

A TREE ON YOUR DOORSTEP, A FOREST IN YOUR MIND



Greenspace planning at the interplay between discourse,
physical conditions, and practice **Ann Van Herzele**

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between discourse, physical conditions, and practice

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INTRODUCTION

Urban greenspace - from the tree in the street to the forest in the urban fringe - is typically linked with a multiplicity of physical and social aspects of urban life. It is therefore one of those issues in which so many different players have a shared interest. Where public parks and other accessible open spaces in the city really 'work', they are at the centre of people's lives: where they meet, walk, play and enjoy nature. However, whether or not these spaces are specifically set aside for public enjoyment, their existence, design and maintenance rests largely on professional practices.

The idea of planning as an administrative, technical, and creative task of individuals, who make in their offices the plans for the environment 'out there', is increasingly being abandoned. The contributions that attractive greenspace can make to localities and more broadly, to the quality of life in cities, is now seen as dependent upon greater engagement than at present between on the one hand those who inhabit city halls, the 'map-world' of planners, and the public they serve on the other. Contemporary practices tend to be more open to a wider variety of inputs. There is now the aim to listen to multiple voices, to draw upon and make widely available a broad range of knowledge and viewpoints.

But this celebration of diversity is not going unchallenged. In practice, to define a given situation, to design a solution to a certain problem, and thereby to determine the direction of action, it is first of all a struggle to have one's view accepted. This, in turn, may lead to the dominance of particular forms of knowledge, ways of reasoning and understanding, while other forms remain underrepresented or undervalued. In this context, lay knowledge, values and skills are not always regarded as equally valid with the more systematised and rationally grounded expert knowledge. In consequence, while some ideas receive great attention, other ideas may pass relatively unnoticed.

Clearly, urban greenspace is not a univocal issue. It can be perceived in many different ways: just a space 'out there', an 'urban forest', a 'green structure', a refuge of wildlife, a place of shared history and identity. In this thesis my particular focus is on the diversity of knowledge, images and understanding, which are used to justify decisions and actions on the ground. To this end, the research was not limited to the platforms of discussion, which help participants to express themselves from their own perspective, but also paid

attention to what happens beyond these arenas. In particular, it was the aim to contextualise the creation and use of that knowledge, and those images and ideas socially, politically and historically.

After having ‘set the scene’, in the next paragraphs of this Introduction, I shall concentrate on the views and insights derived from planning theory generally - including my personal understanding of these - that have shaped the focus of this thesis as well as its methodological approach. Finally, I will present a brief overview of the research undertaken within the framework of this thesis.

Planning as a relational process

‘Discourse shapes our sense of the future through the public negotiation of imagined futures. Expectations are subject to argumentation, and on the basis of those constantly contested meanings we decide whether or not to act. Unable to imagine a better future, we become debilitated. Able to envision improvement and success, we undertake new endeavours.’ (Beauregard, 1995: 61)

This thesis starts from the general recognition that planning is a future-oriented activity: planning is all about thinking and acting now, with the intention of ‘making a difference’ to the value of spaces and places in future. The future then, is shaped by the interplay between both the imaginative and the interpretive work involved in planning, the former leading to ideas and concepts, the latter to policy texts and plans. Greenspace planning, which is the planning field concentrated on here, refers to collective efforts both to ‘re-imagine’ a neighbourhood, a landscape in the urban periphery or another area in the city, and to translate those images and ideas into organisational and political decisions: priorities for land acquisition, nature conservation measures, land-use plans and regulations, design sketches, and, finally, the planting of trees.

In the field of (greenspace) planning, the trajectory from images, ideas and concepts to actual implementation on the ground is usually covering a long time span, and rather than following a one-directional linear sequence, it is likely to develop through a complex series of shorter idea-action chains. For example, ideas emerging from oral discussion become translated into policy texts and plans, which in turn, give rise to or influence new discussions, providing guidance on whether and how to act. The experience of those actions and their effect (whether intended or not) will subsequently influence what is discussed, what new ideas arise, and so on. The processes of creating knowledge and ideas, and of putting those ideas into effect, are thus in continual interaction.

Planning practice cannot be separated from the world around, of course, in particular the social-historical circumstances in which both concepts and ideas (discourses) and physical conditions are produced and acted upon. In this respect, different spaces and places have different potentials and limitations, because of their specific physical features, social relations, local histories, and so on. On the one hand, the context of the situation (for example, the outlay of a park, its proximity to a particular neighbourhood

and its apparent social life) sets the boundaries within which planning processes develop: who might be involved, what can be imagined and actually achieved, and so forth. On the other hand, planning has the capacity to challenge and change these situational contexts.

From the theoretical perspective of space as simultaneously a material reality and a cultural sphere of symbolic valorisation (Richardson and Jensen, 2003), what should be recognised as qualities of spaces and places are thus fundamentally unstable, heterogeneous and impossible to generalise. The environment has no fixed meaning but rather a variety of meanings attributed to it through representation. As such, meanings become a contested domain, as the same site may be read and represented very differently both over time and by different actors (Hillier, 2002: 148).

Such recognition is in line with the now widely accepted social constructionist conception that rejects the idea that such qualities exist objectively, to be found by analysis from certain intellectual positions.¹ Instead constructionists draw attention to the social processes that are involved in the development of knowledge, images and understanding. Representations of a particular place or situation then, are 'social constructs' (or versions of reality) which reflect the interests, values and ideals of those who generate and use these constructs for giving meaning to environmental realities in a particular social context.

The powers of representation

'Analysts must recognize clearly that what gets done depends heavily on what gets said, and how it is said, and to whom.' (Forester, 1989: 23)

Whether ideas can 'take root' in decision-making or not, will often be a matter of representation. As versions of reality are likely to be diverse (depending on the person's stake in a place or role in the planning process, for example), this also implies that single, unbiased representations are impossible, and may even conflict with each other sometimes. Local people who are potentially affected by a particular plan are likely to have a different understanding of the situation than outside experts. If plan proposals ignore local knowledge and realities, they may even be perceived as the outside interventions of arrogant experts (Irwin, 1995), or - as illustrated by Wynne (1992) - may come to threaten people's social identity.

Studies of professional planners have concluded that they are in general a fairly homogeneous group who share a common planning culture, ideology, and self-image (e.g., Healey, 1985; Hubbard, 1994; Kaufman, 2000). More specifically, planners' way of looking at a particular situation is likely to be shaped by their professional education and training, and the experience of their jobs (Campbell and Marshall, 2000b). This means that selectivity is always present:

'The lenses through which practitioners see the world are not so much distorting screens - no experience is immediate and pure - as they are filters that allow only certain aspects of reality to pass.' (Fischler, 1995: 19)

By formulating a problem, planners as key actors have some powers to shape debates and to direct public attention to issues that they see as important. As Graham and Healey (1999) - referring to Rob Shields (1995: 245) - suggest: 'When planners analyse the 'city', their depictions, descriptions, plans, and images are *themselves* partial perspectives, chosen through 'treacherous selective vision', which in turn, become embroiled in the social production of the 'urban'.' Discursive and depicted representations highlight certain aspects of spaces and places whilst inevitably neglecting others. As such, practical 'performances' not only give meaning but they are also implicitly acts of power, in that they attempt to govern what sort of actions are to be carried out and what are not (Forester, 1999; Hillier, 2002; Richardson and Jensen, 2003). The ways in which imagination can link meaning to action (Beauregard, 1995) such as a powerful representation, thus necessarily offers planning practice both empowering and persuasive potential at the same time.

In their day-to-day practices, planners not only need to persuade others of the merits of plans and policies, but they must also negotiate with articulate and powerful economic groups (companies, developers, and so forth), as well as political representatives, whose conceptions might be of great influence and often come to dominate. Clearly, selectivity in representation is not only characteristic of professional planners working for the state or its subordinate authorities². This is well documented in the social movement literature, which describes the deliberative ways in which movement activists seek to construct and use particular 'frames' or representations so as to recruit new movement participants, to 'turn the heads' of participants in order to see issues in a certain way, to promote their ideas to a wider public, to draw support from governmental actors, and ultimately, to have an impact on the effective pursuit of political action.

More generally, and in the context of professional planning practice, Leonie Sandercock (1998: 179-180) drew attention to the complementary as well as antagonistic relationship between the powers of state-directed planning practices, and those of the social mobilisation in civil society: the local, the grassroots, the 'insurgent' (She talks about 'transformative' and 'repressive' powers on both sides, which as such form a kind of mirror images). In order to deal with this tension, or more importantly, to take advantage of its productive potential in creating new possibilities and innovative solutions, planners must link together a variety of understandings, as well as relate their knowledge and expertise to those of other players in the process.³ But this 'link-making work' can be undertaken in many ways. Patsy Healey (1997) in her celebrated book 'Collaborative Planning' advocates a socially inclusive approach that aims to build understanding across culturally-different groups in society and which needs to pay careful attention to the communicative practices through which trust and understanding can develop.

The centrality of communication in planning

'Debates, which on the surface appear to be about urbanisation or resource management, are actually much more complex, and are about identities and meanings, values and powers: about politics.' (Hillier, 2002: 157)

What planning does in terms of motivating a particular action by including certain aspects of reality and disregarding others, relates to John Forester's conception of planning as 'shaping attention'. Forester regards planning as a mode of intervention that is based on speech acts, on listening and questioning, and learning how, through dialogue, to 'shape attention', not only on the facts at hand, but also on why those facts matter. In this sense, Forester sees planning less as an individual's search for a solution through considering alternatives than as a means of 'making sense together' in practical conversations.

It was fundamentally the observation that planning is, above all, an interactive, communicative activity that has led to the emergence of the so-called 'argumentative' or 'communicative' wave in policy and planning theory.⁴ This intellectual movement seeks to overturn objectivist and instrumental notions of reason and action. As John Dryzek (1993) explained, the essence of judgment and decision becomes not the automatic application of rules or algorithms but a process of deliberation, which weighs beliefs, principles, and actions under conditions of multiple frames for the interpretation and evaluation of the world. These theories thus build on the recognition that planning is actually embedded in a world of social relations, and in effect they abandon the idea of planning as a task of individuals working in isolation, relying strictly on their professional expertise to do what is best for 'the public'. The communicative planning tradition concentrates instead on the social processes through which ways of thinking and acting are actively constructed (Healey, 1997).

The question of who might take part in such a communicative process is, however, still a contentious issue. Traditionally, public planning takes place in the institutional setting of public agencies or consultancy firms working for them. Despite increasing attention being given currently to means of organisation such as platforms and rules for discussion⁵ whereby people are given a voice, the core of planners' practical conversation appears still to happen between the four walls of their offices. Therefore, it is to be expected that colleagues, superiors, allied administrators, and even politicians, are more present in such conversations than the ordinary citizen (van Woerkum, 2002).

Even when planners are open to relevant inputs from the public, these can become selected through and translated into their disciplinary discourses. For example, a public discussion is often categorised and reduced to a limited number of 'points' or a 'list of users' needs' that fits into the planner's familiar analytical framework. While this ensures planners with the security of facts over the messiness of underlying motivations and expectations, it also separates meanings from the social interactions that created them.

Planning is about making claims, but this is not just about 'interests' or 'preferences' that can be easily detected with managerial techniques of consensus building and public inquiry. People make claims not only to pursue interests, but also to express identities (Forester, 1998: 224). If planners aim to widen their partial perspective on reality, by connecting this to the ways in which people are experiencing and valuing the environment in everyday life, they need to go beyond the identification of interests and preferences and attempt to discover 'why' people come to make their claims. Attention should be paid not only to the ways in which issues are discussed, but also to the substantive issues in question, as well as to the cultural identities that influence people's ways of giving meaning, value and expression.

New conceptions of place, space-time, and the city

'The contemporary emphasis on the local, while it enhances certain kind of sensitivities, totally erases others and thereby truncates rather than emancipates the field of political engagement and action. While we may all have some 'place' (or 'places') in the order of things, we can never be purely 'local' beings, no matter how hard we try.' (Harvey, 1996: 353)

To see planning as a communicative practice is to attend closely to its day-to-day workings: how problems are identified, represented and acted upon in a complex world of multiple social relations, within which it is increasingly difficult to distinguish between the economic, the political and the social. To see planning as a relational process also brings with it an understanding that the 'here' and 'now' must be placed in multiple relationships of time and space. In attempting to capture the fundamental multi-relational and interactive dynamics involved in the planning process, contemporary planning theorists have started to create new concepts of place, space-time and the city. In this context it is asserted that planners must recognise the existence of many time-space geographies within cities and places (Graham and Healey, 1999; Richardson and Jensen, 2003). For example, rather than maintaining an object-centred view of spaces as areas with boundaries within which events occur, spaces should be seen as shaped through social interactions within and between places.

According to Graham and Healey (1999), 'containered' and objectified views of cities unfortunately have become deeply embedded in the routines of practice and the thought-worlds of the planning professionals, as well as in the policy 'communities' which cluster around the practice of planning systems. In their day-to-day practices planners continue to produce singular cartographic images out of all the multiplicity of relationships in the city, and as Harvey (1996: 284) suggests, such representational exercises suppress differences and establish homogeneity.

But how can planners - in association with citizens and city governance - translate those emerging relational perspectives to the conceptualisations of space and place in practice? There is now a growing recognition that there is a continual need for planners to broaden their understanding of the 'fluid and conflictual, deeply political and always surprising

world they are in' (Forester, 1999: 26), and to stimulate consideration of how they could possibly work differently and more effectively (Hillier, 2002). At the same time, however, it is being realised increasingly that such an understanding cannot be reached on the basis of theory alone.

Towards a methodological approach: the need for reflection on practice

Rather than seeing (the often complained about) 'gap' between theory and practice as a problem of inappropriate communicative circulation or link-making, it could be questioned whether existing theory is itself sufficiently instructive to give satisfactory insight into the possibilities of planning practice, to guide progress more towards people- or place-responsive approaches. This is the basis of what has been called the emerging 'practice movement' within planning theory (Innes, 1995; Liggett, 1996; Yiftachel, 1999; Watson, 2002).

This identifiable approach to the theorising of planning assumes that empirical accounts of planning practice can help to build a more useful and pragmatic kind of planning theory than the generalised procedural or normative models that previously constituted planning theory, and that they have an educational role to play in relation to practising planners and training (Watson, 2002). The approach is characterised by the study of individual planners and planning practice: the documentation and analysis of the many and varied activities of planners, their products, their interactions, and their impact. In short, the notion of 'learning from practice in order to improve practice' is most evident in this thinking (Liggett, 1996, cited in Watson, 2002).

As Jean Hillier (2002: 82) reminds us, practical 'rationality' depends far less on regulations and formulae than on a practical understanding of the specifics of a situation, the ability to unpack its complex messiness and to react appropriately. Donald Schön has elaborated this idea in his book 'The Reflective Practitioner' (1983). He shows in great detail that in order to meet the challenges of their work, professionals rely less on abstract and decontextualised rules than on a kind of 'reflective transfer' in their own practice: from past experience they construct an understanding appropriate to the new situation. Schön and Rein (1994: 193) build further on this idea and argue that policy researchers should seek firstly to understand policy practice, not with the aim to draw from it rules of effective policy making, but to describe and explain the kinds of inquiry in which policy makers engage.⁶

A number of planning theorists have turned to interpretive methods, in order to understand what planners do, and to ascertain what collective decision-making or the application of knowledge into action means in concrete terms (Fischler, 1995). Many of them are within the communicative planning tradition and focus broadly on processes of communication and knowledge production in planning. They seek to uncover the meanings, values and motives that lie below the surface of planning conversation (for example, John Forester, Judith Innes and David Booher). Others follow a more

Foucauldian tradition. Bent Flyvbjerg, for example, was concerned with the tactics and strategies of power and attempted to contextualise planning historically, using genealogical approaches. Another perspective was followed by Leonie Sandercock, who focused attention on the critical role of mobilised communities in putting pressure on politicians, which in turn redirected the work of planning staff.

The valuable contribution of such a variety of perspectives and approaches is that planners are forced to see themselves from the outside, or, to quote Patsy Healey (2003): 'to realise that what we thought was natural are in fact highly particular and socially learned modes of thought and behaviour that have accumulated over time'. By taking a critical stance, possibilities may be opened to question and reinterpretation, and established views and organising routines may be transformed.

This thesis has taken a focus on planning practices. The aim was to return to these practices and to adopt those methodological approaches that might lead to some form of understanding, which in turn can be of help to practising planners. In this way, research functions not as a distraction from practice but as a development of it (Schön, 1983: ix). Fulfilling the learning potential of 'practice writing' requires practices to be documented in particular ways. According to research methodologist Robert Yin (1994: 1), case studies are the preferred research method when 'how' or 'why' questions are being posed, when the investigator has little control over events and when the focus is on a contemporary phenomenon within some real-life context. When case studies take the form of fully contextualised stories of planning practice they have the potential to provide instructive precedent, and to be of great value when we want to understand how did the practices that we can observe come about. For example, when such inquiry focuses on history as sequences of actual events, it may address the development of professional modes of thinking and acting, or practices of analysis and action that have been developed to address particular problems, and how particular planners operate within and against these practices (Watson, 2002).

Outline of the thesis

Part I presents an empirical study aimed at explaining how a forest sector-based discourse could gain prominence in current land-use debates and even come to produce a new set of spatial practices for shaping the rural-urban interface. To this end, the focus was on the genealogy of discourse-actor relationships over the past decades, including the 'translation' of discourse into various (non)-discursive forms. The study draws attention to the powers of 'organising' ways of representation, in particular an appealing 'story line'. It was questioned what makes a story line effective (or not) in carrying forward its strategic idea along the various trajectories from concepts and ideas to actual implementation that are constitutive of a long-term policy process.

Intermezzo I is concerned with the issue of factual evidence and normative prescription as it is used in policy rhetoric and practice. Firstly, the argumentative strategies to purchase

legitimacy for a desired course of action are discussed, in this case the expansion of the forest cover. Next, it is demonstrated that normative prescription as it is being used in the context of local planning has both constraining and enabling effects. Finally, as an introduction to Part II, this *Intermezzo* describes the criteria-driven approach in environmental planning in Flanders.

Part II presents the Greenspace Monitoring Tool as an integrated indicator designed to monitor the urban greenspace provision in cities against quantitative and qualitative targets. Greenspace provision was linked to the concept of urban quality of life via five guiding principles: ‘*Citizen based*’; ‘*Functional levels*’; ‘*Preconditions for use*’; ‘*Variety of qualities*’; ‘*Multiple use*’. The indicator was made operational in a Geographical Information Systems (GIS)-based working procedure, and applied in six cities and towns in Flanders: Antwerp, Ghent, Aalst, Kortrijk, Brughes and Leuven. It was demonstrated that not only can the GIS-based applications provide a powerful tool for analysis and representation, but they can also play an integral part in the dynamics of planning itself: this is to explore spatial datasets in an on-going process, playing with multiple interpretations of the data, rather than representing stable, known information.

Intermezzo II continues with reflecting on the revival of quantitative norms in greenspace planning and the role of GIS in it. Next, it points to the limitations of the geographical approach in dealing with the perceptual qualities of greenspace provision. Finally, as an introduction to Part III, attention is drawn to the need to involve those people who actually use the urban ‘green’ in exploring the special qualities and characteristics that planning should support.

Part III presents an empirical study, which examines the value of local knowledge in the creative phase of planning practice. It uses the case study of an urban renewal project in Antwerp to explore the ways that workshop participants made sense of the planning situation. Analysis of the ‘talks’ identified shared interpretive ‘frames’ employed by the lay participants. The article goes on to discuss how distinctive these were from the professionals’ perspectives and what the consequences were for the material outcomes of the planning process. It was concluded that the public input was used to making adjustments to planning solutions, rather than formulating new interpretations of the planning situation itself.

The *Postscript* first reflects on the research approach undertaken in this thesis. Then it sums up the conclusions from the empirical studies. Finally, it ends with introducing some directions for new research.

PART I

A forest for each city and town: story lines in the policy debate for urban forests in Flanders*

Introduction

An influential discourse on spatial policy in Flanders (the northern autonomous region of Belgium) over the last decade concerns the creation of forests near cities and towns. Large-scale forests are seen as the best strategy for providing urban dwellers with greenspace for recreation, for sustaining a variety of ecological functions and as an instrument that could limit urban sprawl. Unlike cities, for example, in Eastern and Central Europe where communal woodlands have a long tradition as popular recreational assets, the ‘city forest’ or ‘urban forest’ in Flanders is a somewhat rational concept not rooted in any socio-cultural traditions and until recently was largely unknown.⁷ What is interesting about this emerging discourse, is that it has gone along with a shift in direction in forest policy and has recently come to create the conditions for a new set of spatial practices that shape the rural-urban interface.

Whereas in Flanders the 1970s and 1980s have seen a struggle against deforestation, defending the forest largely unsuccessfully against development proposals, an increasingly offensive attitude was adopted during the 1990s. This was reflected in a series of policy documents, aimed at expanding the Flemish forest cover and in which the creation of forests near towns and cities was presented as a consistent and clear priority. The perceived need to create new forests was implemented in the Structure Plan for Flanders (1997). Backed by this formal recognition in spatial policy, the forest administration is currently taking an active role in the negotiation of afforestation proposals within the process of delineating urban areas.

* The manuscript of Part I was submitted to Urban Studies, and currently is in the process of revision.

Since urban forest projects generally require considerable amounts of agricultural land to be turned into forest, farmers and their organisations are proving to be tough opponents of such plans. It was realised, moreover, that the urban population at large was not actively demanding new forests.⁸ Nevertheless, the urban forest idea has come to motivate an ever-widening circle of public sector actors and environmental groups, who were not previously involved in forestry. Urban forests are currently 'shooting up like mushrooms' on planners' drawing boards and, in parallel, the means to enable the acquisition of land, afforestation and management are being created.

Given these initial observations, the purpose of this paper is to explain how a particular discourse, having its origins in a relatively small group in a defensive position, could gain prominence in current land use debates. In addressing this question, one could easily interpret the above observations in terms of a 'causal' schema of events: for example, that an increasingly active group set up a new discourse - stressing the importance of urban forests - which shaped the understandings of a range of actors in key positions so as to regulate institutional practices (regulations on afforestation targets, particular instruments, etc.) and subsequent material activities (e.g. the acquisition of land and the planting of trees). This sort of logic, however, tends to miss a great deal of what may be really be at stake behind the fiction of rational decision-making, as it overlooks the 'relational' forces at work (Harvey, 1996).

