribute to the research of the departmental staff members. In this respect, the distinction between teaching and research has become less important.
2. A BRIEF HISTORY OF THE DEPARTMENT OF SPATIAL PLANNING

Gerrit Wissink, the first professor of spatial planning, in the main lecture theatre of the building Berg en Daalseweg 122, where the department started in 1962

Around 1980

Source: Own collection
Spatial planning as an academic discipline began in Nijmegen with the appointment of Gerrit Wissink as professor in November 1962. He came from the Rijksplanologische Dienst (national planning agency). It was the second planning chair in the Netherlands: the first had been established a few months earlier at the University of Amsterdam, and was occupied by Willem Steigenga. In both cases, spatial planning was placed within an existing faculty of geography. That reflected the practice that had arisen in the 1930’s, with its distinction between those who made spatial plans and those who provided the information which the designers used. The plans were made by designers (urban designers – stedenbouwkundigen - or landscape architects), and the information was provided by researchers educated as human geographers, demographers, etc. (see further Needham 1988.) Gerrit Wissink, who had studied human geography at the University of Utrecht, was in the same line. Since the 1950’s, the geographical faculties of Dutch universities had been trying to get chairs in spatial planning. In 1958, the university of Utrecht established a lectoraat in planning (Chris van Paassen), then full chairs followed in Amsterdam and Nijmegen, later in Groningen, Utrecht, Wageningen, Eindhoven, and Delft.

Knowledge of how spatial planning (planologie) was seen in the Netherlands in that period is necessary for understanding the developments in Nijmegen. For in the early years, much effort was spent by the academic planners in trying to establish their identity and justify the existence of a separate academic discipline. Was spatial planning anything more than applied geography, as some geographers claimed (Hoekveld 1986)? An interuniversity work group (SPAR) was set up, and provided the following definition: “scientific and methodological reflection on spatial ordering and planning, forming – on the basis of empirical research – descriptive, explanatory and normative theories” (translation in Needham 1988). The first Dutch text book on planning was written by Steigenga (1964), and it contained the statement that it was the task of planning to identify the best possible that the ‘spatial order’ could become, given the constraints and the ‘development tendencies’: the choice of the measures necessary in order that this desired spatial order be realised was the task of others. This opinion clearly placed planning within its mother discipline of human geography. And it confirmed the separation between spatial planning (planologie) and design. ‘Planologie’ was the discipline taught and studied at Nijmegen, Amsterdam, Utrecht, and Groningen, (urban and landscape) design was for the ‘technical’ universities of Delft, Eindhoven and Wageningen.

In the early years of the department in Nijmegen, planning could be studied only as a specialism within human geography: the student got a degree in geography. The first lecturers appointed to teach this specialism were human geographers (there were no graduate planners at that time), and the emphasis was on social science research which could be applied in spatial planning. After 1972, it was made possible at the universities of Nijmegen and Amsterdam to graduate with a ‘masters’ (doctoraal) in spatial planning:
admission was by getting a first year diploma (kandidaats) in a related social science subject. This gave the room for expanding the staff. The department had been established primarily to prepare people for practice, so the way the education was given reflected contemporary practice. Practice at that time consisted of contributions made by separate disciplines; so those disciplines had to be included in the course. For that reason, a sociologist was appointed who would teach about housing and social processes in cities, a traffic engineer, an urban designer, an economist who would teach about land economics and economic development, a political scientist, a human geographer who specialised in urban services such as retail, and so on. It was for the students themselves to integrate that knowledge for the practice of planning, by means of project work. This approach did not contribute to the unity of approach and ideas within the staff: but this fragmentation was to some extent repaired when in 1982 many members of staff wrote, together with a few practitioners, chapters for the book ‘Ruimtelijke planning en ruimtelijke ontwikkeling: een gespannen verhouding’ (Spatial planning and spatial development, a fraught relationship – ed. Needham & Wissink 1982). The staff members did that again in 1989 (Ruimtelijk handelen: meewerken aan de ruimtelijke ontwikkeling – Planning interventions: contributing to the spatial development – ed. Muller & Needham 1989), and a third time in 1993 (Dekker et al. 1993) with a Liber amicorum on the occasion of Wissink’s retirement. We return to these books later.

Throughout the 1970’s, the department, still in the faculty of geography, was busy mainly with education and with developing the theoretical bases for that education, using texts such as Foley (1964) about urban structure, Chapin (1965) setting out a systematic approach to planning, McLoughlin (1969) with his systems approach, Friend and Jessop (1969) about strategic choice and coping with uncertainty, Faludi (1973) about rationality in planning. In that way, the department at Nijmegen was similar to departments in spatial planning in England and the United States. What was different was the attention for Marxist ideas (more generally, for historical materialism), an attention which did not come from Wissink but from some lecturers elsewhere in the faculty and from many students, and which was found also in planning departments in some other Dutch universities. This demanded much time in adaptations to the curriculum, and generated research from students (but little from staff).

Education and organisation continued to dominate in the first half of the 1980’s. In 1982, a new structure for university education was imposed by the national government (tweefasenstructuur). Nijmegen (and Amsterdam) used this opportunity to set up a planning course independent of the course in human geography. It was a four year course (nominally: most students took much longer) which gave a ‘doctoraal’ diploma, equivalent to an English / American masters degree. (This change necessitated a transition period of a few years in which two separate degree courses had to be given in parallel without any extra staff.) That was
quickly followed (1983/84) by the attempt by the ministry of education to wind up the course in spatial planning in Nijmegen, on the grounds that one course (in Amsterdam) was sufficient. In 1987 the ministry once again proposed closing the planning department in Nijmegen. Both attempts failed, thanks partly to support from the central board of the university itself, partly to support from outside, and partly to intensive actions undertaken by the staff.

The structure of the education continued to change. When in 1988 the university established a faculty of policy sciences and put planning into it (see below), all students in the faculty had to follow the same lectures in the first one and a half years, being able to specialise (for example in spatial planning) only in the remaining two and a half years. The aim of the faculty was that all its students be exposed to a variety of disciplines: but the separate disciplines themselves (including planning) complained that this allowed too little time for a student to learn the basics of the discipline, and after a few years this educational experiment was ended. In 2001 and in accordance with the Bologna Declaration, the national government decided that the (nominal) four year courses must be split into two parts: a three year 'bachelors' course followed by a one years 'masters' 6. Previously, a planning student in Nijmegen followed the whole four year course there. Now, a planning student who has obtained the bachelors in Nijmegen can follow the masters course elsewhere, and vice versa.

The period in which there was a full time course in spatial planning in Nijmegen given independently of other courses was fairly short (1982 to 1988). Student numbers in planning, but also in human geography and environmental policy, together with new funding norms, made it financially necessary to share many aspects of those three courses. There were positive reasons also, namely the wish to break out of existing disciplinary boundaries and to connect spatial planning more closely with environmental studies, geography, administrative sciences, and so on. Now (2013), there is one bachelors course in Geography, Planning and Environmental Studies, albeit with the possibility to specialise in one of the three separate disciplines. There are, however, still separate masters courses in Human Geography, in Spatial Planning, in Social and Political Sciences of the Environment, and in European Spatial and Environmental Planning.

The organisation within which the department of spatial planning worked changed also. In 1988 a new faculty was set up, called initially 'beleidswetenschappen', policy sciences. It took over the old faculty (which by that time included also a department of environmental policy). This required that planning (and geography) leave the premises which they had occupied since their beginning, near the town centre and not on the main university campus: in 1987 the department of planning moved to that campus, where it still is. The new faculty of policy sciences included also the existing departments of political sciences, public administration, and economics 7. An important reason for
setting up this faculty was to bring together various existing management and policy disciplines and to develop courses and research in profit / commercial organisations. That latter grew into a department of business administration. This grew so fast absolutely, and also relatively to the existing departments, that in 2001 the faculty was given a new name, the faculty of management studies (the Nijmegen School of Management).

International connections
Mention must be made of the international connections which the department in Nijmegen has set up, enjoyed, and used. The research has always built upon ideas produced elsewhere, and Nijmegen research results have been published widely in international journals. There is much participation in international research projects. What is peculiar to Nijmegen is that the education also has had, from early on, many connections with other countries. There was a student exchange programme with the University of Dundee (Scotland), supported by the EC long before the ERASMUS programme was introduced. That latter programme is now used for structural exchanges of staff and students with 17 other universities in Europe. ERASMUS contributes also to financing annual ‘Intensive Programmes’: these are joint structural teaching courses organised since 1992 by Nijmegen, Tours, Hannover, Bristol, Bologna and (since 2009) by Oradea (Romania).

Since 2007 there has been a one year (60 EC’s) masters specialisation called European Spatial and Environmental Planning (ESEP, given jointly with the department of environmental policy). Since 2012, it has been possible to follow an international joint Erasmus Mundus Masters programme called ‘PLANET Europe: European spatial planning, environmental policies and regional development’, which involves periods of study at the universities of Cardiff (UK) and Blekinge Institute of Technology (Sweden), as well as a mandatory professional placement during the two years (120 ECs) of study.

And Nijmegen has made a very big contribution to AESOP, the Association of European Schools of Planning. Gerrit Wissink was one of the founding fathers, both Hans Mastop and Peter Ache have been presidents, and for many years Myrian Janssen-Verbeke, a lecturer in the department, was the general secretary. The AESOP annual conference was held in Nijmegen in 1997.

The professorial chairs
Dutch universities make a distinction between structural chairs and special chairs. A structural chair is for an indefinite time and is usually full time, a special chair is temporary, is intended to bring in from practice a particular specialism, and is usually part time and financed externally.

The department at Nijmegen has two sorts of structural chairs: of spatial planning in general (the ‘core’ chair), and of certain aspects of spatial planning. Wissink had the first structural core chair in spatial planning. When Wissink retired, the structural core chair was filled in 1993 by Hans
Mastop, who had joined the staff a few years before as senior lecturer. The structural chair in spatial planning in general was filled for the third time in 2001 by Rob van der Heijden. He became dean of the faculty in 2011, and was supplemented in 2012 by the fourth ‘core professor’ of planning, Peter Ache.

The first structural non-core chair was in methods for planning and was filled by Mark van Naelten between 1977 and 1998. There was a special chair in spatial economics filled by Bert Kruigt between 1974 and 1992: he worked for both human geography and planning, and was important for the development of research in the planning department in the 1980’s. The first special chair within planning was filled by Arie Dekker between 1982 and 1993. He was detached from the provincial government of Overijssel, in order to improve the education and research by linking it more strongly with practice. In 1994, Barrie Needham was appointed to a structural chair in spatial planning with emphasis on implementation: when, first in 1995 and then in 2002, Mastop was appointed dean of the faculty, and in between to a position within the governing body of the university, Needham became de facto head of the department. Geert Teisman had a supplementary chair in spatial planning between 1997 and 2000. When Needham retired in 2007, the structural chair which he had filled was given a new content namely planning and property development, and Erwin van der Krabben was appointed (‘on a personal basis’) to the post in 2010. In 2013 a structural chair in European spatial planning systems was created and filled (‘on a personal basis’) by Stefanie Dühr.

The ‘special’ professors Kruigt and Dekker have already been mentioned. The list is complemented below:
- Jenno Witsen, chair in National and European dimensions of spatial policy, between 1991 and 1994;
- Eric Bussink, chair in National and European dimensions of spatial policy, between 1995 and 2010;
- Peter Steenbrink, chair in Transport and regional development, between 1995 and 2000;
- Andreas Faludi, chair in Spatial policy systems in Europe, between 1999 and 2005;
- Mark van Twist, chair in Public-private partnerships in cities and regions, between 2006 and 2009;
- George de Kam, chair in Social initiatives in the property market, between 2002 and 2013;
- Henk Meurs, chair in Mobility and spatial development, from 2002;
- Lori Tavassy, chair in Freight transport and spatial-economic development, between 2005 and 2009;
- Harvey Jacobs (University of Wisconsin-Madison), visiting professor from 2012 to 2015.

These special professors were appointed to strengthen the links with practice, but some of them - in particular Faludi and de Kam - have made important contributions to research as well: this will become apparent in later chapters.
The organisation of research
For the first 20 years of the department, there was not much time and attention for systematic research. Setting up the department, organising new courses, giving those courses with few staff, fighting off attempts to close down the course in spatial planning, took most of the energy. In 1984, an important stimulus to research was given by the requirement from the board of the university that all departments have a research function, not just education (research would be financed ‘conditionally’ – voorwaardelijk - on the basis of an approved research programme). This was partly in order to distinguish the universities from the ‘hogescholen’, now called universities of applied sciences to distinguish them from academic universities (such as Nijmegen). In order to get the (internal) finance for research, the faculty had to submit a research programme and have it approved. That was the start of a systematic and structured approach to research. An overview of the faculty research programmes within which planning research was conducted is given in appendix 1.

Initially, most of the research carried out by members of the department was done independently of other departments (although it was still formally the responsibility of the faculty). Later, the research programmes were worked on together with members of the departments of human geography and environmental policy. And those programmes were placed within a faculty-wide research school. This has been called variously:
- IBON: Instituut voor beleidsonderzoek Nijmegen;
- NICE: Nijmegen Centre for Business, Environment, and Government;
- IMR: Institute for Management Research.

The planning research is increasingly being carried out in cooperation with the departments of economics, public administration, and business administration within the same faculty.

Since 1988, the department in Nijmegen has been a member of the national research school NETHUR (Netherlands Graduate School of Housing and Urban Research), and since 2005 of the national research school TRAIL (Transport infrastructuur en logistiek).

4 The faculty was then called anachronistically Aardrijkskunde en pre-historie (geography and pre-history).  
5 Where, incidentally, all of the other first generation professors of spatial planning had studied.  
6 For technical studies (which did not include spatial planning) the masters course lasts two years.  
7 At that time not a separate department, but a ‘task group’.  
8 For many tears, the university of Aviero in Portugal took part in the ‘intensive programmes’.
The ‘lower town’ of Nijmegen between the centre and the river. At this time, it suffered severe planning blight.

1964

Source: Fotocollectie Regionaal Archief Nijmegen (F32540)
A disciplinary body of knowledge
The Dutch idea that there is science of land-use, or spatial, planning called ‘planologie’ is interesting because few other countries share it. The concept is useful and challenging also: the claim that there is a science of spatial planning requires those who reflect on the practice to order their thinking about it, to build up a body of knowledge which can be critically examined. The two main questions which that ‘science’ tries to answer are: How can that practice be understood and explained? How can that practice be improved? This was the academic challenge when the chair of spatial planning in Nijmegen (and in Amsterdam) was established in 1962 (see chapter 2), for there was no agreement on the content of such a body of knowledge. Moreover, a new university discipline – planologie – had to prove its academic credentials. Wissink met this challenge by developing what he later called an ‘action-oriented approach to spatial planning’ (handelingsgerichte benadering). The work that followed, and which is described in this chapter, led to what we claim is a recognisable and coherent theory of spatial planning: one might even call it a paradigm of spatial planning (e.g. Needham 2000b). We do not claim that this paradigm is a purely Nijmegen creation, for it has been built upon, and it incorporates, much work done elsewhere. It is, however, to the credit of the department in Nijmegen that it had the ambition to construct a comprehensive theory of spatial planning. Describing that construction over 50 years is itself a short history of ideas about spatial planning: it is noteworthy, however, that the department has carried out little historical research into the practice of spatial planning in the Netherlands.

The first twenty years
The ideas in the Netherlands about spatial planning when the department was set up have been described briefly in chapter 2. Spatial planning as a discipline grew out of human geography, and the early research of Wissink was in the same tradition. His PhD thesis was on the development of American cities and city regions, and he expected that developments in the Netherlands would be similar, in particular that Dutch cities too would tend to disintegrate. Wissink updated his knowledge of American cities with a long visit in 1974. It was, according to the ideas at that time, the task of spatial planners to investigate and predict such developments. But this was clearly a totally inadequate basis for a science of spatial planning. What kind of information was relevant? What could be done with it? And who should ‘plan the planners’?: that is, who was to study critically the way in which the designers worked, and if necessary suggest improvements to that?

Wissink’s first answer to these questions was that planning should try to create a ‘meaningful spatial order’. To do that required knowledge of spatial developments and how they could be ‘conducted’ (‘geleid’) by government interventions in the direction of the desired spatial order. In a further development, he defined what he saw as the ‘object’ of spatial planning: he used terms such as spatial structure, spatial development, spatial behaviour, and the motives...
behind that behaviour. In this respect, Wissink remained within the demarcation of spatial planning given by the Dutch legislation: actions to further a ‘good spatial order’, with no more specification. He did add, however, that to do this required knowledge of human needs, values, and norms. The spatial structure which planning should try to help to create should be that which meets best the aims, activities and needs of the society. That cannot be achieved just by making a blueprint plan and trying to implement it. For the spatial development of an area has its own momentum and driving forces. It is the task of spatial planning to identify that dynamic and to ‘conduct’ it so that the spatial structure best meets the aims of the society: and not just at the end of the plan period, but at all times during that period.

These ideas were worked out in practice, both in education and in research, at the scale of the city region (see e.g. Linden & Ganzevles 1993) There were three reasons for the choice of this scale. Theoretically, because this was at that time the scale within which the interactions between most spatial activities were contained. Politically, because there was much policy attention then for the city region. And practically, because the department obtained a commission from the municipality of Nijmegen to advise on the planning of the Nijmegen region.