The empirical study presented in this paper takes a relational approach, emphasising the genealogy of discourse-actor relationships in their changing contexts. To this end, it draws on the concept of 'story lines' as understood by Maarten Hajer (1995), complemented by laying special emphasis on the 'translation' of discourse into a variety of discursive and non-discursive realities (Harvey, 1996; Iedema, 2001). A conceptual framework for analysis is presented in the next sections. The paper then moves on to the empirical study. The first two parts present an 'institutional genealogy' of forest discourse in Flanders and illustrate how a particular 'story line' emerged from this discourse which provided credibility and authority to the need for the creation of urban forests. In the last part of the analysis, the example of the 'Ghent Park Forest' is used to explore what happens to urban forest discourse when it comes to interfere with different actors in a concrete planning situation. In the conclusion, what particularly makes a story line effective (or not) in securing its strategic idea over time, is discussed.

The role of discourse in restructuring policy rhetoric

Public policy and planning have widely come to be seen as processes of argumentation, communication and interpretation, rather than the automatic application of universalising rules and prescribed formulae (Forester, 1989; Dryzek, 1990; Sager, 1994; Healey, 1997; Hillier, 2002). This recognition, which is part of an important transformation in social and political theory since the 1970s, has enforced a methodological emphasis on the use of language as seen from a social constructivist viewpoint. Language then, is not only a means through which actors describe the world,

but an integral part of reality, a communicative practice, which influences the perception of interests and preference (Hajer, 1995: 59). In the context of policy-making, this means that issues are discursively raised, related and combined in specific ways so that they become recognised as more, or less important 'policy problems'.

The constitutive view of language is widely endorsed within a wide range of discourse-theoretical traditions, ranging from those emphasising inter-personal interaction and argumentation (for example, Potter and Wetherell, 1987; Billig, 1987) to those tending towards the role of 'discourse' in the public context, such as policy controversies and political change (Schön and Rein, 1994; Hajer, 1995). Whatever the approach adopted, language or discourse cannot be treated in isolation from the non-discursive aspects of social life, or from those producing discourses (Harvey, 1996). Maarten Hajer (1995: 44), in defining discourse, gives emphasis both to the content of what is said and the relationship with the social practices in which it is produced:

'Discourse is here defined as a specific ensemble of ideas, concepts and categorisations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities.'

As discourses are embedded in social practices they will vary, for example, between different disciplines of practice. In the public arena of spatial decision-making - where various disciplines are usually acting together - different discourses are likely to coexist and compete with one other, and participants in debate will typically draw their arguments from more than one discourse at a time.

Rather than embracing a particular discourse in its overall complexity, participants seek the common ground over and above complex disciplinary debates. Hajer (1995: 63) points to the functional role of narratives or a 'story line' in facilitating the reduction of the discursive complexity of a problem and creating possibilities for problem closure. Overall, story lines are an important organising concept in the constitution of consensual meaning in debate as it hints at the mechanisms of creating, maintaining, or transforming discursive order. Hajer (p. 56) defines a story line as follows:

'A story-line, as I interpret it, is a generative sort of narrative that allows actors to draw upon various discursive categories to give meaning to specific physical or social phenomena. The key function of story lines is that they suggest unity in the bewildering variety of separate discursive component parts of a problem.'

In its organising role, a story line seeks to represent a particular combination of the discursive elements brought under attention, which implies that using one element carries with it implicit connotations for the story line as a whole (Wagner, 1990, cited in Hajer, 1995). According to Schön and Rein (1994: 16), setting a problem by means of a 'policy story' involves a complementary process:

'Each story constructs its view of social reality through a complementary process of naming and

framing. Things are selected for attention and named in such a way as to fit the frame constructed for the situation.'

Policy stories and the frames they contain select and direct attention to some aspects of a situation (at the expense of others) and at the same time they restructure a situation so that one can validly say that the story fits the situation. In so doing, they represent a particular conceptualisation of reality in a way that it becomes taken-for-granted. Such stories typically make the 'normative leap' from data to recommendations or from 'is' to 'ought', in such a way as to make it seem graceful, compelling and even obvious (Schön and Rein, 1994: 26). From an argumentative point of view, the power of story lines is essentially based on the idea that they 'sound right' (Potter and Wetherell, 1987; Hajer, 1995).

Furthermore, a story line's coherent and selective representation of the issues under discussion is characterised by a certain degree of 'salience'. As a causal story, it gives meaning to previously singular and unrelated events (Hajer, 1995: 64); this role corresponds with the concept of a 'media frame', defined by Gamson and Modigliani (1987: 143):

'... a central organizing idea or story line that provides meaning to an unfolding strip of events... The frame suggests what the controversy is about, the essence of the issue.'

Media frames shape everyday reality by turning unnoted happenings into a discernable event. Similarly, story lines give rise to new policy claims by indicating their significance. They function as a kind of performative by producing an effect on the audience addressed (alarming, persuading, ascribing roles, and so on) and ultimately making their underlying discourse accepted.

The role of discourse in transforming policy practice

Structured ways of representation have a significant power-effect, since they evoke particular ways of seeing and understanding, and subsequently enable new types of actions to be thought about. Political change may well take place, therefore, through the emergence of new story lines that re-order understandings (Hajer, 1995: 56). However, transforming policy discourses, so as to have an effect on action, does not only need the restructure of policy rhetoric, as Healey (1999: 28) puts it:

'Apparently successful efforts in the transformation of policy rhetoric may fail to transform policy practices because either the rhetoric does not reach the routines of practice or the changes leave contradictory deeper cultural assumptions in place.'

This touches on the degree of penetration of policy discourse into the wider sphere of social action. Story lines play an important role in the pursuit of strategic action, as they create space for the formation of new alliances of actors from different backgrounds, organised around a particular discourse. From this perspective, story lines are:

'... the discursive cement that create communicative networks among actors with different or at best overlapping perceptions and understandings.' (Hajer, 1995: 63)

This tendency to mobilise actors facilitates the dissemination of a policy discourse into the institutional worlds of the 'members' of such a network or alliance. Actors who became engaged will use their positions to persuade others to interpret and act on situations according to their institutional insights.

A distinctive starting point to discourse-practice interaction was provided by David Harvey (1996: 77-95), who positions the role, capacities and powers of discourse in the 'flow of social processes', which he conceptualises as six fundamental 'moments': *discourse, power, imaginary* (thought, fantasy and desire), *institution building, material practices* and *social relations*. Harvey's relational approach was directed towards the internal heterogeneity of discourses themselves, rather than between discourses. By conceiving social processes as flows through and around those distinctive moments, he highlights not only the tensions between those moments, but also the 'internalisation' of those effects. In other words, each moment is constituted as an internal relation of the others and thus internalises the effects of those others. The moment of discourse, for example, expresses human thought, is institutionally based, materially constrained and a manifestation of social and power relationships.

As discourses interact with other 'moments' in the social sphere, those internalisations that might facilitate or constrain the move to real effects or action should be analysed. In the context of this paper, it is questioned then how a particular story line, by its very performance, may facilitate that institutional rules, modes of social relating, material practices and ways of looking, successfully internalise much of a given policy discourse, in order to give it a more durable basis, authority and even hegemony in a given domain.

Discourses themselves are not immune to being transformed or translated. As new actors agglomerate around a story line, they may contribute new discursive elements, which may inject new meanings into a policy discourse. On the other hand, as Harvey (1996: 81) puts it:

'Discourses may become so widely accepted and reified, that they themselves become part of a landscape of knowledge seemingly impermeable to change.'

A conceptual framework for analysis

The emphasis of this paper is on the potential of the 'story line' concept in facilitating the constitutive role of discourse both in restructuring policy rhetoric and transforming policy practice. Special attention is paid to the makers of the story line and to those who play a role in bringing it into 'good currency'. In this context, the term of story line 'sponsorship' is further used.⁹

A conceptual framework for analysis was made, presenting a selection of key organising forces at work in the dynamics of both creating sponsorships and story lines (see Figure 1):

- A particular story line is produced through which actors seek to transmit their viewpoints to the audience addressed. Through shaping attention the story line may convince others of the significance of a particular policy claim, enable them to position themselves as supportive or the reverse, and may ultimately mobilise new sponsors around the story line.
- The extended group of story line sponsors is reproducing the story line and its underlying discourse, eventually bringing about discursive change or even translating discourse into non-discursive forms. New meaning may occur through such a transformation as well as through recontextualisation of the situation over time.

The analysis took a genealogical approach, which means that in tracing back the development of discourse over time, the interest was less with presenting a full picture of this process; it aimed instead to highlight the influence of discourse-actor relationships as they were evolving from the first ideas to the implementation into spatial practices. To this end, the framework was used as a lens through which to read and to observe.

The study draws on multiple data. The historical parts of the analysis (the roots of forest discourse and the emergence of the story line) are based on policy papers and articles written over the last 30 years. The case study part (the Park Forest Ghent project) uses articles in newspapers, study reports, protocols of meetings, exchange of letters, recorded debate of semi-public and public events.¹⁰ It was the purpose to identify the ‘organising’ ideas, which permeated the documents and discussions, how these ideas evolved and changed, and how they were brought into play, disseminated and ‘translated’ into various discursive and non-discursive modes. Accuracy of interpretation was sought through repeated reading, listening, and crosschecking between data. The analysis was complemented with short interviews to gain additional information on specific

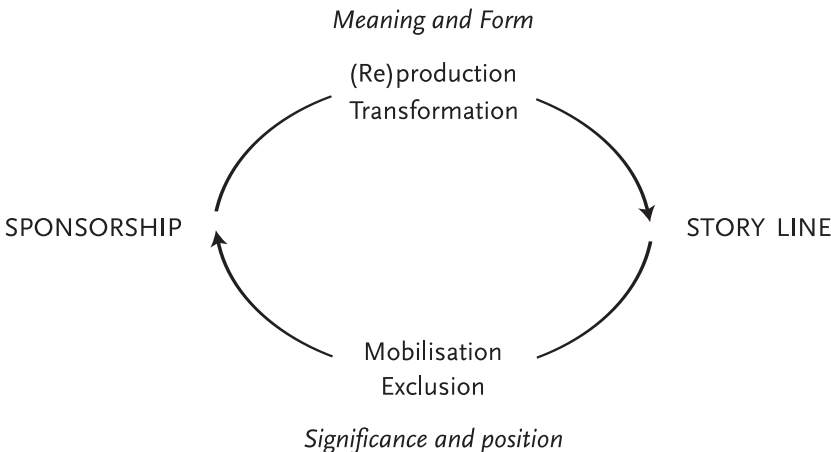


Figure 1: Key forces at work in the dynamics of story line and sponsorship creation

Roots of forest discourse in Flanders

While policy discourse on the creation of urban forests was established in the 1990s, its emergence stems from the wider institutional and professional debate on forestry since the early 1970s. At that time, open space in Flanders was increasingly under the threat of urbanisation and its effects. Despite protective measures by the state, such as the acquisition of forests in some instances, inappropriate and weak legislation constrained public authorities from taking effective action in many other cases (Van Miegroet, Van Herzele, and Dua, 1982). However, that period also showed that the state could not be considered solely as a forest-protecting institution. In various instances, the state or its subordinate authorities have also taken on the role of an initiator (or at least of a favourable party in political bargaining with developers) in forest-destructive projects such as golf courses, recreation and amusement parks, all in the name of the 'public interest'. That this could all happen cannot be explained by urban pressure alone, but points to a more fundamental failure at the political level to appreciate the wider importance of forests to society. The first section of this historical part deals with this problem in greater detail. Next, the forest sector's first efforts to give rise to their policy claims are outlined. The last sections engage in the ideas and concepts that underly much of subsequent forest expansion discourse.

The Flemish forest misunderstood

As in other western European countries during the post-Second World War period, forest policy in Belgium was directed by a predominantly economic-oriented discourse, emphasising productivity and cost-effectiveness. This has had effects on the forest itself: forest conversions (including the reduction of tree species) for yielding a fast economic return were common. Professor Van Miegroet, who has been of great influence on forestry thought in Flanders, appealed to the *'Verprimitivisering des Waldbaus'* (1971: 7). What is often overlooked, however, is the disruptive effect this has had on discourses, which had developed during earlier periods. There is evidence that in the nineteenth century a multi-functionality discourse *'avant-la-lettre'* was in the making in institutional, political and professional milieus of that time. For example, Tack, Van Den Brempt, and Hermey (1993: 61) found documents from the early 1900s, which reveal that there was an initial public concern and even a tentative start was made on policies to include the social and aesthetic values of forests in close proximity to cities¹². Furthermore, nature-oriented approaches to forest management were gradually taking root within the forestry profession, inspired by enlightened foresters in France, Germany, and Switzerland (Van Miegroet, 1994: 256-57).

In short, it seems that between 1914 and 1970, with the damage caused by the world wars and the rise of economic rationality in forest policy, not only had the forest passed through a crisis, but with it an awakening forest discourse tending to a multi-functional orientation. Van Miegroet has reflected on this period with regret:

'Despite deforestations in 1914-18 and 1940-45, the decline of forest cover is not the major problem, rather the break-off with the forestry tradition and the new orientation of forest policy.' (Van Miegroet, 1994: 187)

There was thus not only a fundamental failure to appreciate the forest, but forestry as well. The narrow conceptualisation of forest and forestry also touches on the identity of the forester as a professional, which involves issues such as the loss of traditional knowledge and the reducing of their role to a producer of timber.¹³

Another problem was that forest policy at that time was a nationally regulated matter, leading to a problematic imbalance of attention on policy issues, which was mainly directed to the Walloon part of Belgium. This was also reflected in an unfavourable distribution of resources for Flanders¹⁴ and was even more visible in the national forestry administration, which was spoken of as 'a French speaking bastion'. The problem of forests and forestry in Flanders was experienced as much as a political and cultural matter, and the forester's identity as being intertwined with Flemish emancipation.

In this context, a first attempt was made to create a story line for forest expansion. The organising idea was the imbalance of forest cover in Belgium as it was caused by the lack of any positive forest policy for Flanders in comparison to the Walloon part of Belgium. This 'reforestation' story starts with the history of deforestation in Flanders since 1846, contrasted with the afforestation policy in Wallonia over the same period¹⁵, and then makes the normative leap:

'The conclusion goes without saying: no reason exists indeed for not immediately counteracting the situation and, to set as a final objective the level of 1846 in East- (+ 9,000 ha) and West-Flanders (+ 20,000ha); this within a period of 20 years or less.' (Van Miegroet, 1971)

So this story line not only provided meaning to what happened in the past. It also helped envision a desired future.

First struggles for attention on forest policy

In 1970 - in the context of the European year of nature conservation - a handful of progressive foresters, dismayed at the unfavourable situation, founded the 'Flemish Forestry Association' (FFA). Its aims were presented as three key messages: forest conservation, forest expansion and multi-functionality. Every opportunity was used to alert decision-makers to the forest situation in Flanders. The forest was widely promoted with campaigns such as 'Plant-a-Tree', 'Week of the Forest', 'A Forest for your Municipality', which were all covered extensively by the media. Much was achieved during the 1970s and 1980s. The strong demand for the regionalisation of forestry matters gradually turned into reality: a Flemish forest administration was established, the need to open up the state forests for recreation was accepted and increased budgets were set aside for forest acquisition and recreational equipment. The concept of 'multi-

functional forestry' was secured as a central basic principle in the new Forest Decree of 1990. It can be concluded that a small circle of foresters and their views have actually succeeded in attracting policy attention, challenging and even initiating some important changes in established institutional rules.

The term 'small' is significant here. Successes were largely based on the charisma of individuals and their relations with others located in key political and administrative decision-making positions, as well as in the media. This was a weak foundation for a more broadly and substantially based support. While campaigning has undoubtedly contributed in increasing the general awareness of forest and nature related issues, the FFA remained a rather unknown organisation, unable to succeed in raising its number of members above a few hundreds. Moreover, its active members were forestry academics and students at the Ghent University, together with high-ranking officials in the forest administration. Hence, the image of the organisation was one of a 'tribe of experts'.

In the same period ecologists began to set themselves up as leaders of the nature conservation movement. The public's awareness of environmental issues was growing, as was the demand for the protection of endangered species and their natural habitats. Institutionalisation followed rapidly with the establishment of a separate administration for 'Nature' (1980), and later on, the Institute of Nature Conservation (1985).¹⁶ The subsequent division of forest and nature institutions has fuelled controversies between sectors and, more particularly, has positioned foresters and ecologists at opposite ends from one other in an arena of competition. A particular factor of controversy was that institutional discourse and practice within the nature conservation sector were strongly influenced by the Dutch example. Attention was directed primarily to 'open' types of vegetation and less to woodland sites. The more radical viewpoints about what nature actually is and what it should look like, also led to endless discussions with the forestry sector, for example, whether or not the Scots pine should be considered as an 'exotic' tree species in Flanders. The views of the nature sector were perceived as hostile, both to the forest and the foresters.¹⁷ Nevertheless, nature sector-based views have been powerful in policy debates with regard to the future of open space in Flanders and have gained a foothold in legislation and land use planning.¹⁸ The fact that their message quickly came to attract greater policy attention became a new source of aggrievement to foresters. For example, Professor Lust, the FFA's Chairman (1971-1993) reflected on the 1980s:

'While the FFA was struggling for its survival, it saw the big nature conservation movement flash by. It was very frustrating... We always felt as the little brother in negotiations...' (in: 'De Boskrant', January 2001)

A recurring frustration has been the lack of appreciation of forestry in the emerging concepts on nature. For example, there was extreme indignation over nature conservation's claims for authority over the design of the 'Main Green Structure Plan' for Flanders'. Once more foresters in Flanders felt misunderstood:

'The poor understanding that the forester can find for his insights and viewpoints is frustrating. The

essence of what a forest actually is, which purposes it may serve and how an important role it fulfils in preserving and restoring the ecological equilibrium: this is going to be missed by many law- and decision-makers.' (Van Miegroet, in: 'De Boskrant', July 1989)

What has constrained forest discourse from gaining a wider appeal? In the next sections closer attention is paid to two concepts that have greatly defined and directed forest policy discourse in Flanders. In this context, it is notable that between 1973 and 1988 a series of Greenspace Strategy conferences was held, dealing with topics of concern for the future of open space. They have been a stimulating platform for discussion and for the mobilisation of actors around particular concepts and ideas that are still influential today. In addition, they have induced a strategic way of thinking, which was unfamiliar to most academics and public officials before then.

The close-to-nature forest

In the academic circle at the Ghent University, a particular forest model was promoted, following principles of 'close-to-nature forestry', as it has been applied in Switzerland, Germany and Slovenia for more than a century¹⁹, and more in particular, the concept of '*naturnähe Waltwirtschaft*'. The basic idea was to use the natural processes in primeval forests as a prime source of inspiration in making management decisions. This view was presented during the 1980 Greenspace Strategy conference:

'The ultimate objective of ecologically sound forestry is to preserving a cyclic stability at the maturity stage, which sustains a relatively rich tree-species composition, a high productivity and functional variety. The accomplishment of ecological stability is the major task of forestry.' (Lust, 1980)

The precondition of 'ecological stability' was seen in practical terms as the achievement of a relatively balanced character of forest structure and composition. This implies that much attention should be given to preserving 'forest climate' and soil productivity. As a logical result, forests and forestry may fulfil multiple functions to society (wood production, environmental protection, recreation, etc.). Furthermore, the overall approach adopts a kind of reasoning over an unlimited period of time, at least corresponding with the lifetime of trees.

The close-to-nature forestry model has actively shaped and favoured an idealised image, representing the forest as a large-scale entity under permanent tree cover, of various ages, high, in a mature (or 'climax') stage of development, with closed canopy and closed-off from external disturbances, and, importantly, under the professional control of the forester²⁰. This picture has been powerful in professional discourse, as, in effect, it has established a measure by which management practices were judged and deemed to conform (or not). For example, it has actively dismissed as 'artificial' previously widely adopted silvicultural systems such as clear-felling forests and even traditional coppice and wood-pasture systems. The model has consequently influenced subsequent approaches in the creation of new forests: the strong preference for large unfragmented

entities, and the use of rapidly growing ‘pioneer’ tree species in a first phase with the purpose of rapidly achieving a ‘real forest climate’, favouring the growth of more demanding species.

For a long time the strongly tree-oriented vision has closed off alternative emphases (e.g. biodiversity, historical ecology) introduced by scientists outside the forestry sector. For example, an article by the ecologist Hermy, provoked considerable opposition in the Flemish forestry world, as it promoted revolutionary ideas (for then) on forest management. The emphasis was on the creation of valuable habitats for biodiversity, for example, particular gradients (in forest edges and gaps), including practices such as coppicing and cattle grazing and, even leaving forests to free for development. Bearing in mind the forestry sector’s attachment to traditional approaches in forestry, it was not surprising that this concept was contested:

‘The management vision as described by Hermy, based on mainly Dutch literature, is undisputably valuable and worthy of encouragement. However, in many respects it widely differs from the normal forestry approach, which is generally characterised by its very broad objective. Moreover, it is surprising that this so-called forest management frequently uses very artificial methods and mainly directs its attention to entirely artificial situations, ... It is highly questionable to what extent it takes consideration of particular socio-economic problems, which apply to the whole of society, and, accordingly, whether it fits for general application...’ (Lust, 1980).

It was expected that biodiversity-oriented approaches would be unable to solve ‘socio-economic problems’ such as forest recreation and wood consumption. They were considered as very expensive to society and only acceptable in small areas of scientific importance. The prevailing forest discourse gave credence and authority not only to a particular forest model and related practices but, what is more, to ‘the forester’ as the only professional qualified for the forest management task:

‘Under no circumstances, forest management may be consigned to persons, who have a one-sided approach to the forest, who are not familiar with the forestry methods and who do not know the international forestry world.’ (Van Miegroet, in: ‘De Boskrant’, July 1989)

The idealistic and possibly paternalistic conceptualisation of the forest and its functions does not only suggest a strong relationship between the forester’s identity and the forest. By positioning the forester’s professionalism at the centre of forest management, the circle of those taking part in the discourse became extremely limited. Moreover, the exclusive effect was clearly felt by those who were left out:

‘In those times, for being allowed to put in a word about the forest one ought to be an agricultural engineer in forestry studies and preferably graduated at the Ghent University too.’ (Hermy, pers. comm. 2004)

The multi-functional forest

The concept of 'multiple-use silviculture' as it was developed in the U.S.²¹, has been rapidly adopted by Dutch, Flemish and German foresters (Van Miegroet, 1971). In Flanders, it was particularly the narrowly production-oriented forest policy of that time that had fuelled a counter-discourse as a consequence, given greater prominence to environmental and social aspects of forestry. The broadening view was also in line with the increasing demand for outdoor recreation. However, forest recreation has been so far no tradition in Flanders, as the majority of the forests were not accessible to the general public. This was partly due to the high proportion (80%) of private ownership but also because most of the state and other publicly owned forests were closed to the public.

On the one hand, the emerging ideas of 'social forestry' led to discussions among foresters about the relative importance of wood production, hunting, recreation, and on the nature of public access required (for example, whether a zoning of these activities should be planned). It was particularly the philosophy of care and respect - related to the close-to-nature forest concept - that led to ambivalent feelings. Throughout the Greenspace Strategy conferences, foresters positioned themselves as protectors of the 'forest patrimony', the forest being represented as a 'living entity' or 'complex ecosystem'.²² While forest recreation 'should be accepted where unavoidable' it was spoken of in terms of 'guiding away visitors' and 'damage limitation', which sometimes led to radical standpoints over acceptable and inappropriate behaviours. In particular horse riding was seen as 'the greatest plague of the forest' (Lust and Van Miegroet, 1977). To state foresters the recreation function was regarded as a leap in the dark as to the effects of public access on the forest. Moreover, and importantly, their professional world, which for a long time had been as closed as the forest, was also going to be opened up to the public.

On the other hand, it became rapidly clear that the concept of multi-functionality held potentials for strategic positioning. It was used during the first Greenspace Strategy conferences (1974 and 1977) by agronomists and foresters in their remarkably comparable attempts to draw attention to the importance of farmland or forest: for coping with a scarcity of resources and in the pursuit of self-sufficiency (in food or timber respectively), the air-purifying function (of crops or trees), the preservation of soil productivity (by permanent forest cover or fertilisation), and, for making provision for outdoor recreation in face of increasing societal demands.

The forest sector, however, took a step further when arguing that the fulfillment of all these functions is the logical result of the forest's physical existence, more particularly its ecological stability (Lust, 1980). This idea, which strategically combined the concepts of the close-to-nature forest with the multi-functional forest was further elaborated in the creation of the forest expansion story line presented at the 1988 Greenspace Strategy conference. The next part of the analysis outlines the narrative structure of this story line, the effects on the institutionalisation of forest policy discourse, and the emergence of an 'urban' variant of the story line.

The emergence of the urban forest story line

The multi-functional forest in terms of space and authority

The integration of different land uses in the planning of open space was the theme of the final Greenspace Strategy conference (1988). The forestry sector complained that as a result of the mono-functional approach adopted in the planning system, forests were divided into various designations (forestry, nature conservation, recreation, etc.), according to their 'supposed' main function. The fact that forests were even included in non-open space designations (residential, industrial) has subsequently brought about considerable deforestation (over 6,000 ha between 1990 and 2000). During the conference this problem was anticipated extensively; moreover, the related point that the forest should be regarded as a distinctive planning entity²³ was focused on:

'From a forestry viewpoint, the forest is primarily characterised by its physical form (and thus not by its use). This means that the term 'forest' always refers to a particular surface area, which as a result of its occupation by a plant association within which trees and/or ligneous plants are dominating, ... This definition implies two intrinsic features of the forest, namely, that the forest is always being linked with a spatial impact and that this space may automatically fulfil a range of potential functions, ...' (Dua, 1988)²⁴

Advocating 'multi-functionality' does not necessarily imply a readiness to share either space or authority with other sectors. The above largely forest-based interpretation of multi-functionality - namely that the forest needs to be perceived as a physical entity, out of which its multiple functions logically follow - tends to position the forest sector (with 'centuries-old experience in forest usage') as the fulfiller of those functions. Rather than a general concern to encourage the multi-functional use of the open space, this understanding of multi-functionality is concerned with the valorisation of the intrinsic multi-functionality of the forest itself. It was argued that planning, by starting from sectorially assigned functions, was completely ignoring the fundamental and intrinsic multi-functionality of the forest, and, what is more, that it gave no satisfactory answer to forestry: its spatial position and relation to other sectors remained unclear and its specificity would be lost.

Once more, the loss of identity remained a major concern underlying the discourse. Forestry was regarded as being in a disadvantageous position in actual land use policies: 'By taking a multi-functional approach its demands are being weakened, its distinct features inadequately stressed, and consequently more ready to be discarded' (Dua, 1988). This statement explicitly touches on the strategic implications of discourse.

The forest expansion story line

Strategic positioning was at the centre of the overall conference, not just because of its very theme, but also because of its timing ahead of important changes in the planning

system. Whereas in the previous conferences the term ‘multi-functionality’ had been used in several sectoral discussion groups, this time it was regarded as the cornerstone of the forest sector’s demands. A ‘forest expansion’ discussion group was formed with ten foresters (mostly active FFA members). They presented their spatial claims in the format of a text (Muys et al., 1988), the first in a series of documents on forest policy that signalled a clear strategy for forest expansion. In their deliberately constructed argument, a clear attempt was made to create an appealing ‘story line’, which is captured in the following passages:

- 1) It is a well-known fact that the Flemish forest cover has reached a marginal level (8,5%), which is, moreover, extremely low compared with other European countries:...;
- 2) This is in contrast to the exceptional importance of forests as they fulfil a multiplicity of functions (ecological, social, economic), which are each beneficial to society, because... ;
- 3) As a result of the limited forest cover (1) these potentially beneficial functions (2) have reached a minimal level;
- 4) In order to fulfil all these functions (2), a 30% forest cover would be necessary. Yet for recreation only (1 ha per 100 inhabitants) 55,000 ha accessible forest are required, while there are only 21,000 ha available;
- 5) In reality the actual deficiency (4) is even more serious, because the existing forests are unevenly spread over Flanders and often much too small for appropriate function-fulfilment;
- 6) Taking into account the diverse needs (4) and realities (5), the forest cover should be expanded by 50% by 2050 (1,000 ha each year);
- 7) Considering the current realities (5), new forests should be preferentially located where there is an acute shortage (the provinces of East- and West-Flanders) and especially in the periphery of large agglomerations as the need is actually urgent there.

The core of the story line is that starting from the forest’s intrinsic multi-functionality, an estimate is made of how much space is lacking in order to enable forestry to valorise this multi-functionality appropriately. This organising idea holds together a whole machinery of facts and arguments: estimates of shortage in wood supply, listing of environmental benefits, etc. Altogether these arguments were meant to justify and motivate the very idea of forest expansion.

However, the strength of the story line was not so much in the plausibility of its arguments. The particular framing of multi-functionality in relation to space creates a representation of the forest as a norm on its own terms and subsequently, forest expansion as the most logic decision. Therefore, the fact that arguments were not always well-founded, and sometimes even confusing or contradictory is of less relevance here.

Nevertheless, it was recognised that the idea of forest expansion might not seem that logical to others and, moreover, that it was a controversial topic. This pointed to the need for a ‘general change of mentality’:

'Government, agricultural organisations, as well as the whole population should be informed about the advantages or let's just say the necessity of forest expansion.' (Muys et al., 1988)

It is important to remember that the desire for forest expansion - although stated in the name of the whole forestry sector - was expressed by only a small circle of forestry academics, together with a handful of officials in the forest administration. In this context, the above statement touches on the very importance of a successful story line in imposing a particular view of appropriate action on others.

First steps in offensive forest policy

Notwithstanding that the idea of forest expansion had been circulating since the early 1970s - it was (and still is) one of the objectives of the FFA - it was hardly ever put into operation in institutional organisation or in material practice. Tree planting and promotional campaigns were successful regarding media attention and people involved, although the actual gain in terms of hectares was low and largely limited to waste land. On the other hand, great expectations with regard to the set-aside of farmlands have never been met. Moreover, the afforestation of farmland was counteracted by the agricultural sector, for example, in dossiers of individual requests.

It was together with the emergence of the forest expansion story line that a clear shift was made towards an increasingly offensive forest policy. Throughout the 1990s the story line was used continuously in forest policy documents to advance the cause of forest expansion, a prime example being the 'Long-Term Forestry Plan' (AMINAL, 1993). This document was produced by the Flemish forest administration with the support of a consultancy firm and the Forestry Department of the Ghent University.

The Plan's problem-setting and story line were basically the same as those proposed during the Green Strategy conferences, but they were placed in the wider context of the emerging sustainability discourse following the UN Earth Summit in 1992. For example, the Flemish forest situation was related to the responsibility of the industrial countries for the decline of the world's forest cover.

In order to inform the Plan's forest expansion programme, maps of Flanders were made showing the priority areas for afforestation from the perspective of different function combinations. From this exercise it became evident that afforestation in and near urban areas would sustain many forest functions and thus produce the most societal gain (Van Haeren, pers. comm. 2004). The new concept (within Flanders) of 'urban forest' was introduced, which fitted perfectly within the existing forest expansion story line, so that, in fact, a distinct 'urban variant' was created. However, apart from the precondition of a large-scale surface area - a minimum of 100 ha and preferably 500 ha - the concept was not defined specifically.

Despite its legal base of the Forest Decree (1990), the Plan has never been formally approved. Nevertheless, as both a strategy and a 'scientific study' it has had much influence and, in particular the story line, is still referred to. The urban forest concept rapidly became used in forest policy, which made a clear shift to more action-oriented approaches. For example, in 1994 the Flemish forestry administration launched a first 'urban forest project' in Kortrijk co-ordinated by the FFA.

Institutionalisation of forest expansion discourse

The demand for forest expansion was strongly endorsed in the run-up to the Spatial Structure Plan for Flanders (SSF), which aimed at providing a clear strategy and a frame of reference for future spatial development in Flanders until 2007. With the Long Term Forestry Plan, the forestry sector could position itself as a well-prepared and convincing partner in the negotiation process.²⁵ In 1997, a forest expansion target of 10,000 ha was included in regional spatial policy with the formal approval of the SSF. The Flemish government was given the task of designating the areas for forest expansion in the regional land use plans. The SSF further stipulated:

'The realisation of the ecologically sound forest expansion should be principally linked up with existing forests, acting as buffers, in the function of nature development, or in the vicinity of urban areas (for example, peri-urban forests in sparsely forested areas).'

For the first time, the forest sector's concern with forest expansion was discursively translated into a legal document. However, this was more to do with the quantification of hectares than with its underlying discourse. It was the SSF's major objective to counteract the continuous pressure on the open space by promoting a concentration of development in cities.²⁶ To this end, it employed a distinct 'open space' story line in which nature, forest and agricultural areas were given a 'structuring' function. The basic idea was to make one coherent, structuring framework consisting of the main river valleys together with connected large open areas and corridors of open space. Where these structures penetrated into urban areas they had the potential to contribute to the spatial quality of cities and towns.

This structure-based discourse implied that coherence and connection were the norms for open spaces rather than particular land-uses. Furthermore, a largely nature sector-led view was followed which placed forests in different spatial categories such as 'large units of nature' and 'nature connection areas'. This still left the forestry sector with significant uncertainties:

'Once again, the same mistake is being made. By subdividing forests into all sorts of zoning destinations the principle of multi-functionality is denied. There is a great danger that this will lead to a complete run-down (or erosion) of this principle.' And further: *'It is to be feared that through spatial policy and nature policy, we will become deprived of a part of our responsibilities.'* (Roel Vanhaeren in: 'De Boskrant', January 1997)

Apart from the debate surrounding the forest's position in the SSF, this plan is considered as the beginning of serious attention being paid to the forest expansion issue in spatial policy, which continues to the present. An important step in the institutionalisation of the forest expansion idea was also the establishment of a Forest Expansion Unit, responsible for the implementation of the 'forest expansion programme'. From the very outset it has clearly focused on the urban environment: 'where the forest combines most of its functions' (Theo Vitse, in: 'Eigentijds', March 2001).

The legitimising effect of the SSF has certainly helped the 'urban forest' story line to spread rapidly and even to take root in local policy debate. On a project basis, it was the intention to create fifty-one 'urban forests' in Flanders. For each a change of land-use designation in terms of hectares was calculated, ranging from 20 up to 500 hectares (Figure 2). For example, for the first urban forest projects in Kortrijk and Ghent 300 ha was proposed for each. As this would require about the same amount of agricultural land to be turned into forest, it was not surprising that those proposals are facing severe opposition from farmers and their organisations.

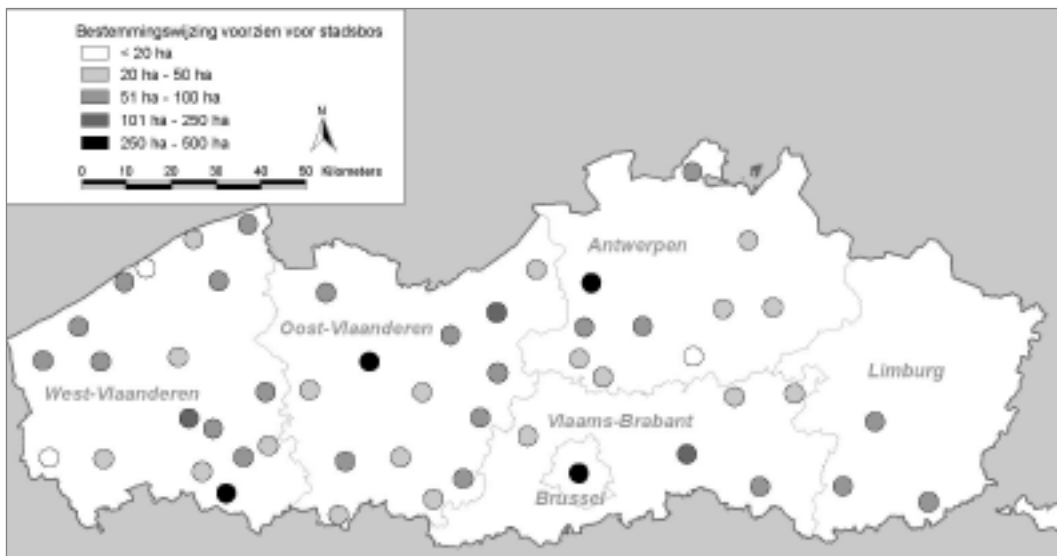


Figure 2: 'Urban Forests in Flanders', an overview of the changes proposed in land-use designation for the creation of fifty-one new forests near cities and towns in Flanders

(Source: Ministerie van de Vlaamse Gemeenschap, Afdeling Bos en Groen, 2004)

Given the local opposition faced in the first project (Kortrijk), it was realised that a more strategic approach would be necessary. A three-step process was developed:

- 1) Location phase (Where should the desired urban forest be located?)
- 2) Concept phase (What should the urban forest look like?)
- 3) Implementation phase (How could the urban forest be realised?)²⁷

A member of the Forest Expansion Unit clarified the underlying motivation for this strategy to an international audience:

'Given the controversial nature of the idea of realising an urban forest, it is more likely for politicians to accept such an idea gradually. Only after reaching consensus amongst decision-makers on the first two steps, the implementation phase, where personal interests are involved is started. Then decisions have to be made such as what to do with this single farmer, or that local amateur football club within the perimeter of the urban forest. Through lobbying, personal interests may have a strong impact. By splitting up the decision-making process, one can avoid that those interests clashing/interfering with general interests, which, and this is the most important, will increase the realisation chances of the urban forest project.' (Nachtergaele et al., 2002)

The argument for keeping the first steps of decision-making out of wider social debate was framed as the need to let (unspecified) common interests prevail over the 'personal' interests of locals. At the same time, it justified the administration's own lobbying activities as legitimate (as will be further illustrated), whilst condemning those of local actors as illegitimate. The case study of the Park Forest Ghent project illustrates what happened when centrally led urban forest targets were adopted locally, in a concrete planning situation.

The Park Forest Ghent project

Turning the story line round

The Flemish forest administration together with the province of East-Flanders commissioned the FFA and the Ghent University (Spatial Planning Department) to undertake a pilot location study for the urban forest of Ghent. A 'scientifically sound' method was developed for finding the best location for creating a 200-300 ha forest, a prime consideration being the potential for 'immediate realisation'.

It is notable how the study's report (October 1997) starts with a structure-based 'open space' story line (pointing to the loss of coherence and connection of open spaces under urban pressure), and then continues with the 'urban forest' story line (framing the problem of forest shortage as the incapacity of the existing forests to provide the desired multi-functionality). The need for the creation of an urban forest was validated still further, by referring to the Long-Term Forestry Plan (1993) and the SSF as documents resulting from 'scientific inquiry' or 'societal consensus'. What is more, while drawing on both spatial and forestry discourses, these were combined substantially. Rather than simply presenting the urban forest story line as a variant of forest expansion, this study took a further step. Associative understandings were created within which the functionality of the forest was considered in a 'structural' relationship with the urban setting:

'Within the whole of the urban area, green areas (forest, nature, landscape) function as structure- and image-defining elements. At the same time, it is ascertained that those green spaces become

increasingly fragmented as they are under pressure of urbanisation. When new urban greenspace (i.e. urban forests) is to be created, it is therefore important to search for structures and to create proximity and connection to existing urban structures in order to strengthen the image- and structure-defining value of urban greenspace. In this way, the function of the urban forest might be optimised within the totality of the urban image, and hence, a more pleasant living environment for the urban dweller will be created.'

After starting traditionally with the functions of greenspace, the line of the story changes direction completely when it comes to the creation of new green spaces. It makes a new start with the functionality of the urban area, the ultimate objective being the creation of a better city (which is inherently 'multi-functional'). The urban forest, among other green spaces, was designated a role in the 'urban functioning' or 'the urban structure'. This turn in the story persuaded foresters to a new way of looking, from the city to the forest rather than the other way round. The problems of the multi-functional city (for example, urban liveability and deterioration) were brought to the fore, rather than those of the multi-functional forest (for example, the capacity of the forest ecosystem under recreational pressure). In other words, through invoking an urban-centred discourse, the forest was presented more as a solution than a problem.

On the other hand, turning the story line round also implied that the forest was not acknowledged anymore as a distinctive entity, let alone a privileged one, and that other kinds of greenspace might be part of the 'solution'. The very engagement of the study as a search for a forest location, however, did not allow this direction of thought. Instead, the spatial planners' concern with creating interconnected open-space structures was nicely combined with the foresters' desired image of a large-scale entity, which would ensure the multi-functionality of the forest as well as its professional management.

Reproducing the forest concepts

The study presented an 'urban forest profile' that was strongly forest-directed, for example when defining acceptable usages:

'The target group mainly consists of urban dwellers searching for quietness and enjoying natural beauty. Active recreation should be avoided, yet, the creation of a limited space for playforest within the urban forest concept is within the bounds of possibility.'

As in the 'close-to-nature' concept, it was recommended that fast growing tree species ('pioneer species') should be planted, enabling the rapid creation of a 'real forest climate'. Remarkably, however, great value was also attached to biodiversity. In particular the research of the ecologist, Martin Hermy, on the potential effect historically of the presence of forest on the diversity of plant species was of most influence. Moreover, evidence on the importance of forest size for biodiversity has provided an additional argument for the forest as a large-scale entity.

In the first step of the location procedure the 100 ha standard was used as a prime exclusive criterion in selecting 'potential locations' for afforestation (the 'exclusion phase'). It was also decided that preferably the 200-300 ha 'budget' should be spent in order to realise one unbroken forest unit. For the second step (the 'ranking phase') a set of 'suitability criteria' was defined for estimating the structure-strengthening, recreational and ecological potential of a forest location. A multi-criteria analysis was performed for testing the potential locations against the previously defined urban forest profile.

The third step (the 'feasibility test') dealt with the acceptability of the suitable locations for various sectors, which were expected to make future spatial demands (agriculture, nature conservation, industry, etc.). Actual land-uses were considered as 'competing categories', and, in contrast with the broad functionality of the urban forest, these were assigned a narrow function. For example, only traditional economic criteria were used for assessing farmland. Underlying this approach was also the assumption that agriculture would not be strong enough to resist to urbanisation, or able to contend with the expected recreational pressure.

Together with the location procedure, urban forest discourse was translated from written text into maps, presenting the most suitable and feasible locations. However, apart from proposing 'Kastelensite' and 'Vinderhoutse bossen' as two best locations (Figure 3), no definitive choice was made and the results were still open for discussion.

Local actors positioning themselves in the location debate

That the study has been effective in stimulating debate was already shown in an early reaction of the local nature movement. Six nature conservation organisations formed an alliance: 'Temporary Co-operative of Vinderhoutse Bossen: a Ghent Urban Forest' (April 1998) and directed an 'open letter' to the local and Flemish authorities and political parties. Special attention was demanded for the 'Vinderhoutse bossen':

'From our viewpoint, the ecological aspects in an urban forest are extremely important. In an appropriately managed urban forest, recreational equipment such as public footpaths should be restricted in terms of the ecological carrying capacity. This automatically argues in favour of the expansion of the Vinderhoutse bossen. After all, the larger the forest, the larger its carrying capacity or the more visitors it can sustain. The restriction of recreation should be supported by means of nature education.'

As for the nature movement, the city of Ghent attempted to relate the urban forest debate to its own policies. In a formal statement (March 1999), the City declared its readiness for collaboration, but at the same time it was stressed that the urban forest idea was not new to them. Reference was made to spatial and nature development policies since the early 1990s, where possibilities for afforestation were considered in several locations so as to make better provision for its citizens. It further criticised the location study in lacking any consideration of 'how the forest project will be integrated into the present cultural landscape with its valuable landscape elements'.

The municipality of Lovendegem - having the largest part of the Vinderhoutse bossen location within its territory - fundamentally opposed turning agricultural land into forest. For this reason, and also because it was decided not to interfere with an ongoing land development project in the area, lobbying concentrated on the Kastelensite location. This area in the southern urban periphery has a mixed pattern of small-scale fields and meadows, small castles and adjacent parks (Figures 4 and 5). It obtained a high ranking because of its potential to keep separate the residential development of the city of Ghent and the municipality of the Pinte, to reinforce the historical characteristics of the castles in this area and because of the presence of forest historically.