It will become clear below how the research in later years was influenced by some of the ideas of Wissink in the first twenty years of his professorship. First, there was the attention for the local scale: for the town centre, for the urban project, for the housing estate, for the town itself, for the region around the town. Later research also has concentrated on this scale, although there has been in addition attention for provincial and regional (e.g. Dekker 1984; Dühr 2009), national (e.g. Mastop 2000) and – later - European planning (see chapter 12). Second, ‘planning’ always had an ‘object’, and this was the land-use, or the physical development, of a particular location, how it came about, was used, and changed. Third, the aim should be not just to analyse practice but to improve it also. Fourth, there were Wissink’s ideas about the limits to the effectiveness of planning: a paper in his name published in 1980 even had the title 'The limits to planning' (Wissink 1980). Planning was limited because it could work only by influencing people’s behaviour; and people do not easily let themselves be influenced, especially when it affects landed property and how it is used. Much of the later research in the department has been about the concrete possibilities for influencing people’s behaviour by taking concrete measures.

The subsequent thirty years: developing a practical theory of, and for, spatial planning
In such ways, the research into ‘knowledge about, and for improving the practice of, spatial planning’ which was carried out in the subsequent 30 years was influenced by the choices made in the first 20 years. The titles of the first two research programmes illustrate this nicely: ‘Ruimtelijke planning en beheer: evaluatie van de Nederlandse praktijk’ – ‘An evaluation of the Dutch practice for planning and use of the physical space’ (1984-1988); ‘and ‘Instruments for spatial
policy, and their effects’ (Bewerktuiging en effecten van ruimtelijk beleid (1989-1993).

The general approach was summarised under the name which Wissink gave it around 1985: the action-oriented (handelingsgericht) approach to spatial planning. This starts by identifying an activity - spatial planning - which consists of government bodies taking action deliberately to influence the physical development within their jurisdiction. Planning policies, in order to be effective, should connect with the aims and spatial activities of citizens and private firms and organisations. So spatial planning should be built around the characteristics of ‘the object’, namely the actions by which people use and change the physical environment, and how those actions could be influenced by the application of concrete measures. This emphasis on the interactions between public measures and private actions was in part a response to the ‘decision-centred view of planning’ being developed at that time at the sister department at the University of Amsterdam and which, in the opinion of Nijmegen, focussed too narrowly on the decisions of the public, planning, agencies. Also, it was an implicit criticism of designers who made plans which took no account of ‘what people want’ or of ‘what would happen if there was no planning’. (It became clear in later research using institutional economics and discourse analysis – see below – that the concepts of ‘what people want’ and ‘what would happen without planning’ are very difficult!) And, more positively, it gave direction to the designing of spatial policies.

With this approach, spatial planning needs two sorts of knowledge:
- knowledge about, and for improving the practice of, spatial planning;
- knowledge about activities in space.

The research in the department has aimed to improve both sorts of knowledge.

Knowledge about the latter - activities in space – is produced by disciplines such as human and economic geography, transport studies, ecology. Nevertheless, the discipline of spatial planning itself sometimes finds it necessary to carry out such research in connection with a planning issue, so as to understand better how a particular activity can be influenced. For that reason, the focus of the research into the spatial activity is often different than if the activity had been investigated by another discipline.

The action-oriented approach was explicitly worked out further in three books in this period, all of which have titles which refer to this approach: Spatial processes and the role of planning and policy (Wissink 1982), Spatial planning and spatial development, a fraught relationship (Needham & Wissink eds. 1982), Spatial interventions: contributing to the spatial development (Muller & Needham eds. 1989).

When the research programme 1989 – 1993 was formally assessed in February 1995, the conclusion was: “At the end of the programme, the action-oriented approach to spatial planning and policy had been developed into a body of fairly
consistent and coherent theoretical notions concerning the relation between strategic and operational policy, the applications of a multi-actor institutional setting for the daily behavior of planning agents, elements of instrumentation policy, and the intricacies of relations between day-to-day policy and decision making and plan and policy formulation. ….. The research projects showed that practice could be interpreted using this approach in a way that was immediately recognisable by the practitioners. ….. The action-oriented approach served as a frame of reference for much of the comparative cross-national research into instruments and procedures for spatial planning. …. It is an important conclusion that the theoretical approach lends itself to analysis and comparison of planning practices in different countries.”

Much of the research in the department – certainly between 1980 and 2000 – was structured around this approach. The research often took the form of studying spatial planning in action, using as a framework a specific concept or theory which arose out of the action-oriented approach. The results led to further developments: it is for this reason that the term ‘the action-oriented approach’ is now too narrow. We call it a ‘practical theory’ to indicate that this theory aims to do more than analyse practice: it aims to improve it also.

It is worth noting that planning theory in general has not received much attention in Nijmegen, precisely because it was felt that a theory of and for spatial planning should have at its centre the characteristics of its object, namely activities and space and land use. Just as spatial planning was more than applied human geography (human geography with a little policy science), so was it more than spatial policy science (policy science with a little human geography). Mastop (PhD completed in 1984 a few years before going to Nijmegen) used a general theory of planning to argue for a particular theory of spatial planning. When Faludi, who had made such a well-known and influential contribution to a general theory of planning, went to Nijmegen in 1999, it was to study European spatial planning (see chapter 12).

The ‘material object’ of spatial planning, and ‘integral policy for the physical environment’
Wissink’s work concentrated on planning undertaken to influence the spatial structure of society. This latter concept, however, is not easy to demarcate. In Dutch spatial planning (ruimtelijke ordening), the law gave a particular demarcation, namely a restriction to land use: but in practice this often proved to be too narrow. For land use has consequences for the environment, for traffic, for infrastructure, and so on: and that works in the other direction too. For this reason, co-ordination is desirable between policy for the use of land and many other policy sectors, such as transport, water, the (natural) environment. This attracted political attention in the 1990’s - under the name of ‘omgevingsbeleid’, integral policy for the physical environment – and several provinces experimented with integrating policy for land use with policy for water and for the natural environment. The department in Nijmegen helped to work that out further (Mastop 1993; van Damme et al. 1992; Huitema & Needham 1998; Needham et
With the new Spatial planning act of 2008, followed by the Wabo 2008 (which combined the building permit with many other permits) and the Crisis and Recovery Act of 2010, such an integral policy became, in many of its aspects, required by law.

**Governance and spatial planning**

According to the ‘practical theory’ just outlined, the physical environment is changed by very many actors. They can be private actors, with their own particular aims; they can be public actors with their own particular aims; and they can be public actors with the aim of changing the physical environment for the benefit of others. Planning agencies fall into this latter category: and for one area there can be several planning agencies trying to change the physical environment there.

This way of looking at spatial planning is fully compatible with what later came to be called ‘governance’: this refers to the activity of determining or regulating how something is to be used or done. It is distinct from ‘government’, which is restricted to how a public body does that. The subsequent chapters in this report, which are based on concepts developed out of the ‘practical theory’ – such as the chapters on realising policy, on effectiveness, on policy making, on framing – will make it clear that the introduction of the concept of governance was easily – and gratefully – incorporated in the research of the department of Nijmegen.

One example is provided by Lukassen (1999). Very many agencies were involved in making spatial policy for a certain region (Arnhem – Nijmegen). There were not only the official planning agencies (multi-purpose bodies) but also single purpose public and semi-public bodies. Then the question was: what does that mean for the decision making about spatial planning? This research was an examination of networks and governance: there are so many agencies involved, that planning agencies must not assume that their plans will be accepted and realised.

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9 One of those ‘few other countries’ was the United States in the 1960’s and 1970’s. Wissink was stimulated by and built upon the publications from that country.

10 Those are the two questions which face any academic study of social practice, such as law, or medicine, or business, or public administration.

11 Two exceptions are Dekker (1984) with a short history of regional planning (streekplannen) and Faludi (1999a) with a short review of the history of how the EU came to adopt a sort of spatial planning

12 The framework starts from the policy of a public body, because this policy aims to affect the way in which others use their own land (by setting conditions on how owners may use their property rights). This fact is crucial for the structure and content of the framework, for it distinguishes the public activity from (spatial) planning undertaken by people or firms for their own land, and it involves consideration of matters such as the public interest and the necessity of overriding private interests, the legitimacy of the use of public powers, etc.

13 These recent legal changes are described in Needham (forthcoming, 2014), Dutch land-use planning, Farnham: Ashgate.
4. REALISING SPATIAL PLANNING POLICY

Taken from the quay of the river Waal, showing the building of ‘The Green Balcony’

In the 1930’s

Source: Fotocollectief Regionaal Archief Nijmegen (GN17048)

Reproduced by kind permission of Jac Trum (Foto Gelderland Nijmegen)
According to the ‘practical theory of spatial planning’ as described above, a public body can influence, but not determine, the form of the physical development. For this reason, it is often better to talk of realising spatial policy than implementing it. But the question remains: how is desired change in the physical environment to be ‘steered’? The idea, common but only implicit in the 1960’s and 1970’s, that this can be done by making a land-use plan and giving or refusing permits accordingly, needed to be worked out further.

This required first a distinction between instruments and measures. In spatial planning, a measure is an action taken by a public body in order to influence, directly or indirectly (see below), the physical environment: a measure is sometimes called an ‘intervention’. A public body has to be authorized and empowered to take such measures. That is done by giving it instruments. For example, the instrument of the land-use plan (bestemmingsplan) gives the municipality the power to refuse a development permit under certain circumstances. The instruments legitimate the public bodies to take measures, the possible measures are constrained by the laws conferring the instruments.

Secondly, it required a distinction between tactical planning and strategic planning. These two terms come from military science: strategy is made for how the battle will be fought, tactics are about the actual fighting on the ground. When the terms are applied to spatial planning, strategy refers to the picture of the desired spatial order, with little attention for how it might be realised. This is often called indicative planning. Tactical planning refers to plans meant to be implemented directly by the use of concrete measures. This distinction is used several times in this report. Here, it is important because the spatial policy set down in tactical plans is realised differently than the spatial policy set down in strategic plans.

Legal instruments for spatial planning
The above reasoning has led to much research – both descriptive and prescriptive - into the legal instruments for spatial planning (e.g. Needham 1991; Needham 2005; de Kam & Lubach 2007; Hong & Needham 2007; Needham 2007a; van der Krabben & Needham 2008; Buitelaar 2009; Geuting 2011; Hartmann & Needham 2012). Some of this research has been commissioned by the central government (e.g. van der Stoep et al. 2013). What kinds of measures do those instruments permit a planning agency to take? This question has a special relevance for thinking about spatial planning in the Netherlands, where – differently from in many other countries – there is little exchange between planners and planning lawyers.

A particular aspect of this research has been into how planning law is used in practice, and how it may legitimately be used within the constraints of the principles of ‘responsible government’. The reason for this attention is that, when measures can have direct consequences for private persons, the legislator sets limits to how the public body may use the instrument. That is done in order to
protect the citizen. Other types of instrument have fewer direct consequences for private persons – like adopting an indicative plan, making information available, organising public consultations – so the legislator limits the use of such instruments much less. Nevertheless, a public body is never completely free in the choice and application of the instruments with which it pursues its spatial policy. Those limits to its freedom have been investigated in, for example the publications: van Damme et al. 1992; Wissink 1993; van Damme et al. 1993; van Damme & Verdaas 1996.

**Influencing the actions of others directly**
A public body can influence the actions of others directly, by – for example – providing infrastructure, granting or withholding applications for development permits, supplying development land, co-operative working arrangements, offering subsidies or joint financing, compulsory purchase. In such cases, the concrete measures are usually supposed to be in conformity with an underlying policy document: for example, whether a building permit is granted or not should depend upon the formally adopted land-use plan. The connection in practice between the measure and the plan has been researched several times (e.g. van Damme & Verdaas 1996) and had been found to be much looser than the lawmaker intended.

Often – and this is characteristic of Dutch planning – the concrete measures taken by the public body have been pro-active, initiating development instead of merely allowing it. The very common Dutch practice of an active land policy has been much researched in Nijmegen; and this has attracted much attention in other countries (see chapter 8). A textbook has been written about this practice (Kruijt et al. 1990, which superseded Kruijt & Needham 1980), and many analytical publications also (e.g. Needham 1997; Needham & Verhage 1998a; Needham & Verhage 1998b; Verhage 2001; Segeren et al. 2005; van der Krabben 2011; Tira et al. 2011; van der Krabben & Jacobs, 2013).

Active land policy is carried out with a combination of private law for land and buildings, and (public) planning law. Interest in how those two types of law interact has led to the concept of ‘user rights regimes’ for land (Buitelaar 2003; Geuting 2007) and to the development of ideas about ‘market structuring’ as a way of influencing the physical environment, either instead of, or as a complement to, using statutory planning powers (Needham 2006; Buitelaar et al. 2007; Buitelaar & Needham 2007a, b, c; van der Krabben 2009b; Geuting 2011). Market structuring means deliberately changing the private law rules so as to produce, or help to produce, a desired form of the physical environment.

Much Dutch spatial planning is carried out in the form of big projects. The planning agency makes a plan for a large project, whereby it is known in advance who will carry out the development. Often the project is initiated by the public body itself, and often the developers work closely with the planning agency. Public law planning measures still have to be taken by the public body, such as issuing development permits, buying land pre-emptively or compulsorily: but how
those measures are taken and their relationship with the legal instruments, might not be the same as when the planning agency is less closely involved with the developers. There has been much research in Nijmegen about how projects have come about in close co-operation between private actors and the municipality as ‘planning agency’ (e.g. Verhage 2001; Buitelaar 2007; Muñoz-Gielen 2010). This has provided much information about the effectiveness of such practices in realising spatial policy, also about the financial risks which the practice exposes planning agencies to, and the problems of democratic accountability.

### Influencing the actions of others indirectly

The physical development can also be influenced indirectly. The land use which is desired is determined, without the intention that the plan or policy be implemented directly. The desired land use is often set down in the form of a land-use plan, when it is called an indicative plan. The public body does that to guide its own direct interventions (Mastop 1984), also to influence the actions of others (where those others can be both private persons and other public bodies). Because of the predominant interest in Nijmegen for spatial planning at the local scale (see chapter 3), most of the research carried out there has been into tactical plans – see above. But there has been also considerable research into strategic planning (see e.g. Mastop 1993; Healey et al. 1997; Salet & Faludi 2000), including how it can be realised.

With this perspective on indicative plans, the existence of an ‘implementation gap’ – a difference between the content of the plan and what is actually developed, a phenomenon which had attracted a lot of attention and concern in both practical and academic circles – is not necessarily a problem. If a difference exists between the motive for taking a concrete measure and what then happens ‘on the ground’, then the implementation gap is indeed a problem: the measures are not effective (and see chapter 6). If however there is a difference between the content of an indicative plan and what is developed, that might be the result of changing circumstances, whereby it would not have been possible or sensible to want the actual development to be in conformity with the plan. This puts the question of ‘realising spatial planning policy’ in a different light. What we then see is described in chapter 4.

Research in Nijmegen and elsewhere has shown that there is another way of influencing the physical environment indirectly. It has become apparent through empirical research that the way in which policy processes are organised and managed can have a significant effect on the content of the agreed policy (see chapter 7). A planning agency can use this knowledge constructively.

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14 This kind of activity is called in Dutch ‘ruimtelijke ordening’, as distinct from ‘ruimtelijke planning’. In English, it is more difficult to make that distinction.
5. LAND AND PROPERTY DEVELOPMENT

Houses being constructed on the Muntweg, Nijmegen

1985

Source: Fotocollectief
Regionaal Archief Nijmegen
(F48027)
Changes in the physical environment are brought about, concretely, by the decisions of property owners and property developers. For this reason, spatial planning in order to be effective must know how property owners and developers make those decisions, including how they react to measures taken by a planning agency deliberately to influence those decisions.

In spite of the irrefutable logic of this reasoning, there was remarkably little knowledge about the relationship between land-use planning and property development, in any case in the Netherlands. The reason might be the very close working relationship that existed there between municipalities and property developers (both commercial and non-commercial such as housing associations), certainly until around 1995. Decisions about land and property development were made jointly. Dutch practice could build upon a good knowledge of the demand for built space. Human and economic geographers had developed models for predicting the demand for housing, for shops, for offices, for industrial land, and so on. But the implicit assumption was that demand would be satisfied by supply in a neutral way. That is, that the process of supplying land and building would have no consequences for what was developed.

It was clear the Dutch practice needed more knowledge of how markets in land and property work, and into how public regulations affect those markets. Much of this knowledge has been provided by research in Nijmegen (e.g. Needham 1992; Needham et al. 1993; Needham & Lee 1994; Needham 2000a; Buitelaar 2004; Needham et al. 2004; Needham & de Kam 2004; Samsura et al. 2009; Beekmans et al. 2012). In the early years, this type of research was stimulated by the special professor of spatial economics Bert Kruijt.