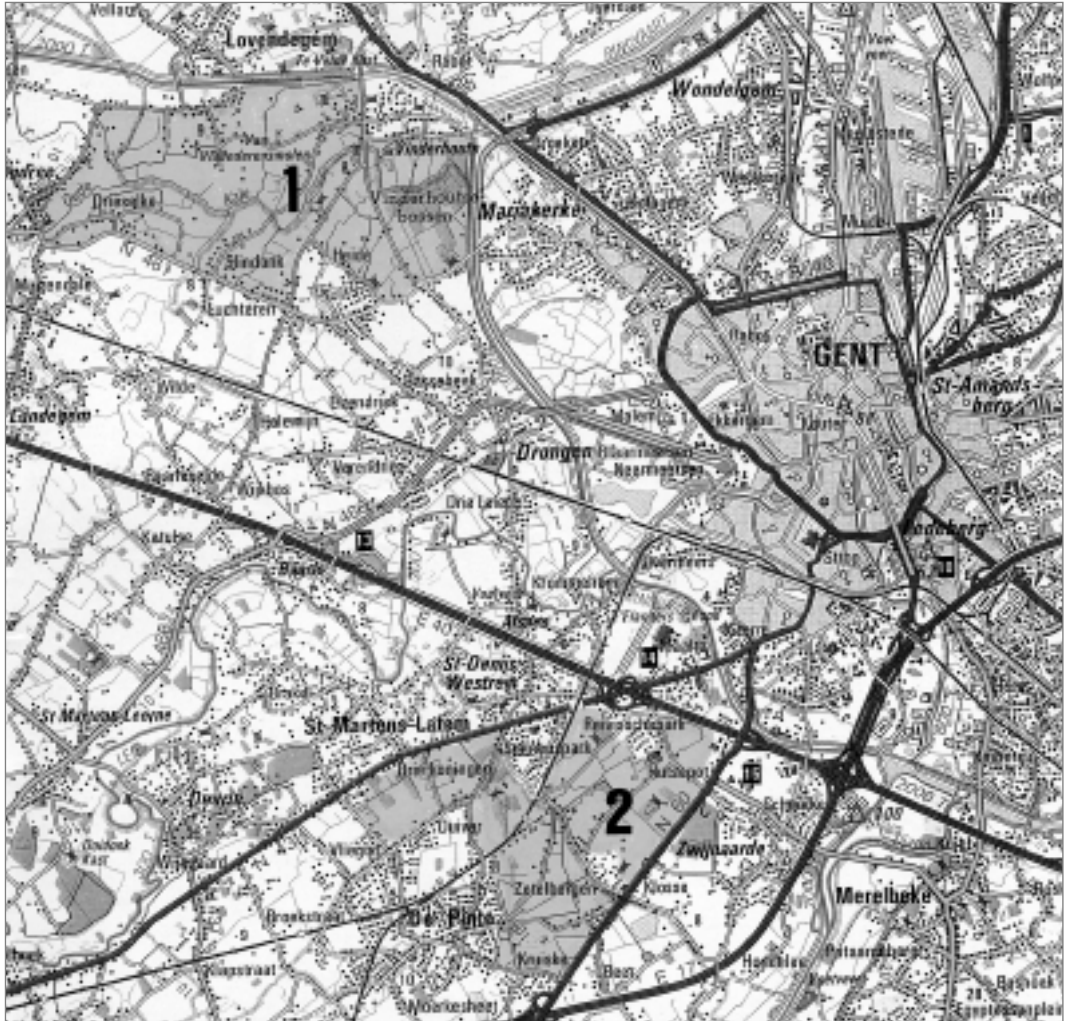


Figure 3: The 'Vinderhoutse bossen' (1) and The 'Kastelensite' (2) locations near Ghent (Source: VBV)



Figure 4: Maaltepark
(Source: Photograph by the author)



Figure 5: Characteristic landscape
(Source: Photograph by the author)

The urban forest idea contested locally

It rapidly became clear that the urban forest was not an image that could easily be sold locally. For example, politicians in De Pinte were initially opposed, as it evoked a strong connotation of the ‘urban’ and they did not want to become a part of the city. There was also the fear that the forest would attract swarms of urban people. Nevertheless, the local politicians were convinced gradually, for example, by the argument that the forest would act precisely as a ‘solution’ by putting up a barrier to the city, rather than attracting ‘urban’ problems (Embo, pers. comm. 2004).

In January 2000, the final choice of the Kastelensite location was in the newspapers, as were the local reactions. There was talk of destroying ‘the beautiful meadows’ and chasing away the farmers. A story went round about Vera Dua, Flemish Minister of the Environment (1999-2003), who was approached by a local resident in a supermarket: ‘You are not going to put it full of trees I hope! The place is already now overrun with foxes, eating up all of our chickens.’

Meanwhile, in October 1999, a EU-funded Life Environment project was started with the prime objective of creating a firm societal support base for the Ghent urban forest. The project initiators (the Flemish forest administration and the province of East-Flanders, with the support of the FFA) formed the ‘Bossanova’ alliance to actively promote the

project to the wider public and the local politicians. Despite Bossanova's intensive lobbying, the local politicians of Ghent remained reluctant: they held the view that the present landscape of the Kastelensite was attractive enough for recreation. During the election debate on 'nature and greenspace in Ghent' (September 2000) politicians were asked to clarify their standpoints to the audience. For example, the Deputy Mayor of Environment, Decaluwe stated:

'Just to be perfectly clear: urban forests are not necessarily forests. This means that when talking about the Kastelensite, we must not think as if it were suddenly 'built-up' with trees. This would destroy the site and the proper character of the area would become lost. No! It must get a character that is distinctive from, for example, the Vinderhoutse bossen'.

In the same period the Spatial Structure Plan for Ghent (SSG) was in the making. A preparatory study (1999) calculated the actual forest shortage in Ghent, according to the standard of 100m² forest per inhabitant. Remember that this normative requirement dated back to the 1980s and had been repeatedly cited since then, so it became increasingly solidified, evoking an assurance of objectivity and suggesting authority.

The planners took need for forest into account, but they started from a structure-based vision emphasising the coherence and connection of open spaces, that is, the open space story line. In this context, the concept of the four 'groenpolen' (large multi-functional green spaces in the urban periphery) was formed, as a main part of the city's green structure.

After the elections of October 2000, the new political coalition of Ghent declared its commitment to the realisation of the four 'groenpolen' in its governmental agreement (2001-2006). The creation of an urban forest was foreseen in three of those locations. Unfortunately for Bossanova and its supporters, this was not the case for the 'Kastelensite', for which the 'preservation of its present landscape values' was among the action points of this coalition. The local nature movement, Minister Dua and the FFA reacted with disappointment: the location was selected through in-depth scientific investigation and, moreover, the Minister had already subscribed the project costs in the Flemish Budget. The Deputy Mayor, van Rouveroij, replied to the FFA in November 2000:

'So long as there is no evidence that afforestation will bring about a considerable added value to the already valuable landscape, the city will forcibly oppose an urban forest in the Kastelensite'.

Increasingly aware of the importance attached to the actual landscape, Bossanova decided to change the name of the project from 'Urban Forest' to 'Park Forest' (December 2000).²⁸ This was also in line with the greater emphasis being placed more recently on recreation. It was realised that a more 'consumer'-oriented approach would be necessary for promoting the forest more widely. This, however, also implied widening the scope to more active forms of forest usage. For example, an article promoting the Ghent urban forest (Embo, 1999) made a new point when speaking of horse and mountainbike trails along or through the forest.

Changing the forest's image

In the same period, the opportunity arose to relaunch the project's strategy. The regional Division for Spatial Planning proposed to integrate the project in the planning process for the delineation of the urban area of Ghent. A procedure for the regional land use plan (RUP) was started with the aim of developing an urban landscape park of 1,200 ha, which also included a 10-15 ha business area, as well as about 300 ha new afforestation. The process was followed by an extensive group of officials from various regional administrations (including the Divisions of Monuments & Landscapes, Land, Nature) as well as the three municipalities involved.²⁹

Among the widened group of administrative representatives, a discussion was started on how to shape the urban forest, which led to the decision to divide the desired forest expansion over several units. Remember that it was the initial intention to create one unbroken forest unit (see location study). The image of 'a massive forest core', which corresponded with 'a real urban forest', was also used in promoting the project (FEA press release, July 2000). The discussion around the RUP, however, challenged this large-scale forest profile.

The preparatory study for the RUP (September 2001) included a structural sketch, designing the whole area as a landscape mosaic of different land uses, including farmland, forest, conservation and habitat creation areas. The total forest cover was estimated at one third of the area and split up into a variety of different forest sizes, ranging from three 'core forests' to numerous small forest patches spread over the area. The sketch was presented in the format of a 'fluid' image without clear borders between the various areas (it was informally called 'the cloud plan', see Figure 6). As such, the plan enabled a common ground to be established among the broad range of public actors involved.

The RUP study imposed a totally new forest image on foresters. Forest fragmentation, traditionally regarded as a main problem of forests in Flanders, now became a valued target. The idea was supported by the argument that small forest patches may act as 'stepping stones' for biodiversity. Furthermore, various morphological (for example, 'border forest') and functional (for example, 'experiential forest') types were introduced. Special attention was given to scenic qualities, such as gradients of transparency. In this context, the open farmland was given a central place. By embedding the forests into a larger mosaic of land uses, the concept of multi-functionality also acquired a new meaning, relating the forest functions to farming, housing and other nearby land uses.

The new image infiltrated the project's campaigning. To date the urban forest had been promoted with photographs of dense forest stands populated with squirrels and woodpeckers (as seen, for example, in Bossanova's first Park Forest magazine, Autumn 2001). Bossanova published the sketch of the 'cloud plan' in its second magazine (Spring 2002). Half of the pictures were of meadows with trees and remarkably, the third magazine (Autumn 2002) did not even show a single forest image.

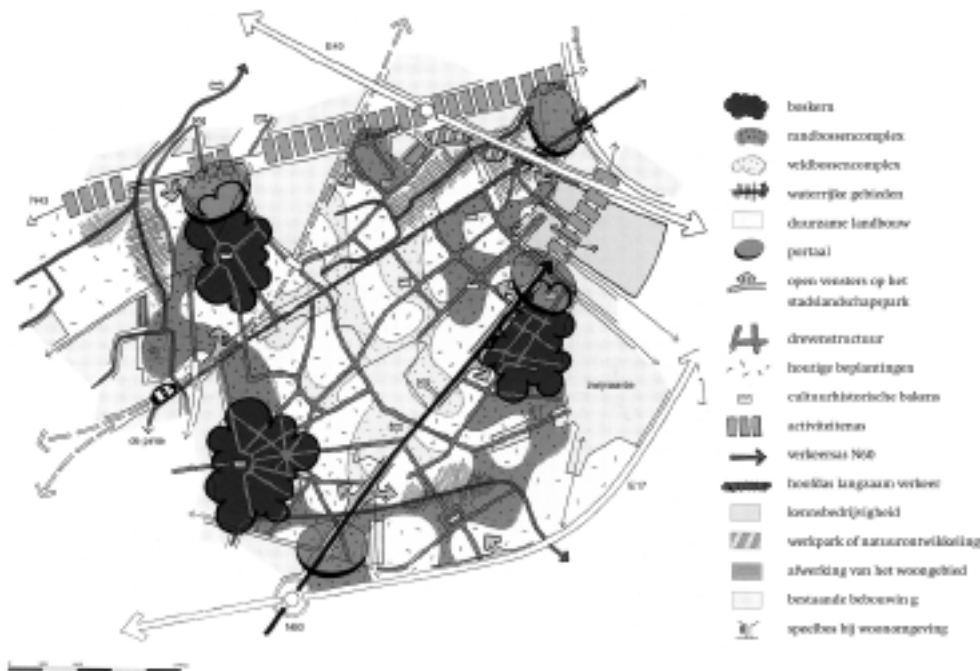


Figure 6: Desired spatial structure ('the cloud plan')

(Source: Ministerie van de Vlaamse Gemeenschap, AROHM-ARP, 2001. Voorstudie gewestelijk RUP bosontwikkeling-bedrijvigheid. By Studiegroep Omgeving-Econnection-Buck Consultants Int.)

While the RUP study brought the public administrations and politicians to agreement, the uncertainties among local people were growing. Farmers and their organisations continued with complaining about the legal insecurities caused by the project, which became even worse through the fragmentation of the forest into multiple entities. A newspaper headline read: 'Urban forest chases away 50 farms' and started cynically by saying: 'Local residents may learn from a colourful leaflet that the Flemish authority wants to develop a 'Park forest' in the Kastelensite.'

Clearly, the present landscape was a sensitive issue among local people. From their letters to Bossanova, as well as from short interviews in the field³⁰, it was learnt that local people would welcome more 'nature' and more recreational equipment such as footpaths and cycle trails. However, many set pre-conditions for not changing the present landscape too much or just wanted to keep it like it was. Surprisingly, part of the locals - including those supporting the urban forest - were expecting the forest to be 'unnatural', 'tidy', or even 'dull'. Throughout their statements, they made a connection between an appreciation of the present landscape and those who made it and still maintained it (the farmers, the great landowners). Creating a forest thus means changing these (to them natural) relationships, and, what is more, it implies a dependency on those institutions that will be given the management task. This expectation, in turn, is carrying many uncertainties: Who is going to keep guard over the forest? To what extent our freedom will be restricted by rules and regulations?

From discussing plans to planting trees

In October-November 2002, information meetings were held for the wider public. The public presentation of the 'cloud plan' began with a shortened, more institutionalised version of the urban forest story line, including a calculation of the forest shortage in Ghent, the legitimising of both forest expansion by the SSF and location choice by the location study, and an organisation chart of all the public bodies involved. Surprisingly the public did not really react to the organisers' presentation. They were thinking of the material implications of the plan (asking about the tree species to be planted, the amount of visitors who might be attracted, etc.). It was remarkable that the message as a whole continued to be contested fundamentally: Why would the urban forest be planned here? Is there a need for a forest at all? Is the general public asking for a forest? Although it was not surprising that the farmers affected were strongly contesting the occupation of their land, the logic of reshaping the open landscape into a forest was not fully understood more generally. Moreover, the idea of turning a meadow (owned by the city of Ghent!) into a business area was contested as a contradictory decision.

In between the public meetings in November 2002, Minister Vera Dua invited Chief Raoni of the Kayapo Indians and Prince Laurent of Belgium to plant the first trees with her. The Minister explained the 'symbolic' event, which was extensively covered by the media, as an act of solidarity with the decline of the Amazonian rainforest. The farmers, however, heavily contested this tree planting. They appeared to take this first 'materialisation' of urban forest discourse as a symbolic act of power (Figures 7 and 8). In the background of this event, nature activists were claiming that in fact they had planted the first trees (500) of the urban forest (on Earth Day, April 21th), and that the City cut down this little forest because they wanted a business area in this place.



Figures 7a and b: Minister Vera Dua and Chief Raoni are planting the first tree of the Ghent Park Forest (Source 7a: Photocopy from newspaper 'Het Laatste Nieuws', 19.11.02; 7b: VBV)



Figures 8a and b: Protesting farmers in the background, one banner reads: ‘When Vera plants a tree, we can say goodbye to our land’ (Source: VBV)

The draft regional land use plan was completed in the summer, 2003 (after agro-economic investigation and negotiation with the affected landowners/farmers). It included the delineation of the various land uses per parcel of land and a regulation for the compulsory purchase of properties for afforestation purposes. The formal procedure included public consultation after approval of the draft plan by the Flemish government. However, in June 2004, before the parliamentary elections, the Minister of the Environment refused to put his signature to the plan because it showed too many deficiencies and his political (Green) party could not agree about the business area.

This disapproval came as an unexpected setback to Bossanova. It was said that it was made entirely with electoral advantage in mind since local Green Party members had positioned themselves in opposition to the business area. Earlier in the year (April 2004) a diverse group of opponents (nature activists, local residents, politicians, artists, and farmers³¹ as well) were mobilised in the ‘Hutsepot Front’³² against this plan. A new ‘illegal’ tree planting was organised: ‘Join in a pleasantly naughty action! Sabotage business area plan and plant a tree.’ It was a successful and popular event. Over 4,000 trees were planted in a 7 hectare parcel (the ‘Hutsepot forest’). In this way a local story line was launched which focused attention on the controversy over the business area. At the same time, however, the positive message of the whole Park Forest project tended to move to the background of public debate.

Conclusions

This empirical study presents a detailed story of how forest expansion discourse in Flanders, having its origins in a relatively small group in a defensive position, could gain prominence in current land use debates. The study highlights the powerful effects of ‘organising’ ways of representation in the policy process (Schön and Rein, 1994; Hajer, 1995). Through an appealing ‘story line’ the previously unnoted problem of the low forest cover in Flanders could be turned into a new policy claim. By indicating the significance

and justification of the need for forest expansion, the story line has facilitated its 'makers' ability to move their cause forward beyond the boundaries of their sector's small 'discursive terrain' and impose their agenda more widely, particularly in relation to spatial planning policies and practices.

Rather than attempting to analyse the above effects separately, this study was interested in the very career of the forest expansion story line: how it emerged and developed in a continual interplay with different actors, some of them acting as 'sponsors' of the story line, others contesting its effects. Placing this career at the centre the analysis has encouraged more explicit attention to the challenges that a story line may face in a long-term policy process. While the story line was deliberately invented at a particular time and place, seeking to persuade a specific audience, it was not possible to plan in advance, let alone to anticipate how it was going to be reproduced, played out and transformed over time in new institutional contexts with new actors involved. The story line has facilitated various institutional rules to integrate much of its strategic message, part of the 'game', however, is how these rules are played. So, for example, considerable budgets were set aside for the creation of an urban forest in Ghent. So far, this potential has been left unused, because some actors prefer to await the formal approval of the regional land use plan. Procedural delay has brought new uncertainties and weakened the story line's significance. Moreover, its positive message became overshadowed by a local story line, which ironically obtained its strength from actual tree planting. Interestingly, this event also does suggest that it is not entirely reasonable to say that discursive activities create the world and therefore are primary in relation to practices. As Harvey (1996) puts it, discourse and material practice both internalise the effects of the other. By planting the 'Hutsepot forest' and so 'taking' the land designated as a business area, a diverse group of local people succeeded in influencing political discourse at the level of the Flemish government.

Another challenge is the tensions that arise when a generalised policy discourse comes to interfere with place-based understandings. In this case, despite the many efforts of adapting the urban forest image and its representation in talk, texts, pictures, and, even the renaming of the project, it could not really permeate local 'imaginary' (Harvey, 1996). Cultural assumptions of place and identity appeared to be determined not only by an appreciation of the agrarian landscape, but also by the material practices of maintaining the landscape and agricultural production that are closely linked with this perception. The expectation that those practices will be modified (by the creation of a public forest) may, in turn, evoke concerns about future changes in the ordering of social relations, namely the possible inconveniences by urban visitors and the dependency of governmental actors. It appears that in contrast to the trajectories of discourse institutionalisation (for example, in spatial structure plans), the translation of policy discourse into the local perception or imagination may take much longer. If the story line is leaving this 'imaginary' unaffected, it may have only limited impact on action on the ground.

A similar question of importance is whether the change in the urban forest concept has actually affected the 'imaginary' of the forestry experts involved. The genealogy of forest discourse does believe that professional practice employs a specific forest image and that it is constitutive of the forester's identity. Like the local interpretation of identity of place, this touches on what Schön and Rein (1994) identify as the deeper layers of discourse, which reflect cultural reference points of which actors are often unaware (Healey, 1999). However, despite of the change in image in this case, it is acknowledged that the afforestation target in terms of hectares was largely left intact. The empirical study does suggest that the desire for forest expansion is strongly related to the position, the identity of the forester, and that it results from long-lasting and multi-faceted struggles over relations of power since the 1970s up to the present.

Finally, the consideration of discourse-actor relationships over a longer time span has enabled to gain a closer understanding of the powers of a story line in a long-term policy process. In this, the trajectory from concepts and ideas to actual implementation, rather than following one linear sequence, is developing through a complex wire of shorter idea-action chains. Along these, the discursive may take various forms, from oral discussion and policy documents (printed study reports and sketches), to highly formalised accounts (legal texts and plans), which may, in turn, evoke or influence new discussions, leading to new actions, and so on. From the empirical study two major strands emerged that might be applied more generally: the durability versus the discussability balance and the commonality versus the autonomy balance.

Firstly, a story line may become embedded in those discursive forms that are possibly most helpful in moving the main strategic idea forward. Such a 'substantive turn' from text to practice (Hillier, 2000: 10), however, may also influence the story line itself. In this case, substantial arguments were subsequently replaced by references to scientific studies, legislation, budgets, etc. While the story line could acquire more institutional importance or authority through appealing to such durable forms, it became presented increasingly as a reified causal scheme and, finally, even as a story of victories in institutionalisation. Yet the linguistic structure as a narrative or story may be beginning to lose its force. Stories make elements of reasoning comprehensible and easier to remember, and may thus become a helpful political tool to get key ideas across (van Woerkum, 2002) or to oppose others. In its 'fluid' narrative form the story line can be passed on, shared socially and discussed, and hence is attractive for actors to engage in. The challenge for the story line is to attain 'durability', to secure the main strategic idea over time and, at the same time, to remain 'discussable', so as to facilitate the work in the policy process beyond. Moreover, in continued debate, the sponsors of a story line are more likely to test out whether their story still 'rings true' and be encouraged to strengthen or even adapt it in response to subsequent situations.

Secondly, a story line may persuade and engage actors of importance to bring its policy message into 'good currency'. Depending on the institutional context, the place and the time in the process, actors will vary as well as their backgrounds. The challenge then is to provide a common ground. For example, in this case, out of widely different discourses

(forestry, biodiversity, and spatial planning) a common 'urban forest profile' could be crafted. Finding 'commonality' is important but, on the other hand, in a practical situation, actors tend to relate the debate to themselves. They seek to tell the story in their own language, each employing their favourite terms and concepts (for example, 'green structure', 'afforestation core'), and so tend to give selective emphasis to different elements. Actors may even come to fit the story in the context of a situation that they had constructed for a different purpose (for example, the fragmentation of open space, the decline of the tropical rainforests). So a story line must allow its sponsors to maintain their differences and 'autonomy' as long as it is compatible with the common project. The argument of a story line not only enforces its plausibility, but perhaps more importantly, it provides a store of reference points to draw on, giving potential sponsors of the story line a new idea about their specific role in translating that argument into action.

INTERMEZZO I

From policy rhetoric to practice: the role of factual argument and normative prescription

Introduction

In Part I, I used the example of forest policy discourse in Flanders to illustrate how a previously distinct and largely unrelated set of facts, arguments, and norms, could be combined and tied together into a generative sort of narrative or ‘story line’, enabling a particular view of appropriate action to be imposed on others. The particular framing of multi-functionality in relation to space created a representation of the forest as a norm on its own terms and subsequently, forest expansion as the most logical decision.

The ‘urban forest story line’ was shown to have the persuasive capacity of carrying concepts and ideas to the arenas of policy articulation, as well as to those where policies were translated into decisions: for example, on the priorities of forest location, and on land use plans and instruments for the acquisition of land. It was questioned then what makes a story line effective (or not) in moving the strategic idea of forest expansion forward along the various trajectories from concepts and ideas to actual implementation that are constitutive of a long-term policy process. Therefore, the focus of the study was on the very ‘career’ of the story line in this process, particularly the continual interplay with different actors in shifting arenas and changing institutional contexts.

In this Intermezzo, I gradually move the level of attention from the long-term policy process to that of the policy arenas of time and place. In particular, I take further the issue of factual evidence and normative prescription as it is used in policy rhetoric and practice. Drawing on the empirical study in Part I of the thesis, I discuss the argumentative strategies employed in the policy arenas of the time to purchase legitimacy for a desired course of action, in this case the expansion of the forest cover. I then consider both the constraining and enabling effects of factual argument and normative prescription in the context of local planning. Finally, as an introduction to Part II, I outline some rule-led approaches in greenspace policy in Flanders.

Genealogy of forest policy discourse revisited

The analysis of forestry discourse over time has shown how arguments advocating the cause of forest expansion have extended and become increasingly varied. This is not surprising, as this concept came to motivate a widening circle of actors (public officials, environmental groups and even politicians). It is remarkable, however, how the emphases in argumentation have changed over time (see Table 1, second column).

Table 1: Key emphases in argumentation on forest expansion and their translation into normative prescription

<i>Time context</i>	<i>Key emphasis in argumentation</i>	<i>Normative prescription</i>
1970s	Recreation - Self-sufficiency in timber supply	Minimum surface areas - Zoning - High-quality timber ('elite' trees)
1980s	Environmental protection Solidarity with tropical forests	Ecological stability Carrying capacity
1990s	Biodiversity Buffer to urban expansion	Target species Green belts and axes
2000s	Quality of life in cities Health and other 'benefits'	Accessibility Consumer satisfaction

So, for example, in the 1970s, the concept of 'social forestry' was brought to the fore together with a sustained effort for opening up state-owned forests for recreation. Hence, forest recreation was a prime argument used in the discourse on forest expansion. Later on, the recreation issue was somewhat pushed into the background by exacting concerns for environmental protection and scientific nature conservation. Since the late 1990s, however, the argument for recreation has reappeared even more forcefully, although from a different perspective. Whereas forest recreation was previously considered from a rather forest-centred standpoint (the carrying capacity of the forest being conditional upon visitors' behaviour), current well-meant discussions have concentrated instead on the visitors' needs and expectations. For example, in several places throughout Flanders robust kinds of forest or so-called 'play-forests' are currently being created for children's play. An increasingly 'consumer-oriented' approach is being adopted, which is open to new trends in forest use and is much more ready to adapt flexibly to these than was the case in the past. This makes what counts as evidence and what makes an argument acceptable, historically variable.

The changes in argument must be seen, of course, in the specific institutional contexts within which they were generated. It is notable, however, that wider developments such as which discourses came to dominate the policy forums of the time, have been most influential. It is suggested here that the 'sponsors' of forest expansion have sought to

secure the political relevance of their claim by subsequently transcribing it into higher-order discourses and related practices, which have come into good currency at a particular time (for example, sustainable development, biodiversity, quality of life). Accordingly, in the hope of purchasing legitimacy for their desired course of action, they selected for attention those representations of the forest (as a resource, an amenity, or a 'green structure') that fitted well with the dominant concepts and ideas to which they were 'hitching on'.

This also helps to explain the striking conclusion that apart from these shifts in argumentation the very idea of forest expansion has largely remained the same over the considered timescale. Whichever way the foresters presented themselves - as the improvers of the urban environment, the providers of recreational space or the defenders of the tropical rainforest - they were the advocates of an afforestation programme and apparently, what they wanted above all was to plant trees.

What may seem to outsiders as an unreasonable attachment to a desired forest cover should be considered within the historical perspective of decades of struggle over the forest situation in Flanders. It was suggested that in the 1970s the first ideas of forest expansion and subsequent efforts to attract policy attention, emerged from a frustration with the unfavourable position of forests in Flanders. The empirical study has revealed that underlying the rhetoric of forest expansion was a deeper concern for the position of the forester as a professional, in the forest as well as more broadly in national forest policy, nature conservation and land use planning. However, the argument for advocating the desired forest expansion in the policy arenas of the time was silent about the actors behind it, and hence, their inner values and professional identities. These belong to what is called the deeper levels of policy assumptions, which reflect the cultural reference points of which actors are often unaware (Schön and Rein, 1994; Healey, 1999).³³

Instead, arguments focused on 'the facts' of the practical situation in which the idea of forest expansion arose: the low forest cover in Flanders and its fragmentation in terms of hectares (comparing this firstly with the Walloon part of Belgium, and later on with a number of other European countries), the shortage in timber supply in terms of cubic metres, the lack of forest in terms of square metres per inhabitant, etc. In this way, the debate was separated from the foresters' views of what this practical situation actually meant to them and how they perceived themselves in it.

Indeed it could be concluded that the factual arguments used did not reflect what the foresters' 'real' concerns were, but rather were resources that could be tapped and exploited for the purpose of ensuring the action they sought to realise. A parallel could be drawn here with social movement literature, which assumes that activists never change their actual thinking, just the way they package their thinking to make it more appealing to someone else (Oliver and Johnston, 2000). Similarly, key actors in forest expansion have combined their institutional positions (either as a public official, a university professor or an elected politician) with a sort of activist role when advocating their cause in multiple bureaucratic and political arenas, and in the media, and when

counteracting 'forest-unfriendly' decisions and lobbying elected representatives. Returning to their rhetorical strategies, whether conscious or not, these actions may have involved more than just adapting the conceptualisation of the forest to influential discourses of the time. Not only the substantial content of their argument, but also how it was grounded and represented may have been part of the strategy. In this case the reversion to scientific evidence and factual information is, of course, a basic part of a forester's professional background or culture. But professional culture is also the product of a confrontation with conditions of practice and with strategic action (Fischler, 1995: 21). Undoubtedly, they have learned that among the rules of the game in policy forums are the criteria by which judgments are made about the validity of participants - their standing as participants in the policy conversation (Rein and Schön, 1993: 157). In the arenas of bureaucracy and politics, 'facts' may bestow arguments, and hence the actors who utter them, with an air of neutrality, so avoiding inter-personal confrontation.

However, when it came to translating the rhetoric into implementation on the ground - the realisation of actual urban forest projects - the arenas of local agency also became important. Then, a confrontation with the 'messiness' of the public's considerations seemed inevitable. However, the foresters' preferred strategy was to avoid such a situation: instead it was proposed that local counter-discourse should be anticipated by closing off decision-making about location choice and concept making from public debate. This was justified so as to let common interests prevail above so-called 'personal interests' (Nachtergaele et al., 2001). Such a presumption corresponds with a general observation that local agency in the urban fringe is seen almost entirely in a negative light because of the presumed inability of local actors to take account of the broader interests of society (Bryant, 1995).

By contrast, the urban forest project was attributed with wider environmental and social importance for the whole of society. This related to the concept of the 'multi-functional forest', focusing on those aspects of the forest involved in the provision of social, ecological, environmental and spatial goods and services. Such a generalised factual argument, however valid, did not appeal to the local public, whose reactions, moreover, revealed other kinds of values: those encompassing beauty, cultural heritage and 'feeling safe'. But these were largely discarded as less relevant, irrational, as resistant to change, and as a too personal response.

This view not only considered the public as being 'wrong', but it effectively undermined their position in debate by suggesting that they were just motivated by self-interest. The attribution of 'interests' is a key strategy employed by people actively involved in disputes about local land use (Burningham, 2000). In their effort to award themselves with neutrality and authority, the sponsors of the urban forest sought to establish adversarial 'interests' between 'us and them', rather than attempting to acknowledge people's deeper values and concerns: they attributed personal interests to the locals while framing their own interest as a broader societal concern.

As a rhetorical strategy this might be most helpful in getting plans and decisions across, On the other hand, such an approach is likely to frustrate public debate as it leads to unequal positioning, and it consequently may be counterproductive in building local consensus. (This is not to say that local people haven't their own strategies in attributing interests to others, as shown in Figure 9).



Figure 9: One cow's protest action against the forest: 'Where may I graze now?' (Source: VBV)

It is concluded here that planners should reflect more carefully on the way they construe their own 'interests' and those of others, instead of blinding themselves from the validity of multiple positions and values. They should recognise that they do not hold 'neutral' values as they pretend, and that citizens should not be perceived as driven only by so-called individual interests. Interests cannot be assumed as given, they are intersubjectively constituted through discourse (Hajer, 1995: 59). It was shown in Part I that the deeper layers of discourse reflecting cultural assumptions about place and identity can play an important role into how people react to proposals for environmental change.³⁴ Therefore, those concerned with mediating or resolving local disputes should engage with the diversity and complexity of local concerns, instead of simply attributing 'interests' to certain parties (Burningham, 2000). To this end, they need to develop reflexive skills to identify not only the range of claims for attention but, perhaps more importantly, the deeper layers of discourse manifest in policy debate, so that they come to understand why people make a particular claim.³⁵

This points to the importance of participatory planning, of people defining their understanding of the situation in a forum where they are given voice and listened to with respect. Rather than adversarial advocacy, it should be the purpose then to encourage a sharing of concerns (Healey, 1997: 305). These issues are pursued further in 'Intermezzo

II' and Part III. In the next section I continue with the powers of normative prescription in argumentation.

Normative prescription as a polyvalent tool

Factual argument and scientific evidence give planners the security of controllable knowledge that is appropriate to put into normative prescription regarding what is to be done: performance targets, 'best practice' and quantitative standards. In the example of forest discourse in Flanders, policy rhetoric and the evolution of its argumentation were consequently translated into an increasing number of normative prescriptions (see Table 1, third column). Normative prescription may have an important role to play in facilitating the implementation of a particular policy on the ground: by making 'abstract' policy discourse easier to imagine, to translate into action programmes, and to address technically. Talen and Ellis (2002), for example, have described how the requirement of well validated, durable criteria for successful outcomes in the practice of city planning is gaining renewed attention in planning theory today.

On the other hand, normative prescription, as a means of defining the boundaries of what is appropriate planning and what is not, may become a forceful tool for planners in persuading the public and elected representatives of the merit of their plans. Particularly when criteria have been consolidated over time through re-citation, they may evoke an assurance of objectivity and hence, suggest authority (Iedema, 2001).³⁶ Normative prescription then becomes a polyvalent tool: not merely a technical but also political tool, as a rhetoric tactic giving planners a better chance of making a convincing point, whether in documents or public debate.

In practical situations, however, this distinction is not always clear. The content of the planners' discourse as well as their routinised forms of representation are embedded in professional culture. If planners resort to the rhetoric of 'urban structures' or 'forest functions' in their attempts to convince other parties, it is primarily because they operate professionally from within these perspectives (Fischler, 1995: 19). If the public do not master the knowledge that has informed a particular rhetoric, if they are unfamiliar with the policy vision underlying it (most obviously because they were not involved in the discussion underlying it), it is also very difficult for them to participate in constructive ways. Again, the effect of inequality of positions within a debate seems unavoidable.

However, inequalities between planners and the public do not merely result from the incomprehensibility of discourse or unfamiliarity with certain routinised forms of representation. It is particularly when these reified or routinised forms are placed within a structured way of seeing (for example, a story line, or more practically, a green structure plan) that they may perform their most persuasive work. Structured ways of representation not only explicate certain policy ideas, but they also introduce a certain conceptual coherence, set the terms of expression, and impose a particular logic of understanding and of intervention on the situation.

The disciplinary force of discursive practices often consists of the implicit assumption that subsequent speakers will answer within the same discursive frame (Hajer, 1995: 57). I give here an example of contemporary spatial planning discourse: it is now a widely accepted standard of ‘good practice’ that plans should include a set of elements that constitute the ‘green structure’ of the city: green belts, green axes, green fingers, stepping stones, and so on. During a public hearing about the Spatial Structure Plan for Ghent the idea of a ‘green ring’ around the city was represented as a means of spatially interconnecting the large natural areas (the ‘groenpolen’) (see Figure 10). A local resident who wanted to call into question the efficiency of such a proposal, seemed to transcribe his own style of expression into the discursive structure of this concept:

‘When I look at these maps from here, the link between, let’s call these the four green lungs of Ghent, seems wafer-thin to me. To be honest, I would not like to be a squirrel living in the forest of Vinderhout and coming to visit a squirrel in Melle.’

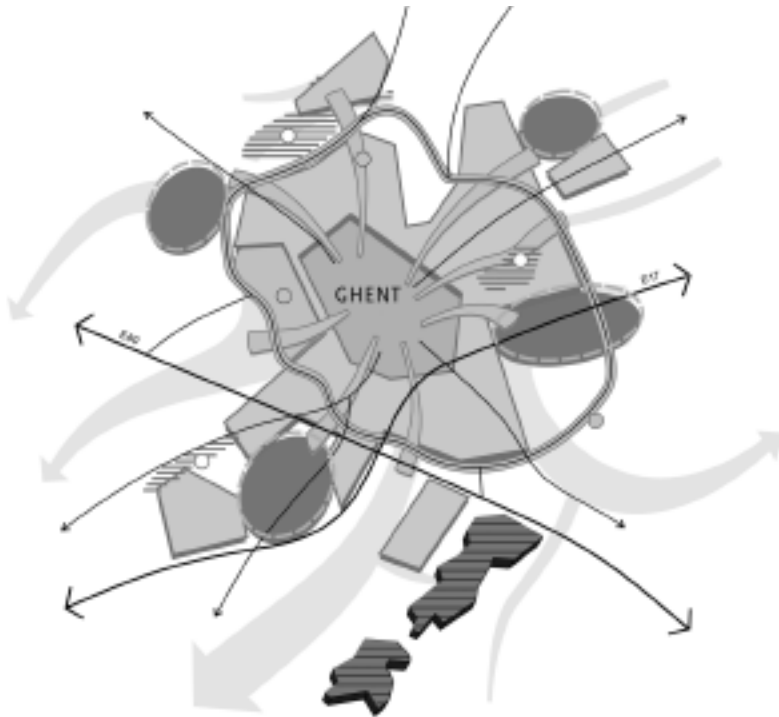


Figure 10: The greenstructure of Ghent (Source: Ministerie van de Vlaamse Gemeenschap, AHRM-ARP. 2002. Afbakening grootstedelijk gebied Gent. Eindnota by Mens en Ruimte)

Even if they do try to challenge the plausibility of a routinised standard of ‘good practice’ people are expected to make their contribution in what Hajer (1995) calls ‘terms of known categories’. The terms of expression are thus already set. This makes it very difficult to reveal the arbitrary character of much normative prescription, let alone to propose an alternative solution.

Normative prescription, when it is called upon by planning officials in order to justify and validate a particular plan or decision, may actually provide them with a certain advantage in debate. Moreover, the privilege of prescribing tends to confirm the symbolic power of their own 'expert status' and that of the institution they represent. At the same time, reified standards tend to restrict the scope for interpretation and improvisation, and thus of what can be talked about and by whom. So they may suppress or marginalise actors who could otherwise have taken part in the formulation of policies and plans, whether constructively or not.

In this context, the professional use of performance targets, 'best practice' and quantitative standards may have empowering (planners themselves) and persuasive (the public, political representatives, developers) effects at the same time. The question then is how planners can find the right balance between both effects of representation, when matching the reality of the political situation within which they find themselves and are expected to act. It is suggested here that planners should anticipate and evaluate the likely consequences of their representations in their attempt to achieve a desirable end for the public good. In political policy- and decision-making environments, 'clever' planning officers (Forester, 1999) anticipate how the issue at hand might appear both to the local public and to the elected representatives, and temper their 'expert advice' accordingly (Hillier, 2002: 209). In making their practical judgements, experienced planning practitioners may be capable of anticipating others' reactions by 'looking through the eyes' of likely actors (elected representatives, local residents, developers, etc.).

Given the realities of spatial competition so typical in urban contexts, it was asserted that at the strategic level open processes and communicative approaches are limited means of mediation, since in reality market-led and political interests, not planning experts, constitute the power base on which decisions are made (Fainstein, 2000). In this 'market of negotiations' both planners and the public are being threatened in many cases by the freedom of private commercial initiatives (Freeman, 1996; Flyvbjerg, 1998). As a result residents may lose nearby attractive greenspace of importance to the quality of their living environment, while planners may lose professional autonomy and the ability to make a (positive) difference to the future of the city.

Normative prescription then may makes it easier for planners to argue deliberatively for what they believe to be better public outcomes. Moreover, by setting the ground rules they may create some kind of framework that makes it easier for people to imagine what to expect. Not having the tools for articulating the key elements of good urban greenspace, as Talen and Ellis (2002) said: '...simply cedes the field to other actors who have no qualms about fighting for their preferences, even if they are narrow, short-sighted, and in conflict with the public interest.'

In the context of the above considerations, I present in Part II a GIS-based tool designed to argue deliberatively and translate into policies and plans key elements of good greenspace provision and distribution. Before turning to this study, firstly I will outline

some general experiences with rule-led approaches and normative prescription for greenspace planning in Flanders.

Criteria for greenspace planning in Flanders

So far I have emphasised that planners' work is not only technical, but also inherently political. Planning representations and negotiations operate in a multiplicity of formal and informal arenas within which political representatives, business, and other private sector actors may play a prominent role. However, whether they work within or outside bureaucracies, planners are inevitably bound by governmental regulation. Moreover, the governmental context within which they need to operate, is typically compartmentalised and multilayered, rather than a univocal statutory power.

In Flanders three levels of government - the Flemish region, the provinces, and the municipalities - are elected and have the right to make policies following the principle of subsidiarity. However, the opportunities for local government to develop their own vision and actions on significant policy fields such as the environment, employment, and so on, are rather limited. Consequently, in practice the principle of subsidiarity has been applied mostly at the stage of service delivery, implementation, and organisation (Ducheyne, Vanhove, and van Altena, 2004).

Central government has a powerful role in this multi-level governmental landscape in translating the 'public interest' into regulatory criteria and other normative prescription, designed to encourage the achievement of central policy objectives by its subordinate authorities (the provinces and municipalities). Since the 1980s, municipalities in Flanders have been faced with a plethora of environmental criteria and regulation of all kinds, causing them to complain that central government was burdening them with an ever-growing workload and that at the same time it was interfering in local affairs and undermining their own autonomy. This points to a major problem with the criteria-driven approach: it draws people into the implementation of policy, not its formulation (Healey, 1997: 234).

In the 1990s, central government made serious attempts to improve its relationships with the municipalities. On the one hand, it intended to make its criteria more acceptable through granting subsidies, so reducing the costs of local policy measures that subscribed to and implemented centrally formulated policies. On the other hand, it aimed to enhance local governments' professionalism and capacity to formulate their own environmental policy. In 1992, local governments were given the opportunity through the 'Municipal Environmental Covenant' to enter into an agreement to take on a particular task, and in turn central government would provide financial compensation (subsidies). It was the intention to encourage the municipalities to undertake specified environmental measures (for example, reducing the use of pesticides), but also to take responsibility for policy planning (nature development plans, environmental policy plans) and to initiate certain initiatives for local participation (through advisory councils).

It is notable in this context that the incentives for local planning were accompanied by a new form of criteria, which related to the content and the process of these plans. Consequently, local governments were given the flexibility to produce their own policy plans, albeit principally within the precondition of the need to meet these pre-given criteria. This has obviously caused some tensions between attempts to increase local responsibility in formulating plans and bureaucratic requirements for criteria of achievement. A further implication is that centrally led criteria, although technically excellent, tend to ignore the local conditions under which policy plans have to be made. Moreover, as in the case of many nature development plans, by setting detailed criteria for provision of an inventory, attention was distracted from the policy work itself. However, the rule-led approach has also had some important enabling effects. I illustrate this (often neglected) aspect using the example of the 'Municipal Nature Development Plan (GNOP).

The first Municipal Environmental Covenant (1992-1996) was devoted largely to the 'Municipal Nature Development Plan' (GNOP), containing a nature inventory, an analysis of bottlenecks, a list of objectives and an action programme. In return (after approval of the plan), the Flemish government provided financial support totalling € 12,500. The provinces took care of the co-ordination of the Plan. 295 of the 308 municipalities in Flanders had made a GNOP (Bogaert, 2004: 116-117). In the following environmental covenants (1997-1999, 2001-2002 and 2002-2004) the emphasis was on the implementation of the GNOP. This has led to the approval of 269 nature projects in the period 1997-2001, supported by subsidies from the Flemish government amounting to € 1,450,000 (ibid.).

The overwhelming effect is even more significant when it is considered that together with the GNOP many local authorities have placed nature policy on their political agendas for the very first time. In addition, new social connections have been built and methods devised of importance for further action. In some instances this horizontal network has even led to a continued co-operation between municipalities. As most of the GNOP plans were contracted out to private consultancy firms, this has also facilitated a horizontal transfer of 'best practice' (for example, botanical mowing schemes for grass verges and standards for green corridors).

This approach has provided enormous leverage on local policy in a much-neglected field. Moreover, it is suggested here that the GNOP has challenged established local policy rhetoric and practice more generally. Where local government discourse was traditionally centred on the delivery of services, the GNOP has helped to pave the way for a new emphasis on improving the (natural) quality of areas. Such an innovation in discourse is not obvious in the local context of budgetary constraints where political representatives are expected to act in direct response to the more pressing day to day concerns (for example, installing sewers and resurfacing roads).

It could be argued that the authority evoked by centrally led regulation and the granting of subsidies, were the key to success. This was important of course, as it provided public

officials in charge of the environment with a strong argument when selling their ideas to political representatives, but it is not a sufficient explanation. For example, a recent evaluation of the 'Covenant for International Co-operation' has shown that local governments who had engaged in it pointed to 'the complexity of the concept of sustainable development' as the prime obstacle in building a local policy for sustainable development (Ducheyne, Vanhove, and van Altena, 2004). There was a general demand for practical 'hat-racks', rather than financial means, personnel and knowledge. The difficulty with abstract concepts such as 'sustainable development' and 'green structure' is that they are insufficiently bound up with everyday decision-making, particularly because it is hard to make people imagine what these terms mean practically, and how their actions may lead to actual improvement. Imagination is an essential element in effective political action: 'Action requires that we assimilate into our consciousness a sense of how the world might be changed' (Beauregard, 1995). The GNOP's inventory-led and outcome-oriented approach was largely involved with the 'tangible' material realities of specific areas, natural elements (lines of trees, hedges and river banks) and 'best practice', rather than the more abstract nature discourse underlying it.

It could be concluded that practical forms of normative prescription are the most helpful in directing attention to particular issues and linking rhetoric to practice. Yet what is viewed as a strength can also be identified as a problem. When normative prescription takes on a life of its own, the danger then is that situations are being structured in terms of delivery on performance criteria, rather than being based on the objectives that the criteria are supposed to express (Healey, 1997: 234). Moreover, such criteria always reflect a particular construction of policy priorities. In the early 1990s, central government's nature discourse drew heavily on the concept of the 'Main Green Structure' (see Bogaert, 2004: 98-116). As a particular frame of reference this concept has influenced the fact that in the GNOP attention was primarily directed to the countryside, to the neglect of nature and greenspace in the built environment, and to the social aspects of nature.