Such research into land and property markets developed into research into the private (civil) law which regulates the ways in which land and buildings are used and changed, such as land leases, landlord and tenant legislation, servitudes and covenants (see e.g. Needham 2006.) One of the reasons for this attention was the realisation that such legal rules can have significant effects on the physical environment: differences between countries in such laws cause differences in the physical development (and see above for ‘user rights regimes’). The second reason was the realisation that the way in which planning instruments (under public law) work are influenced by the private law rules (e.g. Buitelaar et al. 2008). And a third reason was that much Dutch spatial planning at the local level works with private law, namely the active land policy pursued by municipalities (see chapter 4).

In later research (e.g. Needham et al. 2011; Woestenburg & van der Krabben 2013), understanding of the material object was sought using the concept of institutions (rules and practices, formal and informal). One of the significant contributions of that research is that it cast doubt on the validity of the concept ‘the unplanned physical environment’ or ‘what the market would produce if there were no public
planning’. The point is that markets cannot work without formal rules, also that what people want and how they express that as ‘demand’ are strongly influenced by informal rules, fashions, what others say and do (one of the emphases in the ‘old’ institutional economics) and also by formal, private law, rules (one of the topics in the ‘new’ institutional economics).

Property owners and developers (the suppliers of the physical environment) act and react in response to the demand for land and buildings by those who want to use them: by households, by schools, by firms, by farmers, and so on. How property owners and developers do this in general has been the subject of the research described in this chapter. The demand (quantity, quality and location) by the final users of certain types of land and buildings (housing, industrial space, shops), and how suppliers react to that, has been the subject of the research described in chapters 13 and 16.

How landed property gets its price and its value is important for land-use planning, and Nijmegen has made an important contribution to understanding this. The book by Kruijt & Needham (1980) made Ricardian land price theory and its corollary - the residual method of valuing land - better known in the Netherlands. The PhD thesis of Jansen (1992) was the first in the Netherlands to apply hedonic price theory to explaining house prices, and it has been followed by other research in the department into how environmental variables affect property prices (e.g. van der Krabben et al. 2008; de Kam 2008).

15 When some British office developers tried to work in Amsterdam in the 1970s and 1980s, they could not understand the Dutch practices, the municipality could not understand the British practices, and most of the development initiatives failed.
6. THE EFFECTIVENESS AND EFFICIENCY OF SPATIAL PLANNING

Members of the Nijmegen town council. The person third from the left (Hompe) was at that time the member of the municipal executive responsible for planning and building.

1980

Source: Fotocollectief Regionaal Archief Nijmegen (F50230)

Reproduced by kind permission of Marc van Teeffelen, Maanlichtmedia
With the action-oriented approach to spatial planning as outlined above, it is clear that the effectiveness of spatial policy cannot be taken for granted. The reason is that policy is put into practice by taking measures, which can do little more than influence the actions of others. However, the action-oriented approach provides also a method for investigating effectiveness. The expected effectiveness can be predicted by identifying the measures to be taken and by predicting how they – singly and in combination - will affect the actions of others. The realised effectiveness can be explained as a result of the interaction between the measures and the actions of others. The method can be applied to both tactical and strategic planning (for the distinction see chapter 4).

The effectiveness of tactical planning
Wissink’s approach to the question of the effectiveness of spatial planning was that measures would be more effective if they connected with people’s ‘spatial actions’. De Kievit (1993) worked this out further. He recommended that, for more effective planning, when preparing a policy, explicit attention should be paid to how it could be implemented and how it would ‘perform’ in influencing the actions of others. The theories and expectations which planning agencies use to do that were the subject of Arts (1994). Needham (1982) complemented Wissink’s work by paying attention to different types of policy instruments. The different types could be expected to work differently and, therefore, to have different effects under different circumstances. This line was taken up by policy scientists elsewhere in the Netherlands who developed what they called ‘instrumentation theory’ (instrumentenleer), theories of how instruments work by affecting the behaviour of others (Bressers & Klok 1988). Martens (2000) investigated how the national government used land-use planning to influence mobility, and concluded that a different sort of instrument - investment programmes - would be more effective. Halleux et al. (2012) compared the effectiveness of attempts to control urban sprawl in three countries. Needham’s application of micro-economic analysis to understand better the effectiveness of planning instruments led to much further research, and was later given a better theoretical foundation in New Institutional Economics (e.g. Buitelaar 2007; Geuting 2011). Other approaches developed and used in Nijmegen have been game theory (e.g. Samsura & van der Krabben 2012) and game simulation (Geuting 2011; van der Vlies 2011).

Much of this research in Nijmegen has been into the effectiveness of the Dutch practice of active land policy (grondbeleid). Such research was often stimulated by topical policy issues, such as the supposed scarcity of land for housing, the difficulties which housing associations faced in acquiring development land at a suitable price, or the financial problems facing municipalities caused by their land policies. Some of this research has been carried out with other countries, in order to compare national land policies (see e.g. Tira et al. 2011),
One might think that the powers which planning agencies have for acting directly in land markets would be extremely effective: but is this so in practice?

Verhage (2001) investigated the ways in which housing estates were developed in four countries, in order to understand better how this affected the external residential quality of those estates, in particular how that quality was financed. It was the first large-scale economic analysis of land policy made in the Netherlands. This project introduced the terms which were widely used in later research in the department: this was an institutional analysis of planning processes (inspired by the ideas of Healey 1992a). Verhage’s research required a financial analysis of the development process, for which an economic analysis of the ‘building column’ was made. Such analysis of the building column was widely adopted by others in the Netherlands (see e.g. Needham et al. 2000).

The doctoral research of Muñoz-Gielen (2010) returned to the subject investigated in 2001 by Verhage: how do the rules and practices for urban (re-)development affect the distribution of the ‘development gain’, that is the rise in land values caused by the development. This subject had become exceedingly topical as a result of the changes to the Dutch Spatial planning act. Like Verhage, Muñoz-Gielen made careful case studies in several countries, and succeeded in collecting much information about the financial flows. The aim of the research was to make recommendations for improving ‘value capturing’ in the Netherlands.

The interaction between markets and government rules takes a very particular form in Marxist Cuba, and was the subject of Núñez’ research (2012). In that country, the rules introduced after 1959 for urban land management (including property rights) were designed to achieve social and economic goals, also to exclude the working of the market. This research investigated the disadvantages to which that has led, in particular the effects on allocative efficiency, and how they might be overcome by taking more account of the value of land and buildings.

The effectiveness of strategic planning
The PhD research of De Lange (1995) investigated the effects of strategic plans made by the national government on the spatial planning of provincial and municipal governments. For this research, De Lange used the concept of ‘performance’ put forward by Barratt & Fudge (1981) as a measure for effectiveness, a measure which, under certain circumstances, was more appropriate than the measure of ‘conformance’. The question asked was: How has a strategic plan influenced subsequent actions in the direction wished for by the planning agency? rather than: Has the physical environment developed in conformity with the desired direction? The first research into this was by Mastop & Faludi (1993), followed by Mastop et al. (1996). That laid the basis for a special issue of Environment and Planning B, edited by and with contributions from members of the
The results of De Lange's research (1995) were disappointing for those wanting to apply them: it is difficult to discover whether a strategic policy has actually 'performed'. This conclusion has reduced the practical use of the idea of performance. Nevertheless, it can still be useful, and it has been applied to understand the role of European and transnational spatial strategies in the context of emerging European spatial planning since the 1990s (see chapter 12).

The efficiency of spatial policy
Policy can be effective in achieving its aims; but nevertheless very inefficient in how it does that. Efficiency refers to the costs of making and realising the policy - which includes the duration of the policy processes - all in relation to the effects. It is very difficult to make the concept of 'efficiency' operational so that it can be researched empirically. Buitelaar (2007) was one of the first to do this, and he did it by using the concept of transaction costs (out of New Institutional Economics). In that way, he compared the efficiency with which comparable projects were guided and implemented in three countries.

The topic of transaction costs was continued in research carried out in Arnhem (Buitelaar et al. 2006). This was partly a response to the wide-spread concern in the Netherlands about the duration of planning processes: they are seen to be 'viscous' (stroperig) and to last far too long and cost far too much. This research exposed the way in which planning agencies themselves – rather than the formal procedures – can prolong processes by continually demanding changes. That concern was qualified by Teisman (1997) with the argument that spending more time on the process (an apparent inefficiency) can sometimes produce better results (and see 'the importance of policy processes' in chapter 7).
7. MAKING SPATIAL POLICY

Public meeting to discuss plans for the town centre and parking meters, in the Vereeniging, the biggest hall in Nijmegen

1971

Source: Fotocollectief Regionaal Archief Nijmegen (F51835)
Determining the content of spatial policy

With the ‘practical theory of spatial planning’ as set out here, the content of that policy (the desired physical development of the area) can be established legally (the formal adoption of the policy) only by the relevant public body (the planning agency). However, that says nothing about how that content is or should be chosen. The desired physical development is a reflection of the political ambitions of the planning agency. But with what form of physical development can those ambitions best be realised? Although there will often be, in practice, many constraints on the possible physical environment, there is usually room for ‘creativity’, for ‘design’, and so on: spatial planning is a ‘design discipline’ (Needham 2000b). Moreover, the planning agency is free (within the proscribed procedures for public consultation, participation, appeals, etc.) in how it determines the content of its spatial policy, including how it involves others in doing that.

According to the ideas prevalent in the Netherlands 50 years ago, making a spatial plan was reserved for creative designers: urban designers and landscape architects. Spatial planners (planologen) supplied the information which the designers incorporated into a plan. This idea is clearly inadequate for a theory of spatial planning. For it implies that design is an inspiration which cannot be analysed. The ideas of Steigenga and Wissink (see chapter 2) that the plan should reflect development trends provide some guidelines for making plans, but are insufficient.

This topic has been studied in Nijmegen, both analytically – how in practice is the content of spatial policy determined? – and normatively – how should it be determined? When in 1977 Mark van Naelten was appointed to a structural chair in planning, he and his direct colleagues developed methods, both quantitative and otherwise, which could be used systematically for making and evaluating spatial plans and policies (van Naelten 1985, Linden 1985a, Linden 1985b). Attention for such methods continued after his departure, for it remained an important part of the education of planners and for understanding planning processes better (e.g. Carlton & Thissen 2009, Samsura et al. 2013).

There was in addition empirical research into how the content of spatial policy was determined. Methods by which regional plans had been made were analysed by Ekkers et al. (1990). Arts (1994) investigated how planning agencies used knowledge, both about human spatial behaviour and about how that behaviour could be influenced. Complementary research into how planning agencies use different kinds of knowledge was carried out by Wisserhof (1998) and Van den Brink (2009). The latter investigated how technical knowledge is used in decision making by the Rijkswaterstaat. That agency has a vast amount of technical knowledge which is of vital importance for the safety of the Dutch: but recently it has been placed under pressure to adapt itself to be a public-oriented government business, also to be more open and ‘democratic’. Lagendijk and Needham (2012) researched how knowledge for making spatial policy was and should be produced.
How spatial policy could and should be made when there are conflicting opinions about its content was investigated by Gorgels (1993). This research was into policies for public spaces where there is a concentration of people with deviant behaviour (in that case, red-light districts). Such problems were attracting a lot of attention at that time, and a book about this ('Conflict in urban development') was written by members of the department together with Polish colleagues (Dekker et al. 1992).

It will be clear from the above that research in Nijmegen into the making of plans has not taken the form of actually making spatial plans. The Dutch practice of separating 'planologie' from urban design (see chapter 2) has left its stamp on the academic work of the department in Nijmegen: Nijmegen is 'planologie', and has not contributed much to making plans for specific locations 16.

The importance of policy processes
At first, the attention in the Netherlands for policy processes had two causes. One was the concern about the power exercised by government bodies: was this too great, used undemocratically, applied not transparently? The other cause was academic inquisitiveness: the wish to understand. The first study of this in Nijmegen was by Goverde (1987), who studied the decision-making around a very big and controversial project (the Markerruimte) in order to understand better why government policies for such projects succeeded or failed. His concentration on the shifting power relationships was not taken up by much further research, but the case-study method of detailed investigation of decision-making processes has been widely repeated, also the consequences for the effectiveness and efficiency of the policy process. A more general study of such complex decision making processes was made by Teisman (1998a).

Later it became clear that the way in which the process was organised and managed could have big consequences for the content of the spatial policy. When this relationship between 'process' and 'outcome' became better understood, a national debate arose about whether attention for the process was driving out attention for the outcome: is it not the responsibility of the planning agency to determine the outcome, or at the least the criteria which the outcome must meet, and then to set the process going within those constraints? (see Zwanikken 2001).

There is clearly a tension between the formal responsibilities of the planning agency and the necessity and desirability of involving many other actors. For effective policy (see chapter 6), the planning agency must take account of the actions of many others. Also, political legitimacy requires that a planning agency consults others and explains its actions. On the other hand, only the planning agency can impose (public law) planning measures on the citizen: it alone can be responsible for the exercise of those powers.

Verhage & Needham (1998) looked at the effects on the ground of negotiating processes. In line with this, and in response to political concerns about the way in which the
Vinex-locations were being developed Needham et al. (2000) studied how the negotiations between public and private parties had influenced the form and content of those developments. Verhage (2001) and Munoz-Gielen (2010) took the position that the processes should be structured in such a way that public goals chosen in advance (in their researches, the goals concerned the distribution of costs and benefits from development projects) were realised. Samsura (Samsura et al. 2013, Samsura & van der Krabben 2013) analyzed, in an experimental setting, negotiations about value capturing between public infrastructure providers and private developers, and how those negotiations affected the outcomes. Van der Vlies (2011) investigated processes for making plans for redeveloping railway lands in such a way that transport risks would be reduced. Others took a similar position, but where the public goals were much more general. Verbart (2004) investigated ‘management for spatial quality’. Van der Heijden (2002) placed processes for ‘enrichment’ alongside the formal procedures. Teisman (1997) went further and proposed methods for ‘creative competition’ as a way of improving the quality of the end product: this required starting from a position which was as open as possible. Bugge (2013) in his research into the restructuring of industrial estates (as a case of ‘complex multi-actor processes’) recommended a ‘decision-support model’ for speeding up the process, without prior attention for the possible outcomes. Interestingly, and perhaps unexpectedly, Müller-Herbers (2007) concluded from a comparison of two very different processes (Dutch and German) for the same topic (protecting open spaces) that the differences had no effect on the content of the policy.

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16 The attempt in the beginning of the 1970’s to apply McLoughlin’s ideas (see McLoughlin 1969) to making a regional plan for Nijmegen was very promising, but was prematurely terminated.
8. EVALUATING SPATIAL PLANNING

The Executive Board (Gedeputeerde Staten) of the province of Gelderland, in Nijmegen to inspect a model of the plans for redeveloping the centre of Nijmegen

1970

Source: Fotocollectief Regionaal Archief Nijmegen (F54939)
Evaluating spatial policy

A lot of research has been carried out in many countries into the effectiveness of a particular spatial plan or policy. In Nijmegen there has been in addition much research into the more general question: has spatial planning been effective in realising particular goals and / or in satisfying particular process norms?

The ‘action-oriented approach’ to spatial planning, which has coloured so much of the research in Nijmegen (see chapter 3), warns against over-ambitious planning. Spatial planning can work only by influencing the actions of others: so it should be ‘modest’ in its ambitions, otherwise they will be infeasible. Accordingly, the main norm which has been used in Nijmegen is effectiveness: has the practice been effective, or is it expected to be effective, in achieving the formally adopted goals? Examples are Zwanikken et al. (1994): conclusion, expected to be successful, and a complementary evaluation of the same policy (Needham & Zwanikken 1997): conclusion, also expected to be quite successful.

A complementary way of evaluating spatial policy is not to accept the formally adopted goals as a given, but to propose that spatial planning be used to pursue certain substantive goals, then to investigate how effective it has been in achieving this. Those goals can include such things as ecological sustainability, economic growth, full employment, a more equitable society, equal ‘spatial chances’ for everyone, good housing for all, ‘a place for everybody under the sun’ 17. These were the social democratic goals of the pioneers of spatial planning, of two of the first Dutch professors also (Steigenga in Amsterdam, Van den Berg in Groningen): but not of Wissink. He talked of ‘the meaningful spatial order’ (de zinvolle ruimtelijke orde) and although he tried to fill that in by using Maslow’s hierarchy of human needs (1943), this was too abstract to be practicable. Much of the further research in Nijmegen too gave the question of substantive norms little attention. Related to this is the absence of political analysis of spatial planning, after the departure of the political scientist Goverde in 1987.

Nevertheless, not everyone in Nijmegen thought that spatial planning should be so modest in its ambitions to achieve substantive goals. Witsen, in his inaugural lecture (1991) made a plea for high ambitions, which was noteworthy coming from a former Director of the National Spatial Planning Agency. Teisman, in his inaugural lecture (1997) argued for methods for improving the quality of the physical environment. Needham was even more specific: in his inaugural lecture (1995) he made a plea for a spatial policy of urban containment, and in his valedictory lecture (2007a) for policy to improve spatial equity. Ache, in his inaugural lecture (2013) paid attention to the conditions for ‘good’ metropolitan governance.

When the chair in social initiatives in the property market was created in 2002, it was filled by George de Kam, and he paid much attention to two particular substantive goals. First was the importance of enough housing in the social sector, of good quality and affordable. Much of his research was into
how building land can be made available for such housing (see chapter 13). Second was the creation of area-based arrangements for housing with care, as an alternative to residential care in institutions (de Kam 2003). Research has been carried out also into social cohesion, and how this can be stimulated by spatial planning (de Kam & Needham 2003).