Recently, this problem has been recognised, and with the new municipal covenant (Co-operation Agreement 2002-2004) attention has been widened. Subsidies are now granted for reworking the GNOP to include objectives and actions focusing on parks and other types of public greenspace, for the acquisition of land and the redesign and management of public greenspace. In this respect, the concept of 'Harmonious Park Management' has been included as a frame of reference, directing attention to the ecological, environmental and social aspects of greenspace. As with the GNOP, the mobilising potency of this concept lies in its practical approach. However, this was not detached in this instance from its underlying ideas, as this concept was developed at an earlier stage through interaction with municipal officers and it was widely promoted among practitioners via courses and handbooks. Currently, the applications for funding are growing rapidly and have even exceeded the available financial means.

The planning of new green spaces, however, remains a contentious issue. In reality, the results attainable through granting subsidies for the acquisition of land are constrained by multiple spatial claims (business, housing, infrastructure, and so on). In the context of

spatial competition, political pressure and budgetary constraints, the opportunities for creating greenspace are rather scarce, and where they exist it is often hard to make such proposals acceptable in negotiations over decisions on land use. In this respect, 'objective' criteria may provide planners with the capacity to influence decision-making in situations where policy is ineffective in meeting public needs.

In recent years, the Flemish forest administration has promoted the standards for urban greenspace provision that were set in the Environment and Nature Report (MIRA-S 2000; MIRA-T 2004), which in turn, were built on those contained in the Long Term Plan Greenspace Provision (AMINAL, 1993). In Part II of this thesis I demonstrate how these standards can be made operational in the formulation of policy and in policy practice by means of a Geographical Information Systems (GIS)-based tool.

PART II

A monitoring tool for the provision of accessible and attractive urban green spaces*

Introduction

Social viewpoints such as employment, education, and safety have recently been given much attention in the development of indicators of urban liveability. In addition, environmental aspects such as healthy air, a quiet neighbourhood, an attractive street scene, and green spaces within walking distance are gaining weight. International studies over the last ten years underline the importance of nature for people's wellbeing, but it is particularly the reality of urban outflow that stresses the urgent need for urban greenspace. While demographic evolution - in particular the presence of families with children - is seen in relation to urban quality of life, migration studies in Flanders (northern part of Belgium) point out a steady outflow from the cities, especially since the late 1980s (Willaert, 1999; Pelfrene, 2000). The result is a sprawling suburbanisation. Couples with children are the first who leave the urban centres and combined with a low immigration this results in a high net loss of the young household category (Willaert, 1999). On the other hand, sociological studies do underline the importance of natural environments as determinants in the choice of residential location. For example, in a study of Leuven (Tratsaert, 1998), the lack of public green spaces and children's playgrounds seemed to be a main reason why people left the city. Most of the movers were seeking for a green and calm place of residence in the urban fringe.

Improving the quality of life in the cities is a main governmental policy objective in Flanders. In response to growing interest, urban environment was added as a new environmental theme in the Environment and Nature Report for Flanders ('MIRA'). The aim was to provide scientific support to environmental policy-making, particularly by developing environmental indicators and monitoring the status of the environment. The

* The manuscript of Part II (except the last section) was published: Van Herzele A., Wiedemann T. 2003. Landscape and Urban Planning 63: 109-127.

provision of green spaces was presented as a first topic for assessment in the 'Urban Environment' chapter of the 'MIRA-S 2000' Scenario Report (Van Herzele et al., 2000).

The primary goal of this research was to develop and apply an indicator, serving as a 'touchstone' for progress towards sustainable green supply in Flemish cities. The indicator was made operational in a GIS-model, designed to allow the monitoring of the supply of urban green spaces through time and space against quantitative and qualitative targets, and to assess the effects of future policy scenarios (for instance, the realisation of the regional zoning plans). Its focus was on the extent of 'change' over time and the identification of trends and directions, rather than on absolute measures of 'state'.

There are surprisingly few published guidelines explaining how to compare the provision of greenspace on an inter-urban basis (Nicol and Blake, 2000). This study aims to contribute to the development of methodological approaches to greenspace monitoring of importance to the formulation of policies for tackling deficiencies. On the Flemish Community level, the study has formed a 'guiding' tool for the development of urban greening strategies and actions in the framework of the Flemish Environment and Nature Policy Plan. Moreover, the GIS-application aimed to assist in a new way of planning, in which urban greening is integrated within overall urban planning. A clear and workable method was developed, allowing data on greening to be used in planning discussions, and leaving broad margins for local initiative. After all, this method may offer a tool to strengthen the weak position of green spaces in the context of current planning efforts to increase urban density.

This article aims to explain the underlying ideas, to describe the GIS-structure, to describe the indicator's parameters and to discuss its usefulness as a reference for policy, from a 'green liveability' point of view.

Concepts and definitions

Investigation of urban greenspace planning practice as well as earlier research on public preferences and use of green spaces have enabled us to put forward a number of basic principles and assumptions to guide the development of an indicator. These principles were summarised as the characteristic features of the method (Table 2).

The following is an attempt to clarify these principles as well as their integration within the study approach. Furthermore, special attention was paid to the terms accessibility and attractiveness because of the central roles they play in the overall concept.

Citizen based

It is commonly accepted that urban green spaces are essential for the health and wellbeing of citizens. However, given the many strategic issues urban planning has to

deal with alongside the basic social and economic needs of the residents, it is perhaps not surprising, as Anne Beer (1990: 143) has noticed, that the less quantifiable aspects of human life have rather been neglected. In the present study, the benefits of green spaces to urban quality of life are at the centre of attention. Therefore, the monitoring was not limited to the identification of green spaces. Investigation of the opportunities of usage, experiences and accessibility was an integral part of it. Moreover, as we need to be concerned about each part of the city as a liveable place, all of the residential places should be provided with accessible and attractive green spaces. Therefore, people's immediate living environment was the starting point of the investigation, rather than the green spaces themselves.

Table 2: Guiding principles for the monitoring of urban greenspace provision

<p><i>'Citizen based'</i></p> <p>As green spaces are intended to support the quality of life urban populations, they have to be considered in connection with the places where people live and in a way that reflect their point of view.</p>
<p><i>'Functional levels'</i></p> <p>Green spaces inside and outside the city are no substitutes for each other and both are perceived in different ways. Urban greening should be evaluated in relation to the relevant functional scales, ranging from street - to city - level.</p>
<p><i>'Preconditions for use'</i></p> <p>The preconditions for use (proximity, accessibility, surface, safety, and so on) should first be considered. If these are not fulfilled, people won't be attracted to green spaces.</p>
<p><i>'Variety of qualities'</i></p> <p>A variety of qualities is likely to ensure an array of activities and experiences related to urban green within close proximity to homes and workplaces. Variety is a general aim, if not within one green space separately, at least for the total supply on the different functional levels.</p>
<p><i>'Multiple use'</i></p> <p>People use open landscapes, such as parklands, playing fields, forests or farmlands, in and around the cities freely and often without regard to their original purposes. Urban green spaces are seen in a wide scope and include all the open areas, which can be perceived by citizens as contributors to their quality of life.</p>

Functional levels

It is assumed that one needs green spaces within reach at different functional levels. People do not want urban green spaces as substitutes for the countryside and city parks

as substitutes for doorstep spaces (see e.g., Beer, 1990; Reneman et al., 1999). Although little is known about the functional interrelations that may exist between green spaces at different spatial levels and their possible complementarity (see e.g., Katteler and Kropman, 1975), empirical studies do assume that green spaces fulfil different functions at different levels (e.g., Grahn, 1986; Crouch, 1994; Berggren-Bärring and Grahn, 1995). For example, large areas of forest in the urban periphery may have significance to the totality of an urban area for weekend recreation, while small parks in the inner city may have a strong connection with the very local everyday life. As the monitoring of green spaces is aimed to reflect the community's needs, it is important to consider their different functional levels. Based on this principle, various hierarchic systems of standards - mainly developed during the 1970s and early 1980s from practical experience and surveys - have classified green spaces according to their function for use for the whole city, a city district, a city quarter, a city neighbourhood.

Preconditions for use

In his study on the perception of urban environments Freek Coeterier (2000: 149-164) has used Herzberg's two-factor theory to explain how most of the perceptual qualities operate. Restrictions such as distance and safety determine whether people will actually visit an environment. They operate as preconditions for use. Once the preconditions are fulfilled, it will depend of the appearance of satisfiers (qualities such as unity, naturalness, and historic character) how long people are willing to stay there. Distance or walking time from the home has appeared to be the single most important precondition for use of green spaces (e.g., Deconinck, 1982; Grahn, 1994; Bussey, 1996; Holm, 1998). People who live in close proximity to a green space use it frequently, those who live further away do so less frequently in direct proportion to the increase in distance. Following the above 'functional levels' principle, the maximum walking distance may differ according to the function a green space fulfils. For example, according to most authors, neighbourhood parks should be situated within a five minutes' walk - corresponding to maximum 400 metres from home - if they are to be perceived as accessible. In the hierarchic systems of standards each hierarchic class of green space has a different walkable catchment area that is partly determined by its size. The classification is linked to rules of thumb for minimum surface area and distance from home. Furthermore, green spaces' catchment areas also depend on constraints for their use such as lack of maintenance, insecurity, and mentality of other users.

Variety of qualities

Once the preconditions for use are fulfilled, monitoring has to concentrate on the question whether the place is a sufficiently satisfying and interesting place to encourage people to stay and enjoy being there. Human-environment studies in different western countries have shown with remarkable consistency cross-cultural universal patterns in people's preferred environments. An individual's experience of an environment can be

described in terms of a number of relevant factors. For example, Freek Coeterier (1996) has discovered eight dominant attributes in the appreciation of the Dutch landscape: 'unity', 'use', 'naturalness', 'spatiality', 'development', 'management', and 'phenomenal aspects'. Patrick Grahn (1991) presents eight positive characteristics which Swedish people wish to experience in parks and other urban green areas: 'wilderness', 'rich variety of species', 'forest', 'play inspiring', 'sports oriented', 'peaceful', 'festive', 'square'. Nature and culture appear to be dominant characteristics: 'the first thing you notice, is if a park or an open area gives a robust or ornamental impression'. Pronk, de Boer and Boerwinkel (1997) have put the way people perceive their environment into different perceptual dimensions all appearing in the same person: 'explorative', 'instrumental', 'existential', and 'cultural'. Aking and Sorte (1973) have emphasised the meaning of green spaces for 'Man's sensory capacity' and showed that an individual can describe his or her general experience of an environment by psychological attributes. For example, 'pleasantness' refers to the tendency of a human being to classify situations into those s/he perceives as positive or negative environments.

What people seek in urban green spaces is a diversity of natural and social facilities (Burgess et al., 1988; Berggren-Bärring and Grahn, 1995; Holm, 1998). Analyses by Berggren-Bärring and Grahn (1995) have shown that visitors prefer parks containing many qualities, which in turn encourage many activities. They found a clear relationship between the supply of different park characteristics and the frequency of visits. This leads to the formulation of a general aim to reach a variety of qualities, if not within one single green space, at least for the total supply on the different functional levels.

Multiple use

It is assumed that the qualities and constraints one can experience in a place and the activities one can do there are of most importance in people's appreciation of green spaces. A study on people's interpretation of urban green in the UK (Harrison and Burgess, 1988) revealed that the public - in contrast with most trained planners - define not only parks and gardens as open spaces. Riversides, waste places and scrubby bits, farmland, woodland, golf courses, cemeteries and squares in shopping centres, etc. were all encompassed in the phrase 'open space'.

Moreover, sites that are not formally managed for 'recreation' such as green fingers formed by river valleys and derelict land are often more highly valued by the recreational users (Nicol and Blake, 2000). As both the formal and informal green spaces are important for ensuring a full variety of experiences, the monitoring was aimed to use a wide definition of green spaces and the assessment was based on qualities related to use and experience rather than on the classification of types.

Defining accessibility

The concept of a hierarchic system of standards provides a suitable framework for the estimation of green spaces' supply for walking or cycling trips that start at the doorstep of one's home. We have compared systems originating from different countries such as the Netherlands, Sweden, United Kingdom, Germany, and the United States of America. It appears that a lot of general agreement exists about the distance criteria but much less about criteria relating to space sizes. Moreover, as this study concerns a wide scope of green spaces, the catchment area may differ according to the type of green space. For example, for parks in the city centre a smaller minimum surface can be accepted in comparison with less equipped green spaces like nature reserves and farmlands in the urban fringe. An attempt was made to adjust the size and distance standards, which have been suggested earlier for Flanders in preliminary vision reports with help of general recommendations in relevant research studies (e.g., Deconinck, 1982; Grahn, 1986; Berggren-Bärring and Grahn, 1995; Holm, 1998) after checking the appropriateness in the field. For example, in the present study one hectare was proposed as a minimum for a local park instead of the area limit of two hectares included in most systems. Table 3 is based on the minimum target that each urban resident should be able to enter at least one green space on each functional level of the indicated maximum distance and minimum surface.

The references given in Table 3 are general standards, which should be used with caution in specific situations. In particular limited mobility and various constraints may ask for particular attention with regard to specific user groups. For example, Grahn (1986) points to the fact that the walking time may considerably differ along the degree of mobility. A number of studies suggest that the distance criteria used to identify children's use of natural places are especially sensitive to the kind of physical barriers and to social constraints imposed by parental anxieties about children's safety (Harrison et al., 1995). Studies on children's activity range (e.g., Hart, 1979; Matthews, 1987; Hillman, Adams, and Whitelegg, 1990) make it likely that the recommended maximum distance of 400 metres to neighbourhood parks is not a sufficient criterion of a site's real accessibility to many children of primary school age. Although these studies originate from America and England where children seem to be more restricted than, for example, in Nordic countries and Germany, it is apparent that in past decades children in general have lost freedom because of the increase of traffic. In order to handle physical distance as an effective criterion for identifying accessible green spaces, contemporary constraints on mobility and behaviour need to be examined.

In this context, the availability of small green spaces on the doorstep are of crucial importance, especially for less mobile people and young children. For these spaces we have chosen not to specify any surface area standards. A main reason is that small-scaled greening is difficult to assess against spatial criteria. For a large part it is experienced from the outside, integrated within its surrounding area, the architecture, the street life, ... the 'life space' as a whole, on which it also puts a specific meaning. Because of practical reasons linear green spaces such as canal towpaths, and disused railways, were not

included in this framework. However, it is argued here that these sorts of spaces should be assessed in a more appropriate way within the framework of a green structure concept.

Table 3: Standards for urban green spaces (Source: MIRA-S 2000, Van Herzele et al., 2000)

<i>Functional level</i>	<i>Maximum distance from home (metres)</i>	<i>Minimum surface (hectares)</i>
Residential green	150	-
Neighbourhood green	400	1
Quarter green	800	10 (park: 5)
District green	1600	30 (park: 10)
City green	3200	60
Urban forest	5000	200 (towns) 300 (cities)

Defining attractiveness

In one way or another the abstract qualities derived from human-environment studies are perceived through physical features. However, existing knowledge on the physical appearance of perceived qualities is still limited. Moreover, there is scientific evidence that indicates that physical features cannot be systematically related to qualities in an objective way. Each place has a unique set of interrelationships between physical features and perceived qualities. In accordance with the holistic landscape views (e.g., Coeterier, 1987; Antrop, 1989), people regard a landscape as a system, in which things are structurally and functionally related to each other. As a consequence, the appreciation of a landscape is not simply the sum of the appreciation of its parts. It also depends on the context. Furthermore, the same indicators for the same element can be appreciated in a different way, depending on the whole system (Coeterier, 2000).

Keeping the above limitations in mind, an attempt has been made to provide a significant indication of the attractiveness by relating dominant perceptual attributes to physical features of a green space as a whole and taking into account the context of the surroundings. This makes it necessary to evaluate green spaces separately and partly in a subjective way in the field. For the purpose of the indicator development, a range of dominant qualities from literature were aggregated in five groups to be assessed separately: 'Space'; 'Nature'; 'Culture and history'; 'Quietness'; 'Facilities'.

Space

Spaciousness - that is, the feeling of being in a forest or park, which has no boundaries - is a major quality (e.g., Kaplan, 1991; Berggren-Bärring and Grahn, 1995). As a main criterion it could be proposed that the space must be perceived in a way that one can move freely without being aware of the limited dimensions of the green space. Grahn (1991) says that especially in large parks with fully grown stands of trees people can experience being away from all rules of the town and forget about limits, time, and space. Fragmentation disturbs the perception of a space as a whole, and visual impressions from the surroundings such as dominant or large scaled buildings may also disturb the sense of space. Other related visible features of importance are the degree of coherence (e.g., Coeterier, 1996), and visual variation (e.g., Axelsson Lindgren, 1990).

Nature

Natural environments can provoke experiences of being in connection with everything that is alive. Such experiences make our inevitable relationships to the surroundings clear (Axelsson Lindgren, 1990). Research into people's attitudes to urban green spaces (Deconinck, 1982; Harrison and Burgess, 1988; Grahn, 1991) has shown that people expressed a desire for contact with nature and were curious about other organisms and about how nature itself is organised. Therefore, green spaces are needed, which have a wide range of plant and animal species. This quality seems to be valued most in large parks, which are not frequently visited and where the separation from the hustle and bustle of the city is a prerequisite (Deconinck, 1982; Berggren-Bärring and Grahn, 1995). However, smaller spaces on people's doorstep may be important for feeling aware of the natural world on a daily basis.

Culture and history

Often, the cultural history of land use such as agriculture and forestry can be read from present landscapes. Freek Coeterier (1987) has called this the continuity of culture reflected in the landscape. Only a few generations ago, most people had some direct connection with the landscape, mainly as part of the rural household. However, cultural qualities are not necessarily tied up with the past, new landscapes can have qualities too (Coeterier, 1987). In terms of culture, social feelings in particular are apparent, including feelings of pleasure when taking part in recreation with friends (Axelsson Lindgren, 1990; Coeterier, 2000). Research by Berggren-Bärring and Grahn (1995) has shown that social and cultural activities (e.g., looking at old buildings, statues, fountains, and visiting exhibitions) are especially encouraged in smaller, neatly cultivated parks where people can see and encounter the cultural expressions and values of society, and where they can see and meet people.

Quietness

It is one of the most striking conclusions in recent studies (e.g., Grahn, 1991; Reneman et al. 1999; Mens en Ruimte, 1999) that there is a great need for quiet and peaceful places. With respect to the experience of quietness, the distance of the auditory space between sound events is a relevant criterion that can be reflected by statistical noise levels. Noise level, although important, is not the only variable determining the experience of

acoustic environments. According to Lopez and Carles (1995), the noise level is the sum of a diversity of sources to which subjective response will be given. The degree of congruence between sound and the spatial, cultural, or social context, in which it is produced, plays an important part in defining this subjective response (Lopez and Carles, 1995). Moreover, the experience of quietness is related to the 'soundscape' as a whole: the level and source of the sound within its context (Carles, Bernàldez, and de Lucio, 1992). As the context determines the expectations, it may be possible that one evaluates the soundscape of a forest more negatively than that of a neighbourhood park, even if the noise level is higher in the park than in the forest.

Facilities

This group is considered as supporting people's activities and experiences in a green space. The most obvious facilities in green spaces are those related to the degree of internal accessibility to visitors (for example, the presence of footpaths). When considering park facilities, those which invite for a longer stay are of special importance, including places for children to play, access to green fields, benches, toilets, pools, picnic equipment, and so on.

The aggregation of qualities in five groups was mainly based on two requirements: flexibility in the use of variables and relevance to conclusions for policy. The flexibility need is based on the assumption that the value of a perceived quality may considerably differ from one place to another. For example, in a city park other physical features are appreciated than in a nature reserve in the urban fringe. As a wide definition of green spaces has been applied in this study, it must be possible to evaluate the attractiveness by taking into account the type and functional scale of the green space and possible regional characteristics as well. Flexibility in the use of parameters will also avoid a policy being directed towards an equally handled set of physical features, which would lead to uniformity in the field. As a consequence, the way in which the quality groups are handled within the indicator system is fixed but their content is flexible. The flexibility idea is made operational by the evaluation procedure following lead variables and up-and/or downgrading variables as shown in Table 4. As the indicator is designed for use in policy evaluation and planning situations, transparency and simplicity are important requirements to enable communication. When the indicator has to deal with change, especially with regard to future policy scenarios, it is important to be able to draw conclusions on different policy fields - traffic, land use, and so on - for example, when making a separate assessment of the effects of a planned road construction on acoustic and on spatial perceptions.

Table 4: Parameters for evaluation of the attractiveness of urban green spaces in Flanders

<i>Overall-quality attributes</i>	<i>Lead variables</i>	<i>Upgrading variables (if applicable)</i>	<i>Downgrading variables (if applicable)</i>
Space	Low degree of fragmentation (1) Landscape classified as consisting of elements which fit esthetically harmonious and/or function as parts of a whole construction (2)	Visual variation Attractive visual context Closeness (if appropriate to regional characteristics)	Disturbing visual context Little visual variation
Nature	Natural green spaces (forest, heath and other wild or species-rich spaces) Robustness in parks	Groves and/or lakes Dense pattern of small landscape elements (rows of trees, hedges, bushes, ponds, ditches, etc.) Natural elements and/or wild places	
Culture and history	Relics of traditional landscapes (3) Cultivated parks Old parks	Dense pattern of characteristic elements and/or land use Contextual integrity	Bad maintenance Vandalism Contextual disturbance
Quietness	Proximity of major roads, airports Statistical noise levels (4)	Positively experienced types of sound (e.g. birds, the wind) Noise level/source congruent with context	Negatively experienced types of sound (traffic and industrial noise, airplanes) Not congruent with context
Facilities	Degree of physical access (entrances and paths) (5)	Supply of facilities (e.g. benches, fishing places, playgrounds, sports)	Unsafe facilities Too much facilities

- 1) The degree of fragmentation was calculated based on the digitised map layers: The ‘C-ratio’ was used as a measurement for fragmentation: $C = \sqrt{(A_c/A_p)}$. A_c : area of a circle with the same perimeter as the examined green space, A_p : area of the green space. A (empirically derived) value of less than ‘0,4’ was considered as an indicator for highly fragmented spaces (Wiedemann, 1996). Green spaces with a high degree of fragmentation but which allow a circle to be drawn within their boundaries, where the circles have a surface that responds to the minimum areas for each functional level, were considered as ‘not fragmented’.

- 2) These landscapes were derived from the Atlas of the Relics of Traditional Landscapes in Flanders (see Antrop, 1997).
- 3) Dito
- 4) A set of noise level measurements (during a 15-minute period) were taken through during rush hours, in selected sites (by eliminating sections around major roads). Statistical sound parameters have been considered: L_{A99} and L_{A01} . 'Quiet' places are characterised by: 1. $L_{A99} < 40$ dB and L_{A01} not too high (< 60 dB) or 2. $L_{A99} < 40$ dB and $L_{A01} > 60$ dB and peaks are caused by natural sources such as birds.
- 5) Green spaces which can be entered from all four sides and are walkable all over the area (on paths) were ranked with a 'high degree of access'. A 'medium degree of access' was attributed to spaces that can be entered from at least two sides and are walkable for at least a half part of the area. All other accessible spaces were attributed a 'low degree of access'. With regard to public parks the following criteria were used: (high:) freely accessible on paths, fields and playgrounds; (medium:) freely accessible only on paths; (low:) limited public access (entrance fees, opening hours or days, etc.).

Study area

This study was carried out in four Flemish cities: Antwerp, Ghent, Aalst, and Kortrijk (Figure 11). Flanders is the northern autonomous region of Belgium and is densely populated, and highly urbanised. In 1998, it had a population of 5.91 million and an average population density of more than 400 inhabitants per square kilometre. The great expansion of the built up area over the last decades was not proportional to the population growth, which indicates an extreme consumption of the available open space. The continuous suburbanisation together with the growing density of the transportation infrastructure, are causing a constant decrease and severe fragmentation of the open space, and important losses of both natural and cultural values of the landscape. Since recently, the Flemish land-use policy strategy as established in the Spatial Structure Plan for Flanders (1997) aims to counteract this continuous pressure on the open space by promoting a concentration of development in the cities. However, the shift in land-use policy towards the more compact urban form may result in conflicting implications for the supply of green spaces at the different levels from the inner-city areas to the urban periphery.

The examined cities differ in their extent, physical structure, and landscape characteristics. Antwerp and Ghent are the two largest cities of Flanders, Aalst and Kortrijk represent smaller towns.



Figure 11: The Flanders' region in Europe and the location of the four study areas

Working procedure

The model was constructed, based on GIS software (ArcGIS, ArcView 3.2, Spatial Analyst 1.1. (ESRI, 1996-2000) linked to an MS Access XP database (drawn from national statistics) containing data about the population. This database is linked to spatial entities corresponding with neighbourhoods (or 'statistical sectors'). The method is based on the idea that if preconditions for use of individual green spaces are fulfilled, the perceived qualities and the activities one can do there are the centre of attention. A two-step approach was developed:

- Step 1: The preconditions for use, especially accessibility, are examined.
- Step 2: The qualities, which make the place attractive, are examined.

Mapping of the urban core, green spaces, barriers, and pedestrian crossings

The study area was the sum of the area of the urban cores, plus the area of a 5 km buffer around these cores. Four different map layers were created:

- The urban core;
- The surface and qualitative description of green spaces;
- The barriers;
- The pedestrian crossings.

The urban core

The urban core was defined in physical-morphological terms corresponding with densely built areas. Digital topographic raster maps, at an original scale of 1:10,000 (National Geographical Institute, 1990), were used to delineate the urban core as a vector map layer. As a consequence, administrative borders were not taken into account. In order to link the mapped urban core to demographic data, a database of 'statistical sectors' (drawn from national statistics) was linked to spatial entities corresponding with neighbourhoods.

The green spaces

Based on land use maps, all open spaces larger than 10 ha were selected. All these areas were adjusted digitally, based on orthographic aerial photographs and field observations. The fragmentation of each green space was taken into account by splitting up continuous areas at locations where elements of the landscape such as motorways, major roads with more than three lanes, connected 'ribbon' buildings, elevated railways, and waterways intruded. An open space was considered as an urban forest if a considerable part of the area (40-50%) was covered with trees. In addition, a quality threshold was applied concerning particular 'nature', 'culture', and 'facilities' qualities. Only those spaces, which one can enter from minimum one side were selected. Among these, only spaces with a minimum degree of biological value (according to the 'Biological Evaluation Map') or contain attractive landscape elements (such as hedgerows, trees, woods or historical buildings) or belong to relics of traditional landscapes (according to the 'Atlas of the Relics of the Traditional Landscapes' or field observation) were considered.

The barriers

Main linear infrastructures, such as railways, navigable waterways, major roads and motorways, were considered as effective barriers. They were mapped using a digital map of the main linear infrastructures of Flanders, an interpretation of orthographic aerial photographs and additional field observations. Within the urban core, where the supply of pedestrian crossings was considered sufficient to enable pedestrians to overcome the barriers, these barriers were not taken into account, with the exception of certain waterways and railroads with pedestrian crossings located far apart from one another.

The pedestrian crossings

Based on topographic, road, city, and tourist maps, orthographic aerial photographs and field observations, all crossing points were mapped at locations where the selected

barriers were surmountable by pedestrians. Unsafe pedestrian crossings were not considered, although this might be an important restrictive factor for the accessibility of green spaces, especially for children and the elderly.

Assessing the accessibility

In order to calculate the 'attraction' zone (or 'catchment' area) of each green space, we used the standards listed in Table 3. A systematic procedure was followed:

- 1) Green spaces were selected for further analysis when larger than 10 ha, 30 ha, or 60 ha within distances from the urban core of 800 m, 1600 m, or 3200 m respectively. This operation was performed by simple distance analysis between the outlines of the polygons.
- 2) The cost/distance module of ESRI's SpatialAnalyst was used to define the distances, taking into account the effects of barriers as well as the presence of pedestrian crossings. Because this kind of calculation can only be performed on raster maps, the map layers (barriers and pedestrian crossings) were converted from their original vector format into grids. A grid cell resolution of 50m was chosen, based on a working scale of 1:50,000. People's movements were modelled to take place in all directions, only being affected by the presence of barriers. The costs for crossing barriers were considered as infinitesimally high (except for via the pedestrian crossings). By calculating 'cost distances' for each cell of the study area the shortest distance from that particular cell to a particular green space was calculated.
For each green space, the resulting cost grid was reclassified into groups of raster cells with distances ranging from 0-800, 801-1,600, 1,601-3,200, 3,201-5,000 m respectively, according to the different functional levels listed above. The reclassified cost map layers - one for each green space - were converted back into a vector map for further analysis.
- 3) For each statistical sector a map overlay analysis was made to obtain information about the neighbourhoods, which were situated within the catchment area of each green space. Figure 12 shows an example of the calculation of a catchment area of a green space in the North of Ghent.

After this working procedure was carried out for different time series and scenarios, the aggregated results were stored in a database for further analysis.

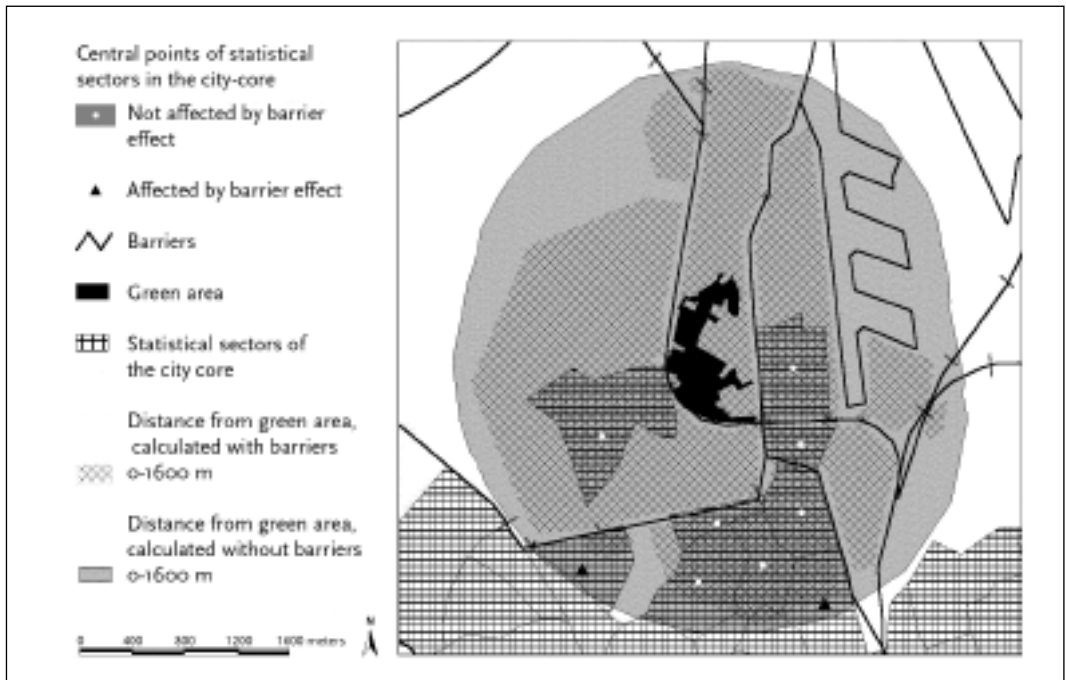


Figure 12: Calculation of distances based on screened map layers of green areas and pedestrian crossings versus calculation of distances based on simple buffering of vector maps (example from the North of Ghent)

Assessing the attractiveness

A number of parameters were used to define the qualities of all accessible green spaces. The parameters were aggregated into different overall quality attributes composed of different parameters operating as follows (see Table 4). In a first step, the variables were evaluated on a ranking scale of 0 ('bad') - 1 ('neutral') - 2 ('good'). Next, it was considered if the judgement needed to be adjusted by up- and/or downgrading variables. For example, a disturbing context such as chemical plants in the vicinity of a green space may downgrade a 'neutral' valuation of the spatial quality into a 'bad' one. If appropriate, the parameters were evaluated cartographically based on various thematic maps. Not all of the parameters of attractiveness can be derived from maps. The refinement with the help of up- and downgrading variables requires additional field observation. A range of parameters was evaluated more or less subjectively during field observations, according to checklists. The results of the qualitative analysis were stored in a database and linked to the map of accessible green spaces.

Particular efforts were made to generate parameters that can possibly predict the experience of quietness. A set of observational data consisting of statistical sound measurements as well as the type and the context of sounds were compared with a subjective evaluation of quietness. Regarding the measurable noise levels it was

concluded that the statistical progress of the minimal value (LA01), the maximal value (LA99) and the difference between these values are directive for the subjective experience of quietness.

Results

Figure 13 represents a comparison of the four cities with respect to the percentage of the urban population with at least one greenspace within reach at different functional levels. It shows that important deficiencies appear on the lower functional levels. In Antwerp, Ghent and Aalst no quarter greening (maximum 800 metres) is available for about 35% of the population, while in Kortrijk this rises to 95%. In addition, the level of urban forest is lacking in three of the four cities. Only in Antwerp there is an urban forest within reach, although just for 13% of the population.

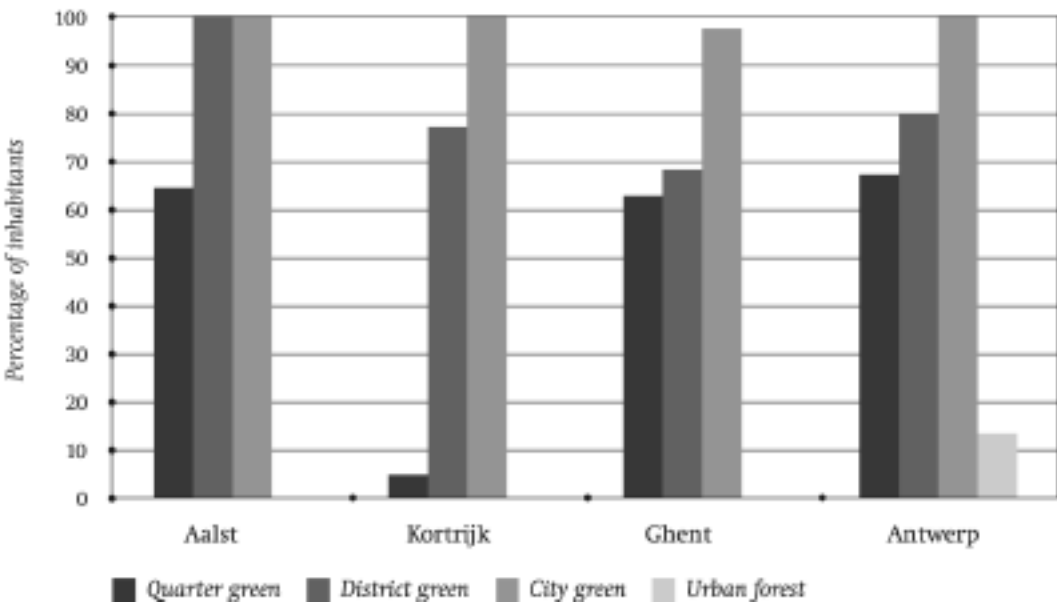


Figure 13: Percentage of inhabitants in four Flemish cities with at least one green area within reach at each of the different functional levels

An important question here is why the availability of green spaces differs between different cities. The better accessibility of green spaces in Antwerp in comparison with much smaller cities like Ghent and Kortrijk is mainly the result of different urban structures. Unlike the ‘ring-shaped’ urban form of the latter, the ‘finger-shaped’ structure of Antwerp allows green spaces to be located more closely to the city centre. The impact of the urban structure is closely connected with the barrier effects of linear infrastructure. The effects of barriers on the accessibility of green spaces were recorded in the model. Figure 14 shows the barrier effects on the availability of at least one green space within

reach on the district and quarter levels. In all the assessed cities barrier effects on quarter level are most problematic. The worst situation occurred in Kortrijk where all green spaces are situated on the outside of a ring of highways around the urban core. 28% of the inhabitants in the urban core do not even have one single green space within reach on the quarter level, due to barrier effects. The effect appears to be worse if one considers that only 33% of the inhabitants would have at least one green space within reach on this level if the barriers should be removed. In Ghent barrier effects are prominent even on the district level.

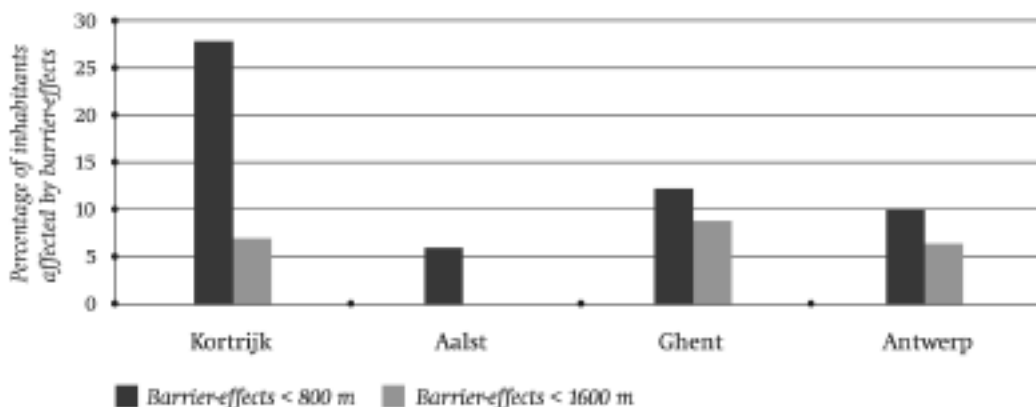


Figure 14: The effect of barriers on the accessibility of at least one green space in four Flemish cities

The example of the City of Antwerp illustrates the possibilities of this method for problem detection within a single city. Figure 16 shows that the availability of the green spaces is not equally spread. Green spaces on the quarter and district level are lacking for neighbourhoods north of the inner urban core, due to the barrier effects of roads, which disturb the structure of 'green fingers' in this area.

The calculation of the percentage of the urban population with access to green spaces with a certain degree of quality on the different functional levels has resulted in different 'quality profiles'. For the degree of 'good' quality, results in Antwerp are illustrated in Figure 15. It appears that quality (except for 'culture') is most problematic on the lowest functional levels. Aalst has the highest quality profile, thanks to the presence of large green spaces of high quality in the immediate proximity of the urban core. Kortrijk scores worst. In all of the city quality profiles the most vulnerable quality seemed to be 'quietness'. Quiet green spaces are even absent in Kortrijk and Ghent. The problem can be seen in relation with the urban structure of the latter cities, where ring roads are located at a certain distance from the city centre, acting as 'noise belts' through the landscape. Furthermore, the qualities are not equally spread within the cities. For example, in Antwerp only a few neighbourhoods have quiet green spaces within reach on the district and/or the quarter level.

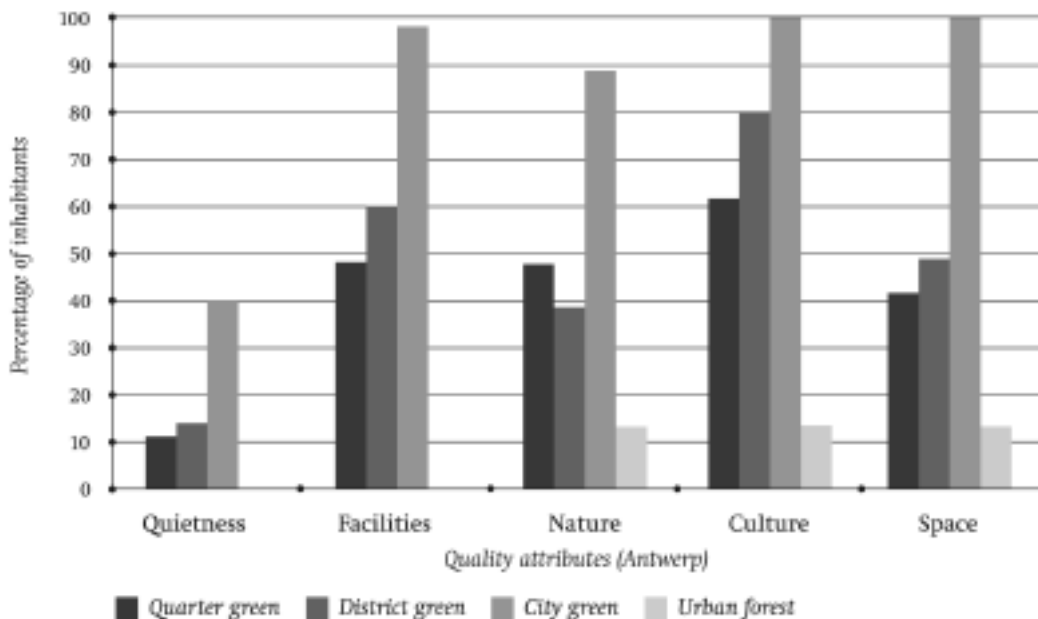


Figure 15: Percentage of inhabitants with at least one green area within reach at different functional levels and with a good level of attractiveness per quality attribute (City of Antwerp)

In all four cities the population in the urban cores decreased more significantly than in the total study area in the period 1991-1998. In the cities of Antwerp and Ghent, a significant and positive correlation was observed between population growth and the close proximity of green spaces. For example, in Antwerp the population declined by -4.5% within the urban core and by -2.4% within the whole study area. Within statistical sectors, which are located near to green spaces, population increased on average by 6.8%. In the statistical sectors outside the urban core, the population declined by 3.4%.

Different future policy scenarios were simulated with the help of the GIS-model. It was estimated, for example, that the realisation of building zones reserved for residential areas, industry, etc., in the Regional Zoning Plan would reduce the total surface of accessible green spaces in all of the four cities (Aalst - 11%, Antwerp -13.5%, Ghent - 18.5%, Kortrijk -26.5%).



Figure 16: Grouped statistical sectors according to the accessibility of green spaces at different functional levels (City of Antwerp)

Discussion

The GIS application has the potential to provide a useful monitoring tool by visualising the main factors for use of urban green spaces and their changes in relation to policy scenarios. On the other hand, the conceptual considerations suggest that the complexity of these factors and their assessment put limits on the reliability of the results.

The discussion on indicators often reveals that several aspects are not reflected. The temptation then is to add more parameters to the system. As a consequence, the indicator system won't fulfil its main function any more: simplifying communication. An indicator system full of details is only meaningful to experts and not to the community itself (Erdmenger, 1998). In order to keep the model manageable and to reach a good balance

between desired output and affordable input, in this study the input variables were derived from research results on dominant attributes. There is scientific evidence to expect that these attributes will reflect quantities and qualities in a way as perceived by most people, regardless of age, gender, ethnicity, and so on. The more variables are used, the less information will be added by each new variable. In order to explain the remaining variance, one would have to invest disproportionate efforts.

Uncertainties may exist about the link between appreciation and physical features. As this link is mainly related to the space itself, the appreciation has partly been handled in the field with the help of checklists of parameters, regarding the green space as a whole and within the context of its surroundings. However, such appreciation is very much based on the first impression of an outsider. As each green space has a unique set of social and cultural associations, the appreciation of field workers doesn't necessarily correspond with the way users or inhabitants experience it. An obvious way to cope with this problem is to supplement the information by observations of people's behaviour and reaction. However, such assessments would improve the reliability of the monitoring tool but weaken its workability. Another possibility is to carry out regular follow-ups, checking hierarchical interrelations of the actual use made of green spaces and different kinds of attention of spaces in people's perception. In this way, the instrument's validity and soundness can be measured and lead to the conclusion whether all relevant elements are presented on the map.

A methodological problem in the application of parameters of attractiveness, especially for larger green spaces, is the variation of values within the same space. In an attempt to cope with this problem, average values were used. However, physical spaces are not the same as perceptual spaces. Determination of the space's limits in map-making do not necessarily correspond with the extent of perceived spaces. Coeterier (2000: 205) argues that people handle a combination of criteria: land use, ground and water, historic character, naturalness, and spaciousness. A problem here is that this combination is not fixed and may differ from space to space.

Another point is the assumption that it is impossible to cross a barrier. The use of cost distance analysis doesn't allow for refining the permeability of barriers with a quality appreciation. By assigning different grid values (different 'costs' for passing barriers) to different types of barriers, barriers could be classified, ranging from 'not permeable' to 'easily permeable'. In an impact analysis regarding a future urban park in Antwerp (Van Herzele, 2001a), criteria for traffic intensity, traffic speed and road width were added to the model. This exercise led to the conclusion that the definition of barriers should ideally be adapted to the functional scales.

The model as it is presented here is designed for application on functional levels beyond the neighbourhood level. Applications on this level are also possible but require a range of refinements. For example, the central points of statistical sectors (corresponding with neighbourhoods) are used as a parameter for the calculation of the number of inhabitants who are living within a certain distance from green spaces. If this point is not situated within a certain distance from a green space, all inhabitants of the same

neighbourhood are thought to live out of reach of the same green space. On the scale of this study, this simplification of reality might be reasonable, but on more detailed scales other approaches (such as a division in sub-sectors) have to be applied. Another simplification is the assumption that the green spaces can be entered from all directions. While the dwelling place may be located nearby a green space, the access points may be far away. The chance that real distances might be much longer than has been assumed in this model particularly appears when green spaces are quite large in relation to their distance. Then the location of access points should be taken into account.

Besides technical considerations, a more fundamental question in the context of the research objectives is whether the model outcome is in a format that can be used for implementation in policy. The results have shown that the method can provide a clear and easily understood picture of the problems concerning greenspace provision, comparing different functional scales, cities, and city parts. The model allows for monitoring change on an on-going basis and thus identifying trends and impacts early in the urban processes. The effectiveness of policy can be monitored, not only by looking back in the past but preferably by developing scenarios for the future. In this way the indicator system can provide a proactive tool as recommended by the OECD (1997).