Yet another way of evaluating practice is against the ‘process norms’ of democratic openness, transparency, participation, ‘responsible governance’, etc. (e.g. Needham 2007b). Related to this is attention for ethical issues. This has been small in Nijmegen, with the important exception of the research by Martens into how transport planning should be carried out to achieve social justice (e.g. Martens 2006; Martens 2011; Martens & Hurvitz 2011; Martens 2012; Martens et al. 2012). And ways have been put forward by which ethical theories can be used to evaluate both the substance and the processes of planning practices (Hoekveld & Needham 2012, Needham & Hoekveld 2013).

17 This was the sub-title of the textbook on planning written by the first professor of spatial planning in Groningen, Gert van den Berg (1981)
9. NATIONAL SYSTEMS FOR SPATIAL PLANNING

Queen Juliana on a formal visit to Nijmegen, on the steps of the Town Hall with the Burgemeester Thom de Graaf

1969

Source: Fotocollectief Regionaal Archief Nijmegen (F70709)
In the early years of this 50 year period, there was much interest in Dutch spatial planning from experts in other countries, but there was not much critical description or analysis available in languages other than Dutch. The Nijmegen publications in English about Dutch spatial planning (see e.g. Needham et al. 1993; Needham & Faludi 1999; Needham 2007b) have helped to fill that gap.

Such research has contributed to knowledge in another way too. For it necessitated developing a framework for analysing the spatial planning in a country and its effects. The physical development in a country is affected by many things, only one of which is the system for spatial planning. That system interacts in many ways with other policy sectors, also with private (civil) law and with private and semi-private organisations. In the terms introduced in chapter 11, there is a number of interlocking and more or less coherent ‘policy arrangements’ which encompass much more than the system for spatial planning. It is those policy arrangements which must be investigated in order to understand how the physical development in a particular location, or a whole country, arises and changes.

Constructing methods for such investigations laid the necessary basis for much cross-national research into planning systems, including Needham (1990), Needham et al. (1998), Needham (1999), Kragt et al. (2000), some of which were the Dutch contribution to European-wide comparisons. And those cross-national comparisons of planning systems in their turn laid the basis for cross-national comparisons of particular aspects of planning systems (see e.g. Evers et al. 2000; Dühr 2007; Halleux et al. 2012; Tira et al. 2011; van der Krabben & Jacobs 2013; de Kam & Needham 2000; and 12 of the 37 PhD research theses).

The conceptual framework used for analysing and comparing planning systems has been used for studies of planning systems in just one country (outside the Netherlands). An example of the latter is Wilson’s research (1988) into changes in French land-use planning between 1958 and 1985, another example is Hees’ research (1990, 1991) into the housing market in Italy, and yet another is Nuñez’ research into urban land management in Cuba (2012).
The bench for the Elders of the Church of St. Steven in the centre of Nijmegen, installed in 1676.

From this bench, many social issues have been 'framed'.

1970

Source: Fotocollectief Regionaal Archief Nijmegen (F27577)
The action-oriented approach to planning implies, logically, attention for the ways in which people perceive the physical environment and their actions within it (Mastop 1993). Early research in Nijmegen (Ekkers 1984; Gorgels 1993) took this into account explicitly.

Later, this idea was systematized by researchers in many countries in what has been called the communicative (or discursive, or argumentative) turn in planning (see e.g. Healey 1992b). It is the idea that reality is socially constructed (we can never know if we know the reality, we can only construct our own version of it, and we do that in discourse with others); and that there are, or can be, systematic differences within society in the way in which people construct and value reality (cultural diversity). In Nijmegen, Hidding et al. (2000) applied these ideas to discourses of town and country; Zwanikken (2001) applied them to three planning discourses topical at that time: Boonstra (2001, 2004) to discourses about rural development; Dühr (2007) analysed European planning traditions about visualising spatial policy, using a social-constructivist approach to map analysis. Derived from those two ideas – the discursive turn and cultural diversity - is the method of discourse analysis. Zwanikken (2001) used it to investigate three national spatial policies; Van den Brink (2009) the national policy for giving more ‘room for the rivers’; Varró (2008) and Varró (2010a) to national policies for ‘resurgent cities and resurgent regions’. A study of discourse theory was written by Van den Brink and Metze (2006).

A related idea is that ‘frames’ are constructed which influence and direct the way in which reality is perceived and problems are expressed. Those frames can be constructed in various ways: see e.g. Dormans et al. 2003; Lagendijk & Needham 2012. Verduijn studied the framing strategies employed by the Dutch Delta Committee (Verduijn et al. 2012); Dühr (2007) and Westerink et al. (2013) investigated the role of spatial concepts in communicative planning processes.
11. UNDERSTANDING POLICY CHANGE AND POLICY TRANSFERS

It is Carnival in Nijmegen, and for these four days the Burgemeester symbolically hands over the keys of the city to Prince Carnival. In this case, it is Burgemeester Ien Dales who does that.

1988

Source: Fotocollectief Regionaal Archief Nijmegen (F20387)
Understanding policy change
Internationally, there has been not only a ‘discursive turn’ in planning (see above) but (and related to it) an ‘institutional turn’ also (e.g. Jessop 2001). This goes further than the study of the role of institutions in economic behaviour (the New Institutional Economics already mentioned) although it uses the same concept of institutions, namely the ‘rules of the game’, written and unwritten. In Nijmegen, this has been worked out as follows. The practice of spatial planning uses both written and unwritten rules. Spatial planning policy is then ‘institutions in action’. Policy stability and policy change can then be regarded as examples of institutional stability and change, and use can be made of general theories of those processes (e.g. North 1990). Insights from applying those theories can be used also to improve practice: introducing new policy effectively requires understanding how policy changes, and how it can be made to change (see e.g. Buitelaar et al. 2007; van der Krabben 2009a).

The occasion for the PhD thesis of Van Damme & Verdaas (1996) was more practical than theoretical. It was the wish to know what effect a change in the law, made in 1985, had had on the daily planning practice of municipalities. Not as much as the legislature had hoped for, was the finding. The theoretical contribution was in explaining this lack of effect (actually, the poor ‘performance’ of an action taken by the national government – see chapter 6). Practice is rooted in formal and informal institutions, and changing just one of them (the formal law) is no guarantee that the practice will change. The same ideas were used to understand why municipal policy for industrial estates changed so slowly, in spite of its accepted weaknesses (Needham & Louw 2006). A similar approach was taken by Buitelaar & De Kam (2012) and De Kam (2013) when explaining why the option of ‘inclusionary housing’ (kwalitatieve locatiediensten) was introduced in the Netherlands so much later than in many other countries, and why it is still not much applied. Policy change is subject to path dependency, and Dicke & Meijerink (2008) discussed the path dependent development of institutions for flood risk management, and governments’ efforts to develop new institutional arrangements for sharing responsibilities between the state, private insurance companies, and civil society.

Later work systematised this method of analysis by using an idea which had been developed within the department of environmental policy within the same faculty. This is the idea of the ‘policy arrangement’ (Tatenhove et al. 2000). To understand a particular policy, it was necessary to take account of four dimensions: the substance of the policy and how it is perceived and formulated, the actors involved and their coalitions, the division of powers and influence between the actors, and the ‘rules of the game’. With this approach, a particular policy for spatial planning (or for any other sector) should be studied within its context, taking account of the different ways of discussing it, and of how it is embedded within the relevant formal and informal rules. In addition, the policy framework approach usually requires attention for actors and for rules at different levels of government: it is
multi-scalar, it takes account of vertical co-ordination, or the lack of it.

Boonstra (2004) was the first within the department to use this approach explicitly. She wanted to explain why some policy changes in rural regions became institutionalised and others not, and offered the explanation that it depended on congruities between components of the policy arrangement. Verwest (2011) took this further. She wanted to understand how local governments react to demographic decline? The question is particularly interesting because the Netherlands has had demographic growth for many decades, and now some regions are having to make a drastic policy change. Verwest developed and tested hypotheses about how incongruities between parts of the arrangement might hinder or lead to institutional change. De Boer (2010) used the same policy arrangement approach. According to one version of this, policies change as a result of political modernisation. De Boer studied changes in the policies for cultural heritage preservation in three countries, and concluded that institutional change was caused by more than political modernisation: also important were the specific historical, geographical, social-political, and economic contexts.

Policy change at a different geographical scale was the subject of the PhD thesis of Varró (2010a). The subject was the rise of regions and city regions as the focus of policies: what she called 'redefining the spatial organisation of the state'. She rejected Marxist explanations of this - the 'strategic-relational approach' - and replaced it with a 'politics of space' approach.

In connection with the recent and urgent interest in water systems in the Netherlands, there has been much additional research in Nijmegen into changing the policy for water, and the purposeful design of institutions and policy processes so as to achieve that change. This is described in chapter 15.

Understanding policy transfer and evolution
Related to the subject of policy change is the question: how are policy ideas transferred from one place and setting to another, and how do they change in the process? The idea that policies ‘diffuse’ and are taken over and adopted unchanged has to be abandoned. Studies have been made of how certain strategic concepts evolve, namely multiple land use (Lagendijk 2001a), advanced public transport, specifically light rail (Lagendijk & Boertjes 2013), innovation campus (Kooi et al. 2013), and business clustering (Ebbekink & Lagendijk 2013). The research focusses in particular on the interaction between the development and use of the concepts in specific local settings, and on the evolution and circulation of the concepts at a ‘global’ level (Lagendijk 2004). The evolution entails both the strategic (motivation, visioning) and instrumental (scripting, practice-oriented) aspects of concept development (Westerink et al. 2013). The outcomes show how the diffusion and local anchoring of the concepts in itself contributes to the recognition and impacts of the concepts. In other words, diffusion produces a significant message, rather than the
message being diffused unchanged. The projects map the networks through which diffusion takes place, zooming in onto nodal organisations (such as leading academics and consultants) and onto the variety of channels carrying and modifying strategic concepts. This research complements other studies on planning concepts in the Netherlands, carried out by Zonneveld and colleagues (2005). Where the latter have elucidated the way in which Dutch planning processes have been shaped by the waxing and waning of strategic planning concepts, the work in Nijmegen sheds light on the processes shaping the concepts themselves (Buitelaar et al. 2007a).
Walkers on the Four Day International Marches on the pontoon bridge over the river Maas at Cuijk.

The sign reads ‘One bridge for everybody’

Between 1956 and 1963

Source: Fotocollectie Regionaal Archief Nijmegen (F42063)
The creation of the special chair in ‘National and European dimensions in spatial planning’ in 1991 was a direct expression of the early interest in Nijmegen for the spatial policies of the EU. This was a timely creation as, since the late 1980s, the then 15 member states had been preparing a ‘European Spatial Development Perspective’ (ESDP). In subsequent years, many changes have increased attention for the European dimension of spatial planning: the increasing body of EU policy with spatial impacts in the fields of water, transport, urban and regional development; the geographical enlargement of the Union and the continuing integration of EU and national institutions through successive Treaty revisions; the completion of the Single-Market; the introduction of the Euro. The research in Nijmegen has evolved alongside these policy developments.

Early research in Nijmegen on European spatial planning focused on providing a better understanding of this new scale of policy-making and development and its relevance for domestic spatial planning. The Dutch Spatial Planning Agency provided funding for studies to analyse spatial planning policy and law at the European level and in neighbouring countries (see Mastop et al. 1990).

When Faludi took his chair in Nijmegen in 1999, he was able to build upon the huge contribution made by Dutch academics, government officials, and politicians to the European Spatial Development Perspective (1999) and on his own study of that contribution (Faludi 1999b). Much of the research in this period contributed to a better understanding of the process of preparing the intergovernmental ESDP, including the role of political influences and different planning cultures in determining the outcome (Faludi & Waterhout 2002; Faludi 2002a; Faludi 2004a; Dühr 2007). Other research in Nijmegen, taking the integrative objectives of the ESDP as a starting point, sought to analyse its role in providing a guiding framework for the EU’s sectoral policies with spatial impacts (Buunk et al. 1999). This led to research into the spatial planning of the EU itself and into the effects of, in particular, the ESDP on domestic spatial planning systems and policies (its ‘performance’) (Faludi 2001; Faludi 2003; Faludi 2004c). This research used several of the concepts and theories which had been developed and applied in Nijmegen to the study of Dutch planning practice (see also chapter 3).

European spatial planning, due to its novel character, opened up new avenues for theoretical discussions. Researchers in Nijmegen began to use more concepts from European integration theory (theories explaining the processes of European integration, including processes of EU policy making and decision making) to understand better the role and contribution of intergovernmental working arrangements on spatial planning and strategy documents such as the ESDP (Faludi 2002b; Dühr 2007). Middle-range theories of European integration in particular have proven useful to Nijmegen researchers for analysing the influences of EU discourses, policies and funding instruments on domestic planning systems and policies. The first Nijmegen PhD on this subject (Böhme 2002) investigated how spatial
planning in five Nordic countries had reacted to the spatial planning initiatives and policies of the EU. Given the lack of an explicit EU competence on spatial planning and, as a result, the fact that documents such as the ESDP are intergovernmental and non-binding, the thesis found that ‘discursive integration’ through networking and the dissemination of policy discourses had been more important than EU law or binding policy. The PhD thesis of Buunk (2003) also considered the question of how processes of EU and policy integration are taking place. His is a study of the composition of policy arenas, of perceptions (discourses), and of interactions between government levels in the EU, focusing on the role of EU sector policies with spatial impacts (nature conservation, regional policy etc.) to understand the field within which European spatial planning is taking place. The thesis concluded that the spatial planning approach itself contributes to the co-ordination and co-operation between the various government levels.

Much of European spatial planning research in Nijmegen in the early 2000’s contributed to the discussion of how the ESDP, which had been prepared by and for 15 member states, might be developed to be applicable to the expanded Union which had to respond to new challenges and policy objectives such as economic growth (Faludi 2000a; Faludi 2004e; Faludi 2004b). This included a discussion of the possible implications of the EU objective of territorial cohesion for progress on European spatial planning (Faludi 2004b). This research line also considered the question of how policies and actors might be integrated into the EU’s multi-level system of governance (Faludi 2004d). The PhD thesis by Waterhout (2008) studied the institutionalisation of spatial planning of the EU between 1999 and 2007. He found that no stable hegemonic discourse had arisen and that the spatial planning initiatives of the EU had had little influence ‘on the ground’. On the other hand, spatial planning in the member states at the national and regional levels has been influenced by EU policies and programmes and has become more ‘Europeanised’.

Since 2006, the responsibility for the research line on European spatial planning has been taken over by Stefanie Dühr. The book ‘European Spatial Planning and Territorial Cooperation’ (Dühr et al. 2010) has become the key text book on the subject.

The main lines of enquiry are how the European Union (EU) influences spatial planning systems, policies and practices in the member states and regions, and how domestic discourses and approaches affect EU policies, with the cross-border and transnational dimension of spatial planning being given particular attention. The concept of Europeanisation has been used to analyse how regional and national actors and processes are interlinked with, and influenced by, EU-level policies, and to analyse the role of territorial cooperation in these processes (Dühr et al. 2007; Dühr & Nadin 2007). Related to this is the wish to understand better the implications of EU spatial planning concepts, such as polycentricity, within countries such as the Netherlands, and the governance arrangements in
transnational and cross-border territories (Priemus et al. 2004).

The discourse on European spatial planning, through the ESDP and related documents, has continued to stimulate contributions to deconstruct the meaning of EU-planning terms (Nadin & Dühr 2007) and to analyse the norms and values of the Union and how these affect spatial planning (Needham & Hoekveld 2013).

The increasing relevance of EU policies and action for spatial planning within the member states and at transnational level is also considered from the perspective of how spatial policy is prepared; which information is available to inform strategic spatial planning (given that much spatial data continues to be collected within national traditions); and how such information is communicated across different planning cultures (Dühr 2007; Dühr & Müller 2012). This line of research applies a social-constructivist approach to analysing map-making and map-reading, reflecting on the context and planning culture within which maps are being prepared and used, and it applies concepts from discourse analysis and framing approaches (Westerink et al. 2013; see chapter 10).
13. HOUSING POLICY AND HOUSING LAND

Laying the stone commemorating the start of the housing project ‘Centraal Wonen’.

1990

Source: Fotocollectie Regionaal Archief Nijmegen (F7449)
Housing policy
The research into housing that has been carried out in Nijmegen has always had a close link with planning issues. Ekkers (1984) studied the process whereby housing in the social sector, owned and managed by housing associations, was allocated among those applying for it. It was the first research in Nijmegen which focussed on the variety of interests and perceptions about urban problems, and on the relationships between the municipality (as planning agency) and other ‘gatekeepers’ (the housing associations).

The research into housing associations was continued by De Kam. He emphasized the importance of governance issues in Dutch housing policy, related to the role of housing associations as hybrid organizations, positioned between government, market and civil society. This research was into how this type of actor, often called ‘social entrepreneurs’, provides housing and care: they are not just at the receiving end of the welfare state, but also actively use their opportunities to earn additional income from the development of land and real estate (de Kam 2003, 2006; Buitelaar & de Kam 2009).

The population of the Netherlands, as in many other western countries, is ageing, and this poses challenges for both housing and planning policy. Recently there has been much research into what is called ‘ageing in place’, whereby fewer older people move to institutions for residential care. This requires new forms of cooperation between providers of housing, care and services, and the local authorities (often called Integrated service areas). Hendrixen et al. (2007) have explored how planning regulations can support these processes, and also which conditions support the realization of area-based arrangements for housing, care and welfare. Spatially relevant findings are that it is important to have (or expand) a housing stock that fits the needs of the elderly, with amenities and services nearby, and a safe environment.

One of the most important contributions by Nijmegen to knowledge about housing policy has been made in the form of a widely used and standard textbook (Ekkers & Helderman 2010).

Housing and land
The relationship between policy for affordable housing and policy for land is clear. Large economic interests are at stake when planning authorities designate land for housing. At the same time, most governments have specific policies to support low-income households in the housing market, policies which are often related to the use of land and the redistribution of value created in the development of land. Research in Nijmegen has provided longitudinal insights into the provision of land for social housing in the Netherlands, framed in institutional analysis with specific attention to transaction costs (de Kam & van der Brug 2012). Comparative research into the provision of land for social housing in 18 European countries (de Kam & Needham 2000) resulted in a contribution to theories of the functioning of land markets, which emphasized the importance of coordination by networks. (Needham & de Kam 2004).
Complementary research into how the land market functions when agricultural land is transformed into land for housing purposes is reported in Woestenburg & Van der Krabben (2013).

The international comparative research reported above was continued in order to understand better the policy practice of inclusionary housing, which is the provision of social or affordable housing by way of planning requirements. This research resulted in a special issue on the embeddedness of inclusionary housing in planning and housing systems (de Kam et al. 2013, de Kam 2013).
14. TRANSPORT AND MOBILITY

View of the railway station and the bus station

1967

Source: Fotocollectief Regionaal Archief Nijmegen (F11785)
Research on transport and mobility has been focused on (a) understanding the mechanisms underlying mobility growth and the translation into transport patterns, and (b) analyzing the planning and decision making processes that deal with the relationship between mobility, transport patterns and spatial development (urban change, transport network development, regional economic development). In many studies both lines have been combined. Special attention is paid to the development and application of (policy-) analytical methods for simulating transport developments, so as to understand uncertainty, and the assessment and evaluation of impacts.

**Mechanisms underlying mobility growth and their translation into transport patterns**

Mobility growth is related to economic growth and market changes, growing car ownership, changes in preferences of individual travelers, logistics choices, and changing transport technologies.

In the past, most attention has been paid to urban passenger transport. The impacts of bicycling have been studied (Drenth et al. 1998): there has been research on Park&Ride behavior based on urban transport services (Bos et al. 2004): on the combination of public transport and the bicycle (Martens 2007): on time budgets in travel behavior (van Wees et al. 2001): and on the development and application of innovative models for urban parking, based on analyses of parking behavior (Martens & Beneson 2008, Martens et al. 2010; Benenson et al. 2008, 2010, 2011; Levy et al. 2012).

In the past decade, research has been carried out in collaboration with the Delft University on the developments in, and the long term impact of, intelligent transport services and devices (van der Heijden & Marchau, 2001, 2005; Marchau & van der Heijden 2003; van der Heijden & van Wees, 2001; van der Heijden et al. 2006; Lu 2006, Lu et al. 2004, 2005a, 2005b; Marchau et al. 2005). In his PhD thesis, Argioliu (2008) investigated whether such innovations in transport services, notably the use of Intelligent Transport Systems, which can be expected to change the accessibility and mobility profiles and attractiveness of locations, would affect the location choice of office-using firms. Argioliu developed a location choice model that was applied to the Arnhem-Nijmegen region (Argioliu et al. 2008).

These studies, in particular because of their long term focus, the identification of uncertainties, and the focus on behavioral, spatial and institutional impacts, were highly innovative in the field of transport. Other driving forces in mobility growth are changes in logistics and freight transport (Tavasszy 2006).

In his PhD thesis, Platz (2009) studied why relatively so little international freight transport is accommodated by transport services on the inland waterways. It was found that the most important factors influencing the choice of transport mode were total transport costs, reliability, and flexibility in the transport chain. His findings were linked to the governance structure within the European market as well as within transport networks. Related aspects and trends in logistics
decision making (role of time, infrastructure, policy interventions) were studied in the following publications: Runhaar et al. 2002a, b; Runhaar et al. 2004, Runhaar & van der Heijden 2005; van Duin et al. 2007; van Duin & van der Heijden 2012; Muilerman et al. 2005; Koike et al. 2006.

Planning and decision making processes for the relationship between mobility, transport patterns, and spatial development
This includes research into the institutional changes and the complexity of planning and decision making, with a special focus on the normative effects of the organization of transport (e.g. Ernste et al. 2012), and on the protection of environmental quality and safety.

For example, there have been studies into the significance and failure of the Dutch policy for transport regions (Kerstens 1998) and into the policy focus on creating dynamic transport network nodes (e.g. van Bendegem et al. 2006). In his PhD thesis, Martens (2000) developed a critical perspective on the Dutch ABC location policy, that was introduced as part of the national policy according to VINEX. Martens’ study focused on the effectiveness of this spatial planning concept: what types of aims can be achieved in that way? He did this by studying the attempts of the national ministry for spatial planning to affect traffic flows and modal split by regulating land use. Ineffective, was his conclusion: those aims can be better achieved by investing in traffic infrastructure.

That thesis sought an approach that is based not only on institutional or policy theories, but also on analyses of mobility trends and changes in the spatial structure of the city and the region. This combination is essential for balanced statements on effectiveness, as well as for more normative statements on the need for changing certain transport policies. This became clear in the PhD thesis of Jacobs (2007). This investigated the competition between maritime harbours to attract the international transport in containers. This is sometimes studied as an economic activity which takes place outside of rules, governance structures, etc. Jacobs showed how the port authorities and the national governments created institutional structures in order to improve the competitiveness of the ports. The attention to formal rules usually requires attention to the rules made at different levels of government: it requires a multi-scalar approach. Jacobs’ work is a good example of the application of institutional analysis both to activities in space and to policies to influence the location of those activities.

Other research analysed the growing danger from the transport of hazardous materials for the adjacent areas (Rosmuller & van der Heijden 2002): it concluded that the national policy of bundling transport infrastructure is difficult to realize in practice and also not always favourable. In his dissertation, Van der Vlies (2011) (see also van der Heijden & van der Vlies 2005) analysed the impacts of transporting hazardous materials by rail. He took the perspective of the institutional setting of the national railway manager on the
one hand, and municipal plans for area development on the other. There is a growing problem: when it is desired to develop or redevelop near to railways on which dangerous goods are transported, there is a risk to the safety of residents. Van der Vlies investigated the institutional context of the decision making about such (re-)developments, and concluded that it does not favour finding good solutions. His study is an example of how the organisation of the decision making can affect the outcomes (see chapter 7).

In the past years in Nijmegen, the issue of justice in transportation has been explored thoroughly (Martens 2006, 2011, 2012, 2013; Martens et al. 2011, 2012; Benenson et al. 2010, 2011) Martens argues that, like education and health care, accessibility is of major importance for people in modern societies, and therefore justice considerations should be central to the planning of transport systems. He criticizes mainstream transportation planning for being demand-driven and ignoring the needs of population groups that are less well-served by the existing transport system. This work draws on major theories of social justice, in an effort to develop a comprehensive account of transportation planning based on principles of justice.
15. WATER AND GOVERNANCE

Flooding in the Lange Hezelstraat

1965

Source: Fotocollectief Regionaal Archief Nijmegen (F52330)
One of the first PhD theses in Nijmegen was into the proposed drainage of the huge water area called the Markerwaard (Goverde 1987): the occasion for this study was a desire to understand the political processes better. It was not until about 15 years later that the many real and urgent problems with water in the Netherlands led to research programmes into how the existing policies for water could be changed. The practical occasion is the deterioration of water quality and the decrease in the natural storage capacity of most water systems, including the expected effects of climate change.

Water governance may be conceived of as a multi-level governance process. First, because of the development of the European water regime, most notably the European Water Framework Directive and the Floods directive: as in many other policy domains, the EU has become a key actor in water management. Secondly, in most countries responsibilities for water management are shared between the government, private parties (for example the insurance industry), and the civil society. Finally, in most countries there are general purpose organizations, such as municipalities or provinces which have policies not only for water but also for land use, nature management, etc. In addition there are special purpose organizations, in the form of river basin or catchment organizations. All of them play an important role in water resources management. Because of this institutional fragmentation, solutions to water issues have to be crafted within complex inter-organizational networks.

The various theories of policy processes predict that a variety of things can cause policy change (and see chapter 11). One is change in external events. Drawing on various theories of the policy process, Meijerink (2005, 2008) investigated the impact of shock or focusing events, such as river floods, on water policies; and Spits et al. (2010) studied the impact of flood events on practices of spatial planning. Another possible cause of policy change is changes in the epistemic (knowledge) community: Meijerink, (2005, 2008) investigated how the new epistemic community of ecologists and biologists was effecting water policies. Van den Brink’s PhD thesis (2009) investigated by means of discourse analysis how the national water agency (Rijkswaterstaat) was adapting to external pressures, both political and technical.

How adaptive are policy institutions to such external changes? The idea of the ‘adaptive capacity wheel’ (Gupta et al., 2010) has been developed to assess this. This assessment tool was inspired by insights from complexity theory, and emphasizes that climate governance needs redundancy, variety, experimenting and learning. It has been applied to both planning and water institutions (van den Brink et al. 2011; Termeer et al. 2009).

The effectiveness of deliberate policy change – innovation – can be strongly influenced by individuals, people called ‘policy entrepreneurs’. Based on a comparison of change processes (or transitions) in sixteen countries, Meijerink and Huijtema (Huijtema & Meijerink 2009a; Huijtema et al. 2011;
Huitema & Meijerink 2009b) concluded that, in most of the cases studied, it was possible to pinpoint key individuals, but that entrepreneurship is often collective: it is a relatively small group of key individuals that makes a difference. These entrepreneurs draw on an arsenal of framing and networking strategies. A framework has been developed, inspired by complexity theory, more specifically by the theory on complexity leadership, for analyzing leadership functions and tasks in climate change adaptation (Meijerink & Stiller, 2013).

From such insights, consequences can be drawn about how policy processes should be designed and what institutions they should incorporate, so that particular policy goals can be better met. This has already been discussed with respect to spatial planning (see chapter 7): it has been applied to water policy too. Meijerink (2004) studied the implementation of the Room for the Rivers programme. Dicke & Meijerink (2006, and see also de Jong & Meijerink 2006; Meijerink, 2009) studied the institutional characteristics of the Dutch Water Boards, as an interesting example of special purpose organizations.
16. SOME PARTICULAR LAND USES

The interior of the butchers shop H.H. Brinkhoff, Couwburgstraat 125

1965-1970

Source: Fotocollectief Regionaal Archief Nijmegen (F47631)
Industrial estates
As a direct result of the policy attention given to the development of industrial estates, and particularly the problems related to this since 2005, research has been carried out into how the market for industrial land and property works. The problems (better: the undesired market outcomes) that have occurred in this segment of the land and property market relate to the ‘oversupply’ of land available for industrial development, the large numbers of obsolete industrial estates, the ineffective policies to revitalize those estates, and the lack of interest of the private sector to invest in them.

Part of this research applies theoretical approaches to land and property markets, making use of institutional economic theory, in order to understand why the market for industrial land and property works as it does in the Netherlands (where municipalities play a dominant role) (Needham & Louw 2006; van der Krabben & van Dinteren 2010; van der Krabben & Buitelaar 2011; Louw et al. 2012; Needham et al. 2013).

A large research project was started in 2008 focusing on four related issues: obsolescence problems on industrial estates; regeneration policies for obsolete industrial estates and their impact on industrial real estate values, building investments, employment and the composition of economic sectors (thus building upon the work of Bugge 2013); private sector involvement in industrial land and property development; and the phenomenon of campus development, such as a high-tech business park, opening new opportunities for industrial development. So far this has produced the following results: Beekmans et al. (2012); Ploegmakers et al. (2013); Ploegmakers & de Vor (2013); Kooij et al. (2012, 2013).

A text book on this subject has been written by Louw et al. (2009).

Retail
In the last few years there have been some incidental research results, and a text book, about the planning of retail locations. Van der Krabben (2009a) evaluated the effects at the local level of changing national planning policies for the development of retail locations, and Van der Krabben (2009b) referred to the planning of retail locations in order to explore ‘market approaches’ in spatial planning. The text book is Evers et al. (2011), and see also Evers et al. (2012).

Recreation
Between 1981 and 1989 there was a working party, containing staff members from both spatial planning and human geography, which carried out much research into tourism and recreation, especially in urban areas. From the department of spatial planning came many publications, including Jansen-Verbeke, (1985a, 1985b, 1988, 1993) Jansen-Verbeke & van de Wiel (1993), Jansen-Verbeke & Dietvorst (1993). With the departure of Jansen-Verbeke in 1994, this research line more or less stopped.
CONTINUING THE CONTRIBUTIONS: THE FUTURE

Peter Ache: chair of planning

“Can we develop theories and practices of provisional agonistic pragmatism which rely less on closure and more on discovery, which reveal potentialities and opportunities and which work with differences and ambiguities?” (Hillier & Healey 2008; with reference to Ploeger 2009)

As this collection of texts and viewpoints demonstrates, planning has come a long way, and not only in Nijmegen. Fifty years development in one place can, in the context of a university which itself has a history of only ninety years, be considered both short and long. The fifty years posed many challenges, including two threats of being closed. As dramatic as those two instances might have been at the time, in hindsight these bi-furcation points (to use a concept from future studies) certainly have had an impact up to today. And in general, the framing and re-framing of planning as an academic and professional activity continues.

As we all know, history is made by people, but not always under conditions of their choosing. As we all know, a path develops partly as a sequence of coincidences and episodes. Often, such an emerging path presents itself only in hindsight as an appropriate line of knowledge, which almost naturally characterises the place in which it grew. And this makes it difficult to write a text about the future.

In terms of present research strands, as the previous sections outline, the planning group is well positioned to research highly relevant issues in the field of real estate markets and property development; in the field of water management; in the field of mobility research; in the field of comparative views on planning systems. This marks out the larger lines of research within which issues like spatial justice, ‘spontaneous’ city development, networks and institutions form the more articulated research perspectives, and where diverse theories and methods are explored and experimented with. All of this is a reaction to current challenges faced by our cities and regions, and to the question, how planning can help find the required and appropriate solutions.

Now, with the precaution formulated by Nils Bohr, who said “prediction is very difficult, especially about the future”, what might be the path of planning in the next fifty years? What are likely developments, for which we have to prepare our research and education? In principle, two basic perspectives are relevant here: that of the spaces that require to be planned; and that of the planning perspective, namely what should planners actually do?
In terms of the spaces, the past decade has seen a recurrence of major visionary exercises. Irrespective of whether they are inside Europe - like most prominently the exercise ‘Le Grand Paris’ - or outside Europe - like the concrete utopia of Masdar City in Abu Dhabi - all those visionary exercises speculate about emerging urban form and function. The research programmes of the EU, from FP7 and JPI UE to ESPON, explore the future of cities and regions with time horizons to 2030 or 2050. All those exercises make clear that we are going to see the emergence of large-scale metropolitan regions with complex socio-economic and concomitant spatial structures. In the best case, those are the new social silicon valleys of the Urban Millennium, where the needed innovative and creative approaches to solve our problems will be created. In the worst case, they constitute a ‘planet of slums’ (Davis 2004).

With the case of Masdar City, a stepping stone from vision to reality is already placed. Companies from the ICT sector and from other advanced technologies, especially regarding sensors, are teaming up with energy providers and other utility companies to create smart cities. Those smart cities are seen as a trillion dollar market propelled by the growing populations in the metropolitan spaces, especially of the south, creating a market for ‘turnkey cities’, where the urban setting is engineered as a kind of optimized living machine. This new format includes also ‘turnkey’ governance, i.e. the optimum management of a ‘club good’ financed by entry fees. We are almost back to classic formats of cities, like the company towns of the industrialisation age. The difference between the two is that in a ‘turnkey metropolis’ there is a shareholder interest, not a Victorian Utopian Entrepreneur. The technology behind such a scenario is communication (in fact, rather basic but amplified by ICT to ‘real time’), big data, and an enhanced understanding of the networked world. Earlier ideas of systems thinking receive a fresh input from advanced network models, up to the point that social interaction comes under the magnifying glass formed by advanced mathematic modelling and real time data production by social media (Watts 2004), in the attempt to create new social engineering models. If Masdar City does in fact represents the future, the metropolitan region of the next half-century will be a complex management operation, with the citizens being consumers of various customized pieces of this living machine.

Overall, such a scenario sounds eerie, at least to the ears of someone my age and background, who was socialised in a workingman’s region. And many questions are linked with those visions: Where are the ‘social silicon valleys’ in such a scenario? Where is the opportunity for participation or inclusion? Are ‘turnkey’ cities blind to spatial justice?

And, in terms of planning as a professional activity, what does this mean for planner? As planners we are hopefully still part and parcel of a process that creates the necessary ‘social silicon valleys’ of the future. Planners hope to be able to support the society to prosper and flourish in a wider sense: this is the enlightening element of planning. However, in all the scenarios talked of above, this element is in need of
strengthening. Planners need much more strongly to give visions to society, and the famous quote by Burnham comes back again: we need to stir the blood of people, with positive ideas about the future. Of course, the warning function of planning is needed as well, but we need even more to concentrate on positive visions; ‘if we cannot imagine, we cannot manage’ (Neuman & Hull 2009).

Fifty years of planning in Nijmegen includes also a variety of approaches to planning education. What has been said above implies that the production of hope, the inspiring element, the thinking outside the given boxes, needs to be reinforced in our planning education. The availability of new technologies will help us; augmented spaces, such as digitally enhanced environments, create new tools to experiment with endless mutations and to 'assess' solutions in a formative way, allowing solutions to be created as we progress over time through space.

How do those future opportunities relate to the last 50 years? Some common elements can be identified: The ultimate purpose of planning is the creation of liveable places, for citizens or more generally for the people. The planner is not the exclusive holder of all knowledge required to do this. Planning is as always part and parcel of a larger management process in a setting of distributed resources and responsibilities, even inside ‘turnkey’ cities. The key word is process, and planning keeps its process orientation. The perspective regarding the main objects of our desires - the places or spaces or territories - changes from a perspective of dividing and allocating, to one which strives for integration. The metropolitan regions of the future will depend on an integration effort, coordinating the various demands and complex structures.

What are the more specific research tracks, which are laid out by current and continuing research? The complexity of urban systems – also on the regional scale - and the ways planning should deal with them is certainly one important field. With the economic analysis of land and property markets and with the IMR (Institute for management Research) expertise in modeling, this research aims for a better understanding of collective decision-making processes within urban systems, particularly (but not exclusively) with regard to metropolitan governance, land and property development, infrastructure planning, and value capturing mechanisms. Increasing our understanding of collaboration, stakeholder participation, negotiation processes and the constellation of networks should help to develop potential innovations in governance and in financial approaches to complex urban systems.

In the more sector oriented research, transportation planning based on principles of justice and normative lines of reasoning is another important feature of the current research. Based on philosophies of justice, the question is asked: what is a ‘fair’ transportation planning and a fair transport and land use system? This approach is normative in essence, and is very relevant scientifically. The ability to delineate a fair transport system will redefine transport
problems, and the research questions, analyses and methodologies will have to be reformulated. From a societal perspective, the approach is highly relevant as governments spend large amounts on transport infrastructure and services, with profound and multiple impacts on people’s lives. At the moment, considerations of efficiency are dominant, and although justice and fairness concerns do play a role, these are not based on systematic moral inquiry.

The group’s research on water governance, another sectoral line, aims for a better understanding of stability and change in water governance regimes, their interaction with spatial planning regimes, and how these regimes contribute to adaptive water management. Given the overexploitation of water resources and climate-induced changes in water systems, such as more frequent water scarcity and floods, knowledge of possibilities to (re)design institutions for adaptive water management is of high societal relevance.

Finally, the European spatial planning research has the ambition to contribute to a better understanding of European spatial planning and territorial cooperation, reflecting on the changing context of new EU policies and programmes. In particular, processes of Europeanisation of spatial planning systems and policies is a major interest, and the research includes a focus on the governance arrangements of transnational spaces and macro-regions.

Clearly, the work of the planning group will help to explore futures in many different ways and degrees. Writing this text for a publication from a university with a Catholic ‘signature’ gives an opportunity to refer to Augustine, the religious scholar who lived between 354-430 AD. His insights are still interesting, more than 1500 years later. Augustine wrote in his Confessions (397-401) about the issue of time and the future. He acknowledges that there are three conventional times, called past, present, and future. But, at a deeper level, he suggests changing that common sense view into three different forms of a ‘presence’. Augustine speaks about this as “praesens de praeteritis memoria, praesens de praesentibus contuitus, praesens de futuris expectatio”. In translation this means the presence of recollection, the presence of actual perceptions, and the presence of future expectations.

Our task as planners is to create such a presence of future expectations. In a positive version of the quote by Neuman & Hull (2009), if we can imagine, we will be able to manage. This new ‘line of knowledge’ will focus on the presence of future expectations and how those shape our cities, regions, or metropolitan spaces. Concretely, the idea is to establish an ‘Urban Futures Lab’ in order to analyze the developments outlined above. The ambition is to search for ‘presences of expectations’ and how they might create different futures, which give us the needed answers to the complex problems of current times. This builds on existing knowledge in various research areas, and extends it with a specific perspective on futures and future actions. Returning to the opening quotation, the contribution specific to Nijmegen will be an attempt to develop theories and practices which rely less on
closure and more on discovery, which reveal potentialities and opportunities, and which work with differences and ambiguities, in the creation of metropolitan futures.
APPENDIX 1: THE FACULTY RESEARCH PROGRAMMES TO WHICH THE DEPARTMENT HAS CONTRIBUTED

Thomas van Aquinostraat, part of the university campus. The department of spatial planning operates from building number 3 on this street.

1991

Source: Fotocollectief Regionaal Archief Nijmegen (F28626)

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1984-1988
Ruimtelijke planning en beheer: evaluatie van de Nederlandse praktijk
(An evaluation of the Dutch practice for planning and use of the physical space)

This had the following aims:
- how is planning for the development and use of the physical space in the Netherlands practised?
- how effective is this practice?
- how can the planning, decision making, and implementation be improved?

Before this programme started, there were two existing research lines: evaluation of Dutch spatial planning, and technology and spatial planning. The first was continued in the new programme, the second – technology and spatial planning – was continued for several years outside it. The new programme was worked upon mainly by members of the department of spatial planning.

1989-1993
Bewerktuiging en effecten van ruimtelijk beleid
(Instruments for spatial policy and their effects)

This had the following aims:
- to increase understanding about how spatial planning is carried out, and how it achieves its effects and what its results are;
- concentrated on policy at the local and regional level;
- to make the research of use to spatial planning policy (in particular in the municipalities and regions) by working out and making explicit the relevance of the theoretical insights for practice.

It posed questions such as:
- how does a municipality choose which type of land-use plan (bestemmingsplan) to use?
- on the basis of what knowledge and theories does a planning subject choose a particular policy?
- how does the spatial planning policy made for a higher level influence the content of policy made at a lower level?
- how can a planning subject use its knowledge of the workings of the property market in order to achieve the physical environment that it wants to see?

This programme too was worked upon mainly by members of the department of spatial planning.

1994-1995
Beleid voor de ruimtelijke inrichting en omgevingskwaliteit
(Policy for spatial development and environmental quality)

This had the following aims: to investigate theoretical and methodological issues in connection with innovations in plan making, with a view to a more integrated approach to policy
for the physical environment, with a special emphasis on new practices at the regional level.

It was a sub-programme, carried out by the department of spatial planning, of a larger research programme: Nieuwe oriëntaties op ruimte en milieu (New approaches to the use of space and the environment) carried out jointly by the three departments of spatial planning, human geography, and environmental policy. The idea for a joint programme was based on the reasoning that all three departments have a common ‘object’, namely the quality of the physical environment. That same idea led to another sub-programme, one on which all three departments worked together: Maatschappelijke vernieuwing en beleidsinnovaties rondom milieu en ruimte (Societal renewal and policy innovations concerning the use of space and the environment).

1996-2000

**Innovatief omgevingsbeleid in Europese context - PIO**
(Innovative policy for the physical environment, in the European context)

The topic of this research was the radical changes – spatial, functional and physical – in the Dutch and European physical environment and, associated with this, the institutional changes in the planning and steering of changes to this environment, or: how the physical environment is used and how it is maintained. The aim was to contribute to more effective and innovative policy processes. Research was focused around four themes:
- policy innovations in rural areas;
- the changing position of cities and city regions in border regions;
- new policy arrangements in environmental and spatial policy;
- methods for innovative policy for the physical environment.

The researchers came from the departments of spatial planning, human geography, environmental policy, and administrative sciences.

PIO was a sub-programme of the faculty research programme: Bedrijfs- en beleidsinnovatie in de Europese omgeving (Innovations in business and in policy in the European environment).


**Governance and places (GaP)**

“GaP explores and evaluates the social and environmental qualities of places, from local to global, with specific interest in questions of spatial formation and governance. Specific research topics include urban and spatial restructuring, identities and border, land policy, economic development, environmental politics, mobility, and water management. For this purpose, the research programme:
- pursues a theoretical research agenda rooted in social contractivism and policy analysis;
- undertakes cross-sectional and case-study oriented empirical research taking into account the inter-relationship between different levels of social-spatial development and spatial policy making, including the international (European) level;
- aims to make a direct contribution to spatial policy praxis and the development of new steering concepts by means of applied research, contract research, consultancy, and active participation.

This research programme was carried out by members of the departments of spatial planning, human geography, environmental policy and also of the department of public administration in the same faculty. It included several research groups, and members of the department of spatial planning worked on those for urban and regional development, for water management, for transport and spatial development, for land policy and location development, and for strategic spatial planning in a European context.

When this research programme was continued for a second four years, there were the following changes in emphasis:
- the research group on transport was able to expand its work, using external funding;
- with the appointment of Professor van der Krabben, the research group on land policy and land management expanded its work considerably;
- a Centre for Water and Society was set up by the university, to which researchers from the water management group contributed together with researchers from the Faculty of Law and the Faculty of Natural Science.

2010 – Scapes

‘Within SCAPES the focus is on the (mis)match between governance approaches on the one hand and the material/social processes in space on the other hand, at all geographical levels: from global to local. The main goal of this research theme is to improve our understanding of possible mismatches and to find appropriate, responsible and just spatial governance strategies to deal with them.

‘For example, at the European level the transnational policy integration of issues like regional development, spatial planning, transport, water management, and sustainability leads to many institutional challenges. At the local level, with respect to location development, frictions appear for instance with respect to complex settings of mixed responsibilities for public and private partners.

Three main research questions underlie the SCAPES research theme:
- why and how are places made, bordered, and identified with?
how do institutional mismatches in space manifest themselves?
what are good / alternative spatial governance strategies to deal with those mismatches?

This multi-disciplinary research programme is being worked upon by members of the departments of spatial planning, human geography, environmental policy and also of the department of public administration.
APPENDIX 2:
SUMMARIES OF THE 36 PHD THESES

PhD theses are defended in the Aula (auditorium) of the university. The first PhD theses originating from the department of spatial planning were defended in the aula pictured here. Since then, the university has built a new aula. The banner on the building is a protest against the new building.

1980

Source: Fotocollectief Regionaal Archief Nijmegen (F55185)

Reproduced by kind permission of Erik van ’t Hullenaar
Since its foundation in 1963, 37 people have been awarded their doctorates for research carried out under the tutorship of a professor of spatial planning (structural, both core and other, and special) of the department in Nijmegen. For each thesis, the name of the researcher is given, the title of the thesis, the date of examination in public, and the name(s) of the tutors. Each of those PhD theses is summarized very briefly (around 150 words) below. That summaries are ordered chronologically, and each is based on the (much longer) summary in the thesis itself. The framework set out in chapter 1 has directed the selectivity of the summary: using another framework would have led to a different summary.

Barrie Needham
Choosing the right policy instruments
4 November 1982
Bert Kruijt, Andreas Faludi (University of Amsterdam)
This is a study of the effectiveness of two different sorts of instrument which can be applied to tackle local social problems. One sort is changing or regulating the local land use (called here physical instruments), the other (financial instruments) is giving financial stimuli to activities in certain locations. It was hypothesised that a municipality would choose one or the other of these two types based on knowledge of the technical possibilities of the instrument, and on knowledge of the context within which the instrument would be applied. The assumption was that predictions would be made of how policy instruments affect the behaviour of people and organisations, when the ‘initial conditions’ were known. The empirical research was into how seven municipalities (four in England and three in the Netherlands) had actually made the choice between those two types of instrument. It was a study of local practice, but the actual effects of the instruments were not investigated.

Paul Ekkers
Toewijzers en woningzoekenden
19 October 1984
Gerrit Wissink
This is a study of how rented housing in the social sector (owned and managed by housing associations) is allocated to those who apply for it. Theoretically it takes an institutional or managerial approach, and the empirical research was carried out in Nijmegen. It is a study of urban social processes which take account of, and in turn affect, the social composition and reputation of the neighbourhoods where the housing is located. Government rules (allocation of social housing among those who are eligible for it) play an important part in those processes, but allow considerable discretion to the allocators. Moreover, there were many active connections between the allocators employed by the (independent) housing associations, and the municipality. The allocators see their task as applying general rules, within the necessary discretion, the house seekers see their position as trying to strengthen their position in the negotiations.
Henri Goverde  
*Macht over de Markerruimte*  
20 May 1987  
Gerrit Wissink  
As part of the closing of the Zuiderzee from the influence of the sea, several large areas within the new fresh-water lake were enclosed by dykes. All but one were drained and became part of the land area of the Netherlands. One area was dyked but not drained – the Markerruimte. This research was into the long decision-making process, which included many conflicts, shifting positions and changing affiliations, of which the final result was that this area remained under water. This case was considered as one example of why government policies succeed or fail. An explanation was sought by studying the changing power relations (the ‘power balance sheet’ of configuration sociology) between the many actors involved in the policy processes, and how the actors can affect that.

Irene Wilson  
*French land-use planning in the Fifth Republic*  
12 January 1988  
Gerrit Wissink  
This is a study of French land-planning, concentrating on the making of the land-use plan (plan d’occupation du sol - POS) between 1958 and 1985. In the first part of that period, land-use planning – even at the local scale – was dominated by the national government. In 1981, after 23 years of right-wing and centre-right governments, the French Socialist Party came to power: it placed more emphasis on land-use planning (urbanisme) and it decentralized the power for that. This study researched the consequences of that change for how “POS’s” were made. It concluded that decentralization was much less than might have been expected, and that the new instruments were used in a more liberal than socialist way. Those findings were explained by the technical weakness of planning departments at the level of the commune, and by the multiple functions which some of the actors fulfilled.

Myriam Jansen-Verbeke  
*Leisure, recreation, and tourism in inner cities*  
4 May 1988  
Jan Buursink  
This is a study, largely empirical, of the ‘supply’ of facilities for recreation and tourism in town centres, of the ‘demanders’ or users of these facilities – their diversity, interests and characteristics – and of those responsible for making public policy for leisure and recreation in inner cities. It was made at a time when there were doubts about the viability of such centres, and when – partly in response to this – ‘tourist-recreational plans’ (TROP’s) were being made by municipalities, individually or in groups. The research aimed to produce insights into the activity, insights which could be used for such policy.

Daan Drenth  
*De informatica-sector in Nederland, tussen rijp en groen*  
20 March 1990  
Bert Kruijt
The location of the informatics sector – both software and hardware – in the Netherlands, and recent changes in that, were studied using an existing register of businesses supplemented by a postal survey. It found in which types of location employment and production were growing, namely the bigger towns and cities. And it discovered the locational factors associated with that growth, in particular those factors which can be influenced by local governments in order to stimulate and attract that growth.

René van Hees
De ontwikkeling van een woningmarktmodel en zijn toepassing op Italië
23 April 1990
Gerrit Wissink
The housing market in Italy is described and analysed by constructing a model of it. Then, using ideas from welfare economics, four ‘failures’ are identified in how the Italian housing market works. A connection was made with government policy for housing, for building, and for land-use planning, all of which place ‘operational constraints’ on the working of the housing market. The conclusion is that government policy is not helping to eradicate the failures.

GertJan Arts
Kennis en ruimtelijk beleid
20 November 1991
Gerrit Wissink
This is a study of how knowledge is used in plan-making processes. ‘Action-oriented knowledge’ is knowledge about the ‘object’ (such as traffic, or housing) concerning a certain spatial problem, and about the way in which measures available can influence that object. That knowledge is always uncertain because it cannot be known what will happen in the phases of execution and performance. The relevant knowledge can be located within the planning agency (it is available for all), or with an individual working there. Different kinds of knowledge are distinguished, obtained in various ways; and factors which influence the way in which knowledge is used are posited. Field work in three Dutch municipalities helped to refine this theoretical framework. The practical conclusion is that planning agencies should practice 'knowledge management'.

Jos Janssen
Prijsvorming van bestaande koopwoningen
4 November 1992
Bert Kruijt
In this study, two aspects of house prices are 'explained' using statistical analysis. One is the variation in price in one geographical market at one moment in time: how can the differences in the transaction prices be explained? Hedonic price theory is translated into multi-correlation analysis, to discover which properties of the house and of the location influence the transaction price. The empirical testing was carried out in four Dutch municipalities. The second aspect is changes in house prices and in the number of dwellings sold. It is hypothesized that changes in factors such as the mortgage interest rate, changes in wages and in general prices, are important. Statistical analysis using national data
concludes that the most important determinant is an indicator of consumer confidence.

Johan de Kievit  
Handelen en ruimte  
10 February 1993  
Gerrit Wissink  
The starting point for this study is that the built environment changes as a result of joint actions between ‘social agents’ and government bodies. Three types of interaction between social agents and government bodies are distinguished: co-operation, consultation, and influence-from-a-distance. The policies of planning agencies which do not take that into account and which focus on their own actions only are likely to be ineffective. In order to avoid this, when policy is being prepared, explicit attention should be paid to how that policy could be implemented and how it will ‘perform’. Those ideas were tested by a study of the policy of the municipality of Nijmegen for the development and functioning of shopping centres.

Daniëlle Gorgels  
Hoeren, burgers en beslissers  
5 November 1993  
Gerrit Wissink  
The practical problems which this research addresses are those which arise in public spaces where there are concentrations of people with deviant behaviour: in this particular case, red-light districts. Public policy to resolve such problems often fail because it takes insufficient account of the actions of those who contribute to the problems (in this case, the prostitutes, their customers, and pimps, but also the residents in the adjacent streets). ‘Action-oriented’ policy is recommended, which requires action-oriented knowledge and an action-oriented approach. The theory is supplemented by Gidden’s structuration theory, which explains agents’ actions as a combination of motives and the social context. The recommended policy process includes more than just involving the agents: it should aim to find measures which meet, or at least do not harm, all the interests concerned. The policy process should be ‘built around’ those interests, using the differences between them to expand the room for solutions.

Marice de Lange  
Besluitvorming rond strategisch ruimtelijk beleid  
6 April 1995  
Hans Mastop, Arie Dekkers  
Strategic spatial policy is made not in order to be directly implemented by concrete interventions in the built environment (operational decisions) but to influence the decisions of government bodies which will, later, take such operational decisions. For that reason, the effectiveness of strategic policy is not appropriately measured by conformity – does the built environment change in conformity with the strategic plan? – but by how the strategic plan ‘performs’ in influencing later decisions. From this standpoint, this research develops a method for evaluating strategic policy, and applies it to the national policy for large-scale landscapes. This method includes an analysis of the
decision making after the policy has been determined, decision making which usually takes place within complex policy networks, where the policy makers can try to influence the decision making, but cannot control it. With this type of research, however, it is difficult to discover whether the strategic policy has actually ‘performed’. The conclusion is that the question whether a policy has performed cannot be conclusively answered.

Leonard van Damme, Co Verdaas
Plannen laten zich niet plannen
31 October 1996
Hans Mastop
(Note that this counts as two separate PhD theses)

In 1985, the Act and the corresponding Decree on Spatial Planning were revised in order to make it possible to make more flexible land-use plans (and thus to reduce the prevalent use of non-transparent and ad hoc exemptions given to such plans). This research is an evaluation of that law, carried out by empirical studies of how municipalities adapted their own practices to the changed law (even though there was no legal obligation to do that). The findings were that, in the first three years after the change to the law, municipalities did make use of the new possibilities, but not on a large scale; and after that period, there were no further changes. Moreover, the frequent use of the exemption procedure did not decrease. The question was then: why did municipalities largely continue their old practices? Two sorts of answer were given. One is that municipalities considered the legal change as a disruption to their usual practices, a disruption to which they adapted with as little modification as possible. The other is that municipalities operate within a network in which the other actors have expectations of each other’s behaviour: and those other actors (apart from the national government) wanted no change.

Ursula Lukassen
Fragmentatie en eenheid in ruimtelijk beleid
5 March 1999
Hans Mastop

At the regional level in the Netherlands, there are all-purpose government bodies for making spatial policy (such as provinces and municipalities), and there are also special purpose regional organisations (“furo’s”) such as for employment, water, the police, refuse disposal, which too are involved in spatial policy. This combination is called a ‘polycentric system of governance’. This can make it difficult to integrate that policy, defined here as ‘congruence between actors regarding a preferred solution to a policy decision, at a particular moment in a policy process’. This was investigated empirically in the region of Arnhem – Nijmegen, where it was found that over 100 organisations are involved in spatial planning in one way or another. The co-ordination was, it was found, not a problem, because the traditional roles were respected: the “furo’s” influenced the policy content, but the policy was determined by the government bodies. One of the reasons why this worked was that all the actors could recognize and accept the policy process and the policy content. It is concluded that such a
fragmentation in the public domain must be accepted as a reality, and does not necessarily lead to disintegration

Karel Martens
Debatteren over mobiliteit
30 March 2000
Hans Mastop
This study evaluates the policy for mobility pursued by the ministry for spatial planning. The criterion is rationality, defined as the requirement that policy can be justified in terms of a coherent system of arguments and conclusions. The mobility policies in the national spatial planning documents are analysed (concentration of activities to reduce the need to travel, locating activities near to public transport to reduce car travel) and found to be remarkably stable: but the ministry had investigated no alternative policies for achieving the same ends. Also analysed is the ABC-location policy, which aims to connect the location of activities to the amount of traffic that they generate. The empirical assumptions behind this policy are investigated and found to be weak or incorrect. The thesis concludes that spatial policy is not appropriate for trying to reduce the use of the car. Probably that can be better done by investments in traffic infrastructure.

Roelof Verhage
Local policy for housing development: European experiences
9 February 2001
Barrie Needham
This is a study of how the quality of the residential environment is influenced by the processes by which the residential area is developed. It was carried out by eight case studies of housing development: two in each of the Netherlands, England, France, (Western) Germany. The development was studied in two ways: as a policy process with various actors, each with their own goals and interests; and as an economic process. This led to a concentration on financial flows and surpluses: how much money is available for ‘quality’, and how is the division of that money determined during the development process? It is argued that the residual value of the land is, in principle, available for improving the residential environment. Whether it is or not depends on the power and interdependency relationship between the actors; and the outcome can be found by a financial analysis of the land development. The case studies concluded that in the interactions around the housing development, it was not just land ownership which influenced the outcomes, but rules and ideas also. The second conclusion was that there is indeed a ‘struggle for the surplus’ when land is developed. Practical recommendations are made for how municipalities can improve the quality of the residential environment. More generally, it is argued that public policy can be improved by institutional capacity building.

Tim Zwanikken
Ruimte als voorraad? Ruimte als variëteit!
21 September 2001
Barrie Needham
The starting point was an idea introduced in the 1990’s, namely that (geographical) space could be regarded as an environmental resource, comparable with – for example – energy or raw materials. This idea was incorporated into spatial planning in three separate discourses: that space should be used efficiently and not wastefully; that is it better to concentrate urban development in existing centres than to build on greenfield sites; a reaction against the increasing attention to the process of decision making relative to the attention for the spatial quality of the resulting development. The consequences of the three discourses for Dutch spatial planning are investigated by four case studies of (national) spatial policy issues. It was found that many of the actors involved in those processes were dissatisfied with the ways in which the discourses were being applied: they thought that seeing space as a resource did not recognize what people wanted of that space. This finding was interpreted using cultural theory, namely that people judge differently how space (land) should be used according to four ‘ways of life’. The conclusion is drawn that different preferences should have access to the policy arena, and that their ideas be incorporated in the policy design. Spatial planning should generate and incorporate variety.

Kai Böhme
Nordic echoes of European spatial planning: discursive integration in practice
9 December 2002
Andreas Faludi

This study investigates how spatial planning in five Nordic countries has reacted to the spatial planning policies of the EU. This has been by networking and formulating policy discourses: this indicates that discursive European integration is possible. Moreover, this happened in countries where the EU approach to spatial planning – reconciling planning, environmental, and regional policies – was absent. A necessary condition is that there are strong policy communities at European and national levels, and that there are strong links, both institutional and personal, between them. However, although this has led to the harmonization of planning policies, there are no signs that it will lead to a harmonisation of planning systems. It appears that creating policy networks might be an alternative to establishing formal EU competencies.

Willem Buunk
Discovering the locus of European integration
29 September 2003
Hans Mastop
The ‘locus’ of European integration refers to two things. One is the spatial dimension of European policy, in particular policy for regional development, for infrastructure networks which cover the European territory, and for improving the quality of rural areas. The concept of locus refers also to the new ways of pursuing policy, ways which in turn can contribute to European integration. Case studies are investigated in four member states of the EU, where one or more of the three EU policies with a spatial dimension (see above) are involved. The case studies focus on the
composition of the policy arena, how the policy issue is perceived, and the interactions between the various actors. It is concluded that the spatial planning approach contributes to the capacity of the actors at the different government levels to work together with common policy processes and decision making.

Froukje Boonstra
Laveren tussen regio’s en regels
12 March 2004
Barrie Needham, Henri Goverde (University of Wageningen)

In the 1990’s, a start was made with an integrated approach (multi-sectoral) to problems in rural regions, whereby solutions would be sought by implementing projects. This study analyses the experience with that new approach, by using what is called the ‘policy arrangement framework’. This has four dimensions, one relating to the substance of the policy, the other three to the organisation of the policy. For this study, this framework had to be made dynamic. This was done by studying the institutionalisation of the framework, using ideas about strategic congruency between the actors, and about structural congruency within the policy arrangement itself and between that arrangement and the (external) institutional context. Three rural / regional programmes were studied, all in the Netherlands. It was found that strategic congruency was a necessary condition for structuration in a regional policy arrangement, and that in addition structural congruency was necessary.

Jeroen Verbart
Management van ruimtelijke kwaliteit
15 April 2004
Geert Teisman

It is expected of development projects that they improve the ‘spatial quality’ of an area. Then, development strategies are desired which will achieve that. This study investigated that by focussing on one particularly big, controversial, and complex project, namely the redevelopment of the area around Utrecht central station. For that purpose, three aspects of spatial quality were identified: strengthening economic viability, improving liveability, and facilitating mobility. Spatial design concepts can be developed which should improve quality, and those concepts should be ‘anchored’ so that they will be realised. The question is posed: what redevelopment strategies should be followed to realise such quality management? The case study of Utrecht leads to the conclusions that high ambitions should be tempered by feasibility considerations; that during the process a variety of design concepts should be maintained; and that, as spatial concepts are often ‘nested’, it can be useful to alternate between the various levels.

Edwin Buitelaar
The cost of land-use decisions
30 March 2007
Barrie Needham

This is a study of the transaction costs associated with urban development. Transactions can take place with different governance structures: in this study, this refers to the user
rights regime concerning land and real estate. Sometimes it is said that the governance structure adapts so that the transaction costs are minimised. However, this takes no account of the cultural and institutional embedding of those structures. This is investigated empirically with three case studies of projects where around 100 dwelling were built: in the Netherlands, in England, and in the US (Houston). It was found that the properties of the institutional context which affected the transaction costs most were the ‘quest for control’, the relationship between public and private, the division of the transactions costs between the actors, and the legal style. The conclusions are that the actors do not always try to reduce transaction costs: moreover, high transaction costs can sometimes result in better projects.

Wouter Jacobs
Political economy of port competition
11 September 2007
Barrie Needham
This is a study of the competition between maritime harbours to attract the international transport of containers. Three concepts are used in the analysis. One is the structure of provision, which includes the physical facilities, the local institutions (rules), and the local governance structure. The second is the territorial regime, consisting of rules and governance structures which determine the economy of the country and – thus – of its harbours. The third is the global production network, which describes the international logistic chains in which the sea harbour and its related firms operate. Those three – the structure of provision, the territorial regime, the global production network – influence each other continually and evolve in interaction. Using this framework, three harbours are studied: Rotterdam, Los Angeles – Long Beach, Dubai. The conclusion is that the development of sea harbours cannot be understood without taking account of the institutions – time and place specific – within which they operate, and which can be adjusted as policy instruments

Sabine Müller-Herbers
Bescherming van de groene ruimte in Duitsland en in Nederland
21 December 2007
Andreas Faludi
The occasion for this study was the concern that protecting the ecological and landscape values of open spaces against urban expansion might be weakened by the practice of negotiations between the stakeholders in order to achieve consensus. To this end, a comparison was made between the Netherlands and Germany of how decisions about such urban expansion were made, both in general and by case studies. There is in the Netherlands a long tradition of consensus, consultation and compromise between a few central actors, and this has been complemented recently by interactive processes involving more parties. In Germany, many fewer actors are involved in the decision making, namely the municipality and the developer. In spite of that great different in decision making, the case studies showed no difference in the extent to which the interests of nature and the environment were protected. The conclusion can be
drawn that, if it is desired for social and political reasons to open to many actors the decision making about open spaces, this need not endanger those spaces.

Raffael Argioli
**Office choice behaviour and intelligent transport systems**
8 January 2008
Rob van der Heijden
Information and communication technology (ICT) can be used to develop intelligent transport systems (ITS). These are in three types: advanced driver assistance systems (ADAS), systems that provide information about travel choices (ATIS), and systems that improve the management of traffic and transport (ATMS). It can be expected that the application of such systems will affect the (relative) attraction of locations, both for households and for firms. This study is of the possible effects for office-using firms. It was carried out by surveys of such firms, asking them how they would react to the changed accessibility and mobility profiles of certain named locations. It was concluded that ITS will affect the location choices made by such firms.

Bas Waterhout
**The institutionalisation of European spatial planning**
16 July 2008
Andreas Faludi (University of Delft)
(Note that this degree was awarded by the University of Delft. It is included in the list of Nijmegen PhD because the first four years of the research were carried out in Nijmegen when Andreas Faludi was a special professor there.) This is a study of how the spatial planning of the EU became institutionalised in the period between the ESDP (1999) and the Territorial Agenda (2007). Institutional change can be deliberate (institutional design), but it often arises from informal incidents, which agents can put to their own use. Institutionalisation is recognised in three ways: whether a hegemonic discourse arises, whether the EU applies its own spatial policy in practice, whether national policies adapt to EU policies. This is researched through a study of policy documents of the EU and of the member states. It is concluded that there is no stable hegemonic discourse. There is also little evidence that EU spatial planning has much influence of physical development. On the other hand, national and regional spatial planning is influenced by EU policies and programmes, such as the ESDP, ESPON, and INTERREG.

Tilman Platz
**De efficiënte integratie van de binnenvaart in continentale intermodale vervoerketens**
25 August 2009
Rob van der Heijden
Relatively little international freight is transported on the inland waterways, and this study attempts to discover why, in order to derive measures which would increase that share. Literature study and theory building lead to hypotheses concerning each of the levels: a transport firm, the transport chain, and transport as a whole. In order to examine these
hypotheses critically, three case studies were carried out in depth. It was concluded that the following are the most important for the choice of transport mode: reducing total transport costs, reliability, and flexibility in the transport chain. Seven factors which can influence those aspects are then identified.

Margo van den Brink
Rijkswaterstaat on the horns of a dilemma
9 December 2009
Barrie Needham, Henri Goverde (University of Wageningen)

This is a study of the changing role and positioning of the Rijkswaterstaat, the policy-implementing arm of the Dutch ministry of transport, public works and water management. The history of those changes, and the dilemma to which they have led, are investigated using a discursive approach. This is based on the subjective notion of meaning and the idea that socially shared beliefs constitute reality. This approach is supplemented with insights derived from framing theories. In this way, the history of Rijkswaterstaat from its foundation in 1798 is studied, and three current projects within the programme ‘Room for the river’. Rijkswaterstaat worked for centuries within a technocracy discourse, and around 1980 transformed itself into a public-oriented government business. However, at the same time the ministry itself repositioned itself with a democracy discourse. Tensions arose in the ‘Room for the river’ projects, between a democratic governance logic and a neo-liberal logic. Recommendations are put forward for how Rijkswaterstaat should recognise and deal with other forms of knowledge than engineer’s knowledge.

Sara de Boer
Traces of change
12 January 2010
Barrie Needham, Nico Nelissen (department of public administration), Henri Goverde (University of Wageningen)

Since the beginning of the 1990’s there have been a number of significant changes in the policy for cultural heritage preservation, and this study investigates to what extent these are connected with certain social and political changes in Western society, called – for short – political modernisation. This is studied using the concept of the ‘policy arrangement’, which includes a study of political modernisation and of institutionalisation. This framework is used to study changes in cultural heritage preservation in Norway, Arizona, and the Netherlands. Those changes are analysed in the light of the political modernisation process. It is found that, although in all three countries that process has taken place and has influenced the policies, nevertheless the policies in the three countries have not converged. The specific historical, geographical, social-political and economic contexts continue to influence the content, stability, and the changes in the policy arrangements.
Krisztina Varró  
**After resurgent regions, resurgent cities?**  
5 November 2010  
Barrie Needham, Henri Goverde (University of Wageningen)

This study arises out of dissatisfaction with the Marxist ‘strategic-relational approach’ as an explanation for the rise of regions and urban areas as focus of policy, that is as an explanation for this redefining of the spatial organisation of the state. That approach cannot explain adequately recent policy changes in two neo-liberal states, Hungary and England. As an alternative, a ‘politics of space’ approach is put forward. This sees spatial re-organisation of the state as a process involving conflicts about the significance of the ‘spatiality’ of the state. The appropriate way to investigate this is with discourse theory. Case studies of Hungary (2004 – 2006) and of England (1997 – 2007) illustrate the value of this approach.

André Boisvert  
**Études comparative des pratiques d’aménagement du territoirs aux Pays-Bas et au Québec**  
20 December 2010  
Andreas Faludi

This is a comparison of the spatial planning in two very different urban regions: Montreal and the Randstad, both placed within their wider context (Montreal in the state of Quebec, the Randstad in the Netherlands). The author was active in the planning of the Montreal region, and asks why this is so different from that in the Randstad, which he prefers. In particular, why is there in the Randstad a ‘vision’ of how the area could and should develop, whereas this is absent in Montreal? He looks for the answer in the social and cultural ideas about the availability of land: in the Randstad, this is seen to be scarce, in the Montreal region as being unlimited. Nevertheless, the author thinks that spatial planning in the latter region is desirable, and could learn from the Randstad.

Vincent van der Vlies  
**Rail transport risks and urban planning**  
27 October 2011  
Rob van der Heijden

When dangerous goods are transported by rail through built-up areas, there is a risk for the safety of the residents. This creates especial problems for the decision making when it is desired to develop or re-develop near to railway lines. In the Netherlands, this decision making takes place in an institutional context which does not favour finding good solutions. In particular, nothing is regulated about who should pay for the measures to reduce the risks, not even about who is responsible for those risks. This study analysed the problems around such decision making, using Group Decision Room sessions. Then new institutional rules were proposed for better risk management, and those rules were tried out in game simulation applied to two practical cases which had deadlocked – in Roosendaal and in Dordrecht. The players, all in reality involved in those cases, concluded that the new rules would improve the decision making and lower the risks.
Demetrio Muñoz Gielen
Capturing value increase in urban redevelopment
22 November 2010
Barrie Needham
The question which this study attempts to answer is: if there is land in the urban area which is to be redeveloped, and if this is owned privately, how can the value increase which results from changing the land-use designation be captured in order to finance public infrastructure and other facilities? The answer for the Netherlands is sought in new legal rules. A general model is made of the development process, focusing on how the ‘initial profit’ (the value increase) arises, and on how this is divided between the parties so that a ‘final profit’ remains which can be used for public facilities. The model is used to identify the variables which can be influenced by new legal rules. This leads to a focus on modifying the rights of land owners, and on changing the certainty which plans give and the flexibility with which plans can be used. It was hypothesised that such rules affect the amount of value capturing. This was then investigated by studies of financial flows in four case studies in Valencia, three in England, and four in the Netherlands: they were chosen after a quick scan of nine countries in Western Europe. The results are used to make recommendations for improving value capturing in the Netherlands.

Femke Verwest
Demographic decline and local government strategies
14 September 2011
Barrie Needham
After decades of demographic growth (number of people, of households, of working population), some Dutch regions are experiencing demographic decline, and this is expected to continue and to spread to more regions. Municipal policies have been based on demographic growth and on the expectation that this will continue. The study asks: how are the municipalities in the declining regions adapting to the new circumstances? The conceptual framework is taken from a modified version of the policy arrangement approach. In this way, it is a study of institutional dynamics. It is hypothesised that change, also the type and size of change, is determined by the changes in the dimensions of the policy arrangement, and the extent to which those cause ‘incongruencies’ within the policy arrangement. These hypotheses are tested and refined by investigating local policies for housing and for the economy in three declining Dutch regions.

Esther Geuting
Marktstructurering als ruimtelijkeordeningsinstrueme
14 December 2011
Barrie Needham
One of the postulates of New Institutional Economics (NIE) is that the way in which property rights are delineated (in this case, rights in land) can affect the market outcomes (in this case, way in which land is used). The aim of land-use planning is to achieve a desired land use. It follows that changing the property rights in land might be an alternative, or a supplementary or complementary way, to the customary way in which land-use planning is practised, namely by using
public law (statutory) instruments. This is the object of this study. Changing the delineation of property rights for this purpose is called ‘market structuring in planning’. That can be done directly, by changes to laws regulating the use of property rights, or indirectly, by other legal changes which lead to property rights being used differently. This is investigated as a possible way of solving three topical problems with housing development in the Netherlands. Four hypotheses are developed and then tested by three gaming simulations, each designed to investigate the effects of a legal change which has been proposed to the property rights regime for housing development.

Ricardo Núñez
Urban land management in Cuba
26 March 2012
Barrie Needham

This study explores and analyses urban land management in Cuba since the Revolution in 1959. After that revolution, mechanisms for urban land management were introduced – delineation of property rights, planning laws, public organisations, also valuation methods – to achieve the provision of urban functions and which gave priority to equity over economic efficiency. This has resulted in many big and urgent problems in cities. Some of those can be explained as the result of insufficient attention for the allocative efficiency with which land is used. This is illustrated by a study of the ‘permuta’, an informal housing market by which households swap dwellings. Econometric analyses are carried out on two data sets: one links state property valuations to the characteristics of the properties, the other links the exchange prices when dwellings are swapped to the characteristics of those dwelling. This shows that there are objective factors which systematically influence prices and values. This suggests that paying more attention to prices and to the factors which influence them would increase the allocative efficiency with which land is used. This could be done in ways which would not harm the realisation of other social and political goals.

Kjell-Erik Bugge
Restructuring industrial sites more quickly
29 January 2013
Barrie Needham

It is a problem in the Netherlands that many industrial sites are old and need to be restructured, but that the restructuring takes a very long time. This study puts forward a method for speeding up the restructuring without loss of quality. Restructuring is seen as a complex, multi-actor process, so a theoretical investigation is made of such processes. For this the ‘institutional analysis and development’ framework of Ostrom is chosen and developed so as to adapt it to restructuring industrial sites. The viewpoint is that of the planning agency which attempts to construct a decision-making process and to manage it. The planning agency can be helped to do this, in a way which speeds up the process, by an appropriate decision-support model: this model was derived from the theoretical investigation. The model was tested and operationalized in five separate and independent focus group sessions. The
recommendation is made that policy makers should shift the emphasis from what can be done directly (in particular, financial and organisational measures) to how such measures can be selected and implemented.
APPENDIX 3
THE RESEARCH RESULTS (PUBLICATIONS) 1962 – 2013

The library on the first floor of the Town Hall
1978
Source: Fotocollectief Regionaal Archief Nijmegen (F31260)
Ache, P. (2013) Metropolen zijn de toekomst; wat is de toekomst van de metropool? Inaugural lecture delivered at the University of Nijmegen, 12 June 2013


Arts, G.J. (1994) Kennis en ruimtelijk beleid, Zeist: Kerskebosch


Boisvert, A. (2010) Études comparative des pratiques d’aménagement du territoirs aux Pays-Bas et au Québec, PhD thesis University of Nijmegen, defended on 20 December 2010


Brink, M. van den (2009) Rijkswaterstaat on the horns of a dilemma, Delft: Eburon

Brink, M. van den, T. Metze, eds. (2006). *Words matter in policy and planning: discourse theory and method in the social sciences* Utrecht: KNAG/NETHUR


Buitelaar, E., B. Needham (2007a) Property rights and private initiatives (eds.), *Special issue: Town Planning Review*, nr.78/1


Damme, L. van, J. Mastop, J. Verdaas, P. van Gompel (1993) Bestemmingsplannen als instrument van beleidsvoering, research commissioned by the Ministry of Spatial planning, Housing and Environmental policy (VROM)

Damme, L. van, J. Mastop, T. Mineur, J. Verdaas (1992) Bestemmingsplannen als instrument van beleidsvoering. Research commissioned by the Ministry of Spatial planning, Housing and Environmental policy (VROM)

Damme, L. van, M. Galle, M. Pen-Soetermeer, J. Verdaas (1997) Improving the performance of local land-use plans, in Environment and Planning B, nr.24/6, 833-844


Dekker, A., H. Goverde, T. Markowski, M. Ptaszynska-Woloczkowicz (1992) Conflict in urban development: a comparison between East and West Europe, Aldershot: Ashgate


Drenth, D., B. van Schijndel, P. Voet (1998) Mobilopolis: de actieve fietsstad, research commissioned by the IVVS


Duin, J. van, L. Tavasszy, E. Taniguchi (2007) Real time simulation of auctioning and re-scheduling processes in hybrid freight markets. Transportation Research part B: Methodological, 41(9), 1050-1066


Evers, E., B. Ben-zadok, A. Faludi (2000) The Netherlands and Florida: two growth management strategies, in International Planning Studies, nr.5/1, 7-23

Faludi, A. (1999a) Patterns of doctrinal development, in Journal of Planning Education and Research, nr. 18, 333-344

Faludi, A. (1999b) De architectuur van de Europese ruimtelijke ontwikkelingspolitiek, inaugural lecture delivered at the University of Nijmegen, 22 January 1999


Faludi, A. (2001) The application of the European Spatial Development Perspective: evidence from the North West Metropolitan Area, in European Planning Studies nr. 9, 667-679


Faludi, A. (2002b) Positioning European spatial planning, in European Planning Studies, nr.10/7, 899-911
Hartmann, T., B. Needham, eds. (2012) *Planning by law and property rights reconsidered*, Farnham: Ashgate
Hees, I. van (1990) *De ontwikkeling van een woningmarktmodel en zijn toepassing op Italië*, PhD thesis University of Nijmegen, defended on 23 April 1990

Hees, I. van (1991) *The Italian housing market its failures and their causes*, in *Urban Studies* nr. 28/1, 15-39

Heijden, R. van der (2002) *Ruimte delen, processen maken*, inaugural lecture delivered at the University of Nijmegen, 4 October 2002


Houtum, H., A. Lagendijk (2001) *Contextualising regional identity and imagination in the construction of new policy configurations for polycentric urban regions, the cases of the Ruhr area and the Basque Country*, in *Urban Studies*, nr. 38/4, 743-764

Huitema, D., B. Needham (1998) *Instrumenten voor omgevingsbeleid*, research commissioned by the Province of Flevoland


Jansen-Verbeke, M. (1985a) Inner city leisure resources, in Leisure Studies nr.4

Jansen-Verbeke, M. (1985b) De toeristische-recreatieve functie van de binnenstad: een nieuw aandachtsveld in het gemeentelijke beleid, in Recreatie, nr. 3


Kam, G. de (2003) Op grond van betekenis: over maatschappelijk ondernemen met grond en locaties, inaugural lecture delivered at the University of Nijmegen, 28 March 2003

Kam, G. de (2006) De waarde van hybriditeit – over de positie van woningcorporaties, in het bijzonder bij gebiedsontwikkeling. Bouwrecht, 43(8), 709-716


Kam, G. de, B. Needham (2000) Land for social housing, Hilversum: Comité Européen de Coordination de l’Habitat Social (90 p.) also published in a French version (Des terrains pour le logement social) and a German version (Grundstücke für die sozialen Wohnungsbau)


Kam, G. de, I. van der Brug (2012) Bouwgrond voor de volkshuisvesting: 10 jaar corporatiebeleid en een blik op de toekomst, Almere: Nesta Communicatie


Kooij, H., K. van Assche, A. Lagendijk (2013) Open concepts as crystallization points and enables of discursive configuration: The case of the innovation campus in the Netherlands. *European Planning Studies*, iFirst article, 1-17


Lagendijk, A. (1999a) Regional cluster policy in a global economy: from market competition to institutional anchoring: the cases of the North-east of England and Aragon, in *European Planning Studies*, nr. 7/6, 775-792

Lagendijk, A. (1999b) The emergence of knowledge oriented forms of regional policy in Europe, in *Journal of Economic and Social Geography*, nr. 90/1, 110-116

Lagendijk, A. (2001a) Regional learning between variation and convergence: the concept of 'mixed land use' in regional spatial planning in the Netherlands, in *Canadian Journal Regional Science*, nr.24/1, 81-100

Lagendijk, A. (2001b) Three stories about regional salience: 'regional worlds, 'political mobilisation', performativity', in *Zeitschrift für Wirtschaftsgeographie*, nr.45/3-3, 139-158

Lagendijk, A. (2002) Beyond the regional lifeworld against the global systemworld: towards a relational-scalar perspective on spatial-economic development, in *Geografiska Annaler*, nr.84 B/2, 77-92


Lagendijk, A., B. Needham (2012) The short lifespan of the Netherlands Institute for Spatial Research: on the framing practices of a think tank for spatial development and planning, in *Regional Studies*, nr.46/4, 475-491


mushrooming of a transport concept. Planning Theory (in press)


Linden, G. (1985a) Computer cartografie als hulpmiddel bij de ruimtelijke ordening op lokaal niveau, in Kartografisch Tijdschrift, januari

Linden, G. (1985b) Ruimtelijke planningsysteem voor tracé-locatie, in Landschap, december


Lu, M., K. Wevers, R. van der Heijden (2005a) Technical feasibility of advanced driver assistance systems (ADAS) for road traffic safety. Transportation Planning and Technology, 28(3), 167-187


Martens, C (2013). "The role of the bicycle in limiting transport poverty in the Netherlands." *Transportation Research Record: Journal of the Transportation Research Board*


Mastop J., M. Steenstraten, E. van der Krabben, B, Needham (1990) *Ruimtelijke regelgeving in Noord-west Europe nader bekeken*, research commissioned by the National Spatial Planning Agency (RPD)


Mastop, J. (1993) *Het aardige van plannen*, inaugural lecture delivered at the University of Nijmegen, 17 September 1993


Mastop, J., A. Faludi, B. Needham (1997) Performance in strategic planning, Special Issue *Environment and Planning B, nr.24/6*
Mastop, J., H. Goverde, R. Verhage, T. Zwanikken (1996) Ervaringen met restrictief beleid: doorwerking van het restrictief beleid uit de Vinex op provinciaal niveau, research commissioned by the National Spatial Planning Agency (RPD)

Mastop, J., L. van Damme (1997) Integratie als opgave: overwegingen bij geïntegreerd omgevingsbeleid, research commissioned by the Ministry of Housing, Spatial planning and Environmental policy

Mastop, J., P. Leroy, H. Goverde, H. van Geest (1993) Gebiedsgericht milieubeleid belicht: beschouwing over de gebiedsgerichte benadering in het milieubeleid, research commissioned by the Ministry of Spatial planning, Housing and Environmental policy (VROM)


Meijerink, S., S. Stiller (2013) What kind of leadership do we need for climate adaptation? A framework for analyzing leadership functions and tasks in climate change adaptation. Environment and Planning C. 31(2)


Muller, N., B. Needham, eds.(1989) Ruimtelijk handelen: meewerken aan de ruimtelijke ontwikkeling, Zeist: Kerckebosch


Muñoz-Gielen, D. (2010) Capturing value increase in urban redevelopment, a study of how the economic value increase in urban redevelopment can be used to finance the necessary public infrastructure and other facilities. Leiden: Sidestone Press

Naelten, M. van (1985) Achtergronden van de computercartografie in Vlaanderen, in *Kartografisch Tijdschrift*, nr. 2


Needham, B. (1995) *De gronden van ons bestaan: ruimtelijk beleid voor een klein, dichtbevolkt land*, inaugural lecture delivered at the University of Nijmegen 24 March 1995


Needham, B. (2000b) Spatial planning as a design discipline: a paradigm for Western Europe, in *Environment and Planning B: Planning and Design*, vol.27, pp. 437-453


Needham, B. (2007a) *De Nederlandse ruimtelijke ordening gewikt en gewogen*. Valedictory lecture, delivered at the University of Nijmegen 31 May 2007


Needham, B., G. Hoekveld (2013) The European Union as an ethical community and what this means for spatial planning, European Planning Studies, nr.???


Needham, B., R. Lee (1994) The public regulation of property supply and its effects on private prices, risks and returns, in Journal of Property Research, nr.11, 199-213

Needham, B., R. Verhage (1998a) The effects of land policy: quantity as well as quality is important, in Urban Studies, nr. 35/1, 25-44

Needham, B., R. Verhage (1998b) Housing and land in Israel and the Netherlands: a comparison of policies and the consequences for the access to housing, in Town Planning Review nr. 99/4, 397-423


Runhaar, H., R. van der Heijden, B. Kuipers (2002b) Hoe flexibel is de transportsector? *Tijdschrift Vervoerswetenschap*, nr.38/2, 28-32


Salet, W., A. Faludi, eds. (2000) *The revival of strategic planning*, Amsterdam: Royal Netherlands Academy of Arts and Sciences


Teisman, G. (1997) *Sturen via creatieve concurrentie: een innovatie-planologisch perspectief op ruimtelijke investeringsprocessen*, inaugural lecture delivered at the University of Nijmegen, 7 November 1997


Verhage, R., B. Needham (1998) Negotiating about the residential environment: it is not only money that matters, in *Urban Studies*, 34(12), 2053-2068


Vlies, V. van der (2011) *Rail transport risks and urban planning solving deadlock situations between urban planning and rail transport of hazardous materials in the Netherlands*, PhD thesis University of Nijmegen, defended on 27 October 2011


Wisserhof, J. (1995) Enhancing research utilization for integrated water management, in *Water Science and Technology* nr.31/8, 511-319


Witsen, J. (1991) *Ambities van ruimtelijk beleid*, inaugural lecture delivered at the University of Nijmegen, 2 October 1991


Zwanikken, T., W. Korthals-Altes, A. Faludi, B. Needham (1994) *Evaluatie Vino-Vinex: verstedelijking, de stand van zaken*, research commissioned by the Ministry of
Housing, Spatial planning and Environmental policy (VROM)

Literature referred to in the text, and written outside the department of spatial planning, Nijmegen

Barrett, S.M., C. Fudge (1981) Policy and action, essays on the implementation of policy London: Methuen
Hoekveld, G. (1986) De relatie tussen planologie en toegepaste regionale geografie, Rooilijn, nr.3
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