In addition, the GIS-model allows for explaining the recorded similarities and differences. Thanks to the combination of quantitative and qualitative urban greening information with social information on a neighbourhood level, the model allows for a better insight with regard to the recorded deficiencies in different parts of the city. Since the analysis can be performed at different functional levels, it can be detected to what extent problems and changes result from conditions and politics on different levels of decision making: local, regional, and so on. As a consequence, measures can be adopted for the spaces' functional scale. The use of aggregated quality groups also allows for relating the results to different policy domains such as traffic, nature, and so on.

For the cities highlighted in this study, scenario simulations do predict that a major decrease of urban green spaces will be a fact in the future. The effects of actions to be undertaken such as de-fragmentation and barrier removal will be insufficient to tackle the growing deficits. The challenge will be to conduct urban dynamics in such a way that with a decreasing quantity the quality of the green spaces will increase. Quality of the green spaces will take a central position in future urban planning. On the other hand, increasing urban density tends to involve the loss of green spaces attractive to informal recreation and children's play such as derelict land and other 'left-over' areas.

The loss of variety in qualities is in particular an ongoing trend in agricultural landscapes of the urban fringe. There, the cultural, natural, and spatial values as well as the internal accessibility (footpaths) are increasingly under pressure. The physical features of those open spaces are often not determined anymore by the people who are working in it on a daily base. While traditional connections are disappearing, new connections have to come in place. The landscape of tomorrow will be a more planned landscape, where landscape planners will have to play an increasing role so that high

quality landscape character and local distinctiveness can persist (Gustavsson, 1999). As the sense of connection plays a central role in the perceived liveability of places, the active involvement of citizens in the (re)-defining of the qualities will be a task for today and tomorrow. More participation in the continuing process of making plans will help people to deal with change and restrengthen the sense of connection.

The Greenspace Monitoring Tool continued: analysis, representation, and exploration

The major originality of the research lies in its attempt to span a bridge between empirical findings and planning practice. Plenty of research results exist on the public perception and appreciation of nature, forests and parks. This information is, however, seldom in a format, which can be used for implementation in policy and planning. In the recent past this problem was already dealt with by site planners in the UK such as Bentley and co-workers (1985) and Anne Beer (1990) who have translated empirical findings into practical recommendations for the planning and design of spaces for people.

In our study an attempt was made to make scientific evidence operational in the format of an integrated monitoring tool that can easily be used by local authorities. Many possibilities exist for further extending the linkages, for example, with other major themes of urban liveability, such as healthy air, traffic liveability, street scenes, etc. (Van Herzele, 1998). In addition, the approach offers the potential of developing some interesting applications in urban planning as well. For example, the space-related approach can serve as a starting point for the design of a coherent green structure within which the main qualities can be experienced and which will ensure that green spaces are well distributed and connected and a variety of qualities is provided.

The Greenspace Monitoring Tool was developed further within the framework of the Environment and Nature Report for Flanders, MIRA-T 2004 (Van Herzele et al., 2004), the EC-funded 'NeighbourWoods' project (Van Herzele, De Clercq, and Wiedemann, 2005) and very recently, within the framework of the Spatial Structure Plan for Antwerp. It is suggested that these recent developments have not only refined the tool technically, and have extended its applications, but that they have also widened the traditional perspectives on the provision of greenspace with some relevant social questions (for example, on social equity). These issues are indeed important, but analysis alone is not sufficient to do appropriately justice to them. In the next paragraphs I will concentrate on the tool's potential in relation to three important practical aspects: analysis, representation and exploration.

Analysis

Firstly, the continued investigation has enabled the analytical potential of the GIS-based approach to be optimised: important innovations include calculating accessibility

through linking the surface areas gradually with the corresponding distances (Figure 17), and consideration of the actual proportion of inhabitants of a statistical sector who live within reach of a particular green area. In the framework of the Spatial Structure Plan for Antwerp the accessibility of urban greenspace was calculated per housing unit.

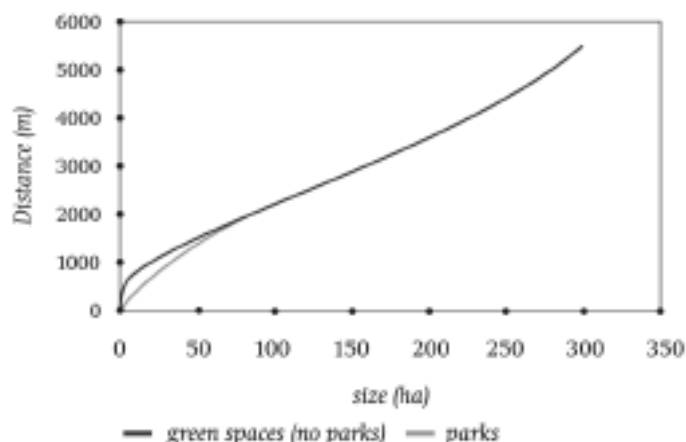


Figure 17: Gradual relationship between the size of greenspace and the distance from the home

These refinements have enabled a more adequate analysis of greenspace provision to be made, and importantly, have also enabled the tool's application to be extended to the micro-scale, including small green spaces sized 0,5 ha and over at a short distance from the home. From a social point of view, this is a significant improvement as the green spaces right on people's doorsteps are those that are likely to be visited and enjoyed on a regular basis, and hence, will contribute the most to the quality of urban life (Beer, 1990; Grahn and Stigsdotter, 2003).

In addition to the question of greenspace provision, there was also dealt with the issue of distribution: 'who gets what where?' This refers to the kind of people likely to benefit the most from the urban greenspace: urban or suburban residents, low or high-income groups, and so on. In this respect, some striking correlations were found between the average income of a neighbourhood and the proximity of parks as well as between income levels and the qualities of those parks (Van Herzele et al., 2004). For example, Figures 18 and 19 show the percentage of the urban population divided into five income classes³⁷ with no, one, two or more green spaces within a distance of maximum 800 metres. A positive correlation was calculated (Antwerp: + 0,98; Ghent: + 0,93) between the average income of a neighbourhood and the accessibility of two or more green spaces. A similar but negative correlation was calculated between the average income of a neighbourhood and the absence of greenspace. It was concluded for four out of the six cities investigated: the poorer the neighbourhood, the greater the chance that there is no green in close proximity, and the wealthier the neighbourhood, the greater the chance that there are two or more parks within reach.

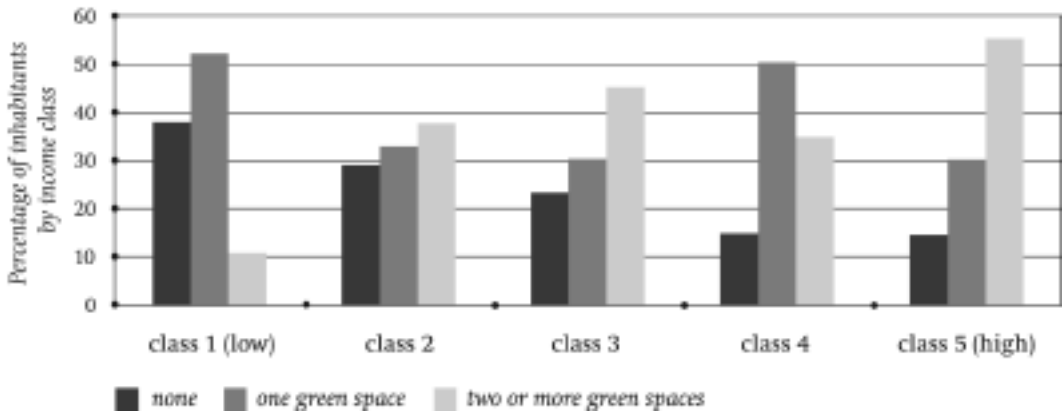


Figure 18: Distribution of incomes and the number of green spaces within reach in Antwerp (Source: Van Herzele et al., 2004)

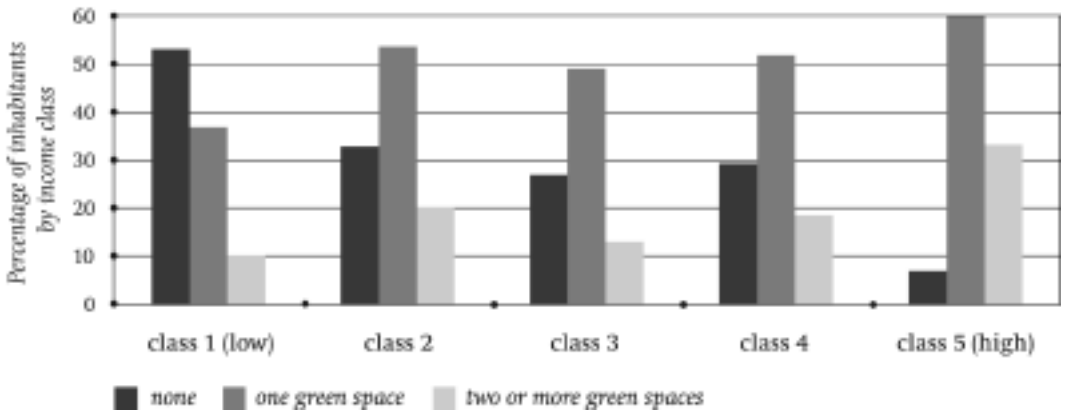


Figure 19: Distribution of incomes and the number of green spaces within reach in Ghent (Source: Van Herzele et al., 2004)

It was also shown that poorer neighbourhoods more often rely on informal environments, that are spaces not specifically set aside for public enjoyment such as waste land, land alongside waterways and tracts of ‘encapsulated’ farmland. Although the experiences available in those informal areas are often preferred to conventional public parks (Harrison and Burgess, 1988), their social value has received little recognition within contemporary planning discourse so far. This tends to mirror the concept of the ‘compact city’ and its related rhetoric of ‘high-density development’.

Representation

Secondly, the GIS-based practices have helped to construct an understandable representation of the situation. For example, in the ‘Urban Environment’ chapter of the

Environment and Nature Report for Flanders (Van Herzele et al., 2004) diagrams were included of the six Flemish cities and towns assessed, showing the percentage of inhabitants who have at least one green space within reach at five different functional levels (Figure 20). In addition, maps were included, representing those areas that are currently deficient in the provision of greenspace at the neighbourhood level (400 m or less) and the quarter level (800 m or less) respectively, and at both of these levels (Figure 21).

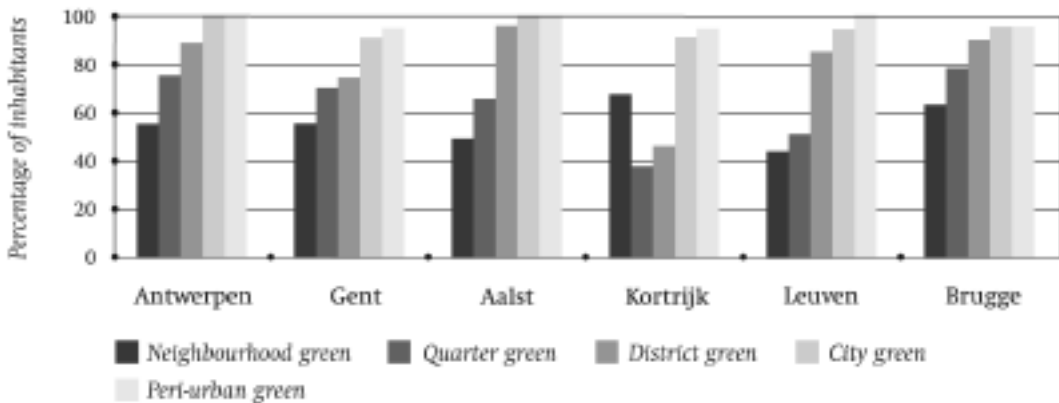


Figure 20: Accessibility of green spaces in six Flemish cities and towns: percentage of the urban population with at least one greenspace within reach at each functional level

(Source: Van Herzele et al., 2004)

The representations were meant to be highly informative to central and local policies. For example, the maps in Figure 21 not only localise the areas of deficiency at the neighbourhood and quarter levels, but they also indicate that the deficiencies often culminate in the same parts of a city or town. However, there is more to this representation than just describing the situation. As Harley (1992) puts it, maps are practices of knowledge-power and much of the power of the map, as a representation of social geography, is that it operates behind ‘a mask of a seemingly neutral science’. Yet, the fact that these maps were published in a scientific report bestows them with an air of neutrality and objectivity. However, they are not so value-neutral. As an abstraction of reality, cartographic ‘facts’ bring some aspects to the forefront and leave other aspects in the background. As such, through selecting and emphasising, they may have some political effect.

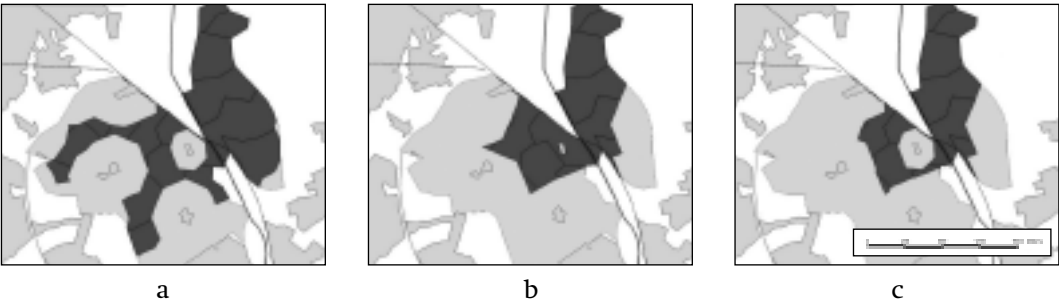
In this example, the provision of greenspace was measured at five functional levels in the spatial analysis (from the neighbourhood to the peri-urban) and was represented in the form of diagrams (Figure 20). However, only two of these levels were chosen for representation in the form of maps (Figure 21). In this manner, by singling out those green spaces in close proximity to the home (i.e. for weekday use), some distortion of the hierarchy of functional levels was created (see Part II). What is more, the maps imposed a problem-directed view on the situation. This was definitely the purpose when representing the areas of deficiencies in red. But it was particularly the sequence of maps

within a set that sought to represent the ‘problem’ as one culminating in the last (c) map: the areas having neither neighbourhood green nor quarter green.

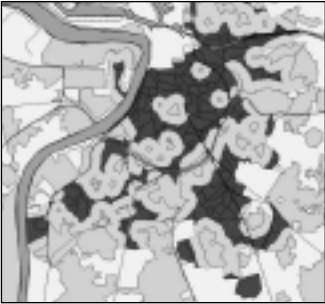
That the above tactic of representation might actually work in decision-making soon became evident in a concrete example. In the framework of the Spatial Structure Plan for Antwerp, the planning officials in charge of the Plan used the set of maps in Figure 21 in their attempt to convince political representatives of the need to tackle the deficiencies of greenspace for weekday use first, and to include the ‘red areas’ of the (c) map as priority zones for the creation of new green spaces. A two-step approach was proposed: firstly, to take advantage of the existing opportunities; secondly, to see where problems remained and to create new opportunities in those places (by removing barriers, creating inner spaces). It would be the ultimate objective to make all the red on the (c) map fade away.

Representation may have some unintended effects as well. For example, in Figures 21, the maps have different scales owing to layout, which implies that the problem areas look larger in smaller towns (for example, in Leuven). Such an effect might bias the comparison of cities and towns. That the comparison itself might also lead to different interpretations was shown after the publication of the diagram represented in Fig. 13 (Part II) in the Flemish newspapers. Surprisingly, public officials in Antwerp expressed concern about the relatively good results for Antwerp, since it was considered that this information might divert political attention from the enhancement of its greenspace provision. Conversely, in Kortrijk public officials were wondering uneasily what the reason could be for the bad results, and political representatives were even called to account about the unfavourable situation on regional television. The practice of comparing cities and towns through a criteria-driven approach may stimulate competitive behaviour, and, as Healey (1997: 235) notes, such an approach may marginalise those who cannot jump to the criteria. The example of Kortrijk, moreover, was also shown to be a matter of selective representation due to the elimination of the neighbourhood level in the analysis. In the latest Environment and Nature Report (MIRA-T 2004) the neighbourhood green was also measured and it was even found that Kortrijk achieved the best result (Figure 20).

Aalst



Antwerp



a



b



c

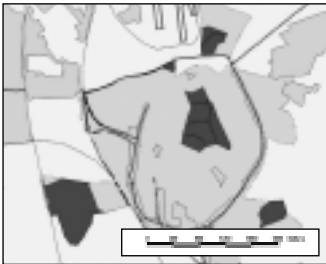
Brughes



a



b



c

Ghent



a



b



c

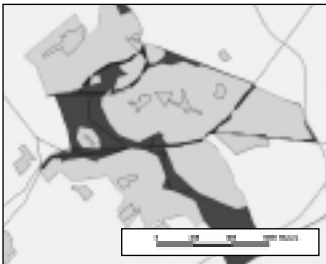
Kortrijk



a



b



c

Leuven



Figure 21: Areas of greenspace deficiency in six Flemish cities and towns: (a) no neighbourhood green, (b) no quarter green, and (c) neither neighbourhood green nor quarter green, in each map represented in red (Source: Van Herzele et al., 2004)

Exploration

Finally, the third important practical aspect to the geographical approach is the exploration of, or thinking through ideas, which is not necessarily a linear process. The building of a common vision is happening increasingly in reflexive and proactive ways in the interaction between the different professional groups and multiple stakeholders involved. GIS-based practices are increasingly becoming an integral part of the dynamics that develop in such an exploratory environment. Therefore, it was also the purpose of the Greenspace Monitoring Tool that it should not be confined to baseline measurement, map production and representation, but that it should also inform planning more directly on how it could make a difference.

This aspect was developed in a virtual exercise: a rapid comparative assessment of different locations for the creation of a peri-urban forest in Antwerp (Van Herzele, De Clercq, and Wiedemann, 2005). By evaluating the locations with regard to their positions in relation to residential areas, it was demonstrated how the tool could foster discussion on questions about who benefits from planning outcomes: the urban or suburban residents, low or high income groups, and so on. It is suggested that this explorative approach allows different questions to be asked without putting first any single optimal perspective. This relates to the concept of ‘geographic visualisation’ (Crampton, 2001), which emphasises data exploration (a process) over data presentation (a product), and as such is a questioning or sense-making activity, rather than an answer-delivering model.

From a methodological point of view, the model is thus much more than the databases it contains. Changing perspectives and views can be easily implemented by adapting the model for other kinds of parameters or standards. The space related construction of the model allows for integrating local knowledge and interpretations. The potential of the Greenspace Monitoring Tool in an explorative environment is currently being tested within the framework of the Spatial Structure Plan for the city of Antwerp, for example,

as a proactive way of assessing the effects of possible options of urban development (housing, traffic, etc.) from multiple perspectives, by means of GIS-based simulations. For instance, a given scenario of urban infill with new housing estates may decrease the available greenspace, while at the same time it increases the need for it. GIS does not only make images readily available during planning discussions, it is also a means of exploring visually what is being imagined, proposed or planned within the context of what currently exists.

INTERMEZZO II

From policy rhetoric to practice: the role of discursive interaction

Introduction

In Intermezzo I, I have demonstrated that normative prescription (performance targets, ‘best practice’, and quantitative standards) may have an important role to play in facilitating the implementation of a particular policy on the ground: by making ‘abstract’ policy discourse easier to imagine, to translate into action programmes, and to address technically. It was acknowledged that factual evidence and normative prescription are not merely material resources for analysis, but that they are also drawn upon by planners to shape problem definitions, and so advance their positions and forward their ideas.

In Part II of this thesis, I have presented the Greenspace Monitoring Tool as a ‘touchstone’ for current and future policy by comparing greenspace provision between and within cities and locating deficiencies needing to be addressed. The analysis has provided a store of factual information that is appropriate to put into normative prescription regarding to what needs to be done. This tool is a prime example of how ‘facts’ were used as a material base both in the spatial analysis of greenspace provision and in its representation in the Environment and Nature Report, which aimed to provide the basis for environmental policy in Flanders.

Up to this point, the planner was at the very centre of this thesis: the key actor with the power to formulate the problems, set the terms in which a solution would be sought, and direct public attention to issues that planners consider important. However, it was also acknowledged in the Introduction that planning is no longer a privilege of professionals and elected representatives, but increasingly a dynamic process of interaction with different stakeholders. This trend is illustrative of a general shift from primarily state-initiated regulatory strategies towards new styles and practices of governance, in which polycentric

networks of actors appear to aim at the building of a common vision (Van Tatenhove and Leroy, 2003).

Related to these developments, the traditional organisational forms and routines of formal government are increasingly being challenged. Healey et al. (2003), for example, have criticised the traditional 'service delivery' model of government, which typically divides policy agendas into 'sectors', since this model inhibits the integration of policy attention around 'place qualities' and makes it very difficult to ensure inclusion of the opportunities and ambitions of residents and others with a stake in a place.

It is suggested here that, together with the emerging 'network society' that now forms the socio-spatial context of planning practice (Hajer and Zonneveld, 2000), the growing recognition of the need to integrated area strategies and place-focused approaches has led to the building of new connections between governmental actors, business and citizens. They all are increasingly acting as inter-dependent stakeholders in multiple arenas of planning negotiation. In general the involvement of these actors has changed from reactive to more reflexive and proactive ways of participation, and from legislative procedures towards extra-legal processes (Van Tatenhove and Leroy, 2003). It has become common practice to involve a great diversity of actors, who bring to the table varying perspectives on the situation to be explored.

In the last section of Part II, I have demonstrated that not only can the GIS-based applications provide a powerful tool for analysis and representation, but they can also play an integral part in the dynamics of planning itself. This is to explore spatial datasets in an on-going process, playing with multiple interpretations of the data, rather than representing stable, known information.

In this Intermezzo, I start with placing these evolving applications of GIS in the context of recent debates on the urban environment. While GIS-based practices have considerable potential for capturing physical realities (size, distance, population), they are, however, less good in dealing with the more subjective aspects of greenspace provision. Therefore, in the next part of the Intermezzo, I will point to some limitations of the geographical approach. Finally, in the last section, and as an introduction to Part III of this thesis, I will draw attention to the need to involve those people who actually use the urban 'green' in exploring the special qualities and characteristics that planning should support.

The revival of quantitative norms in greenspace planning and the role of GIS

The in Part II described GIS-based applications are particularly relevant in the context of the contradictory arguments that now appear to be emerging within governments' own environmental agenda, involving advocacy of the compact city concurrently with calls for a 'greening' of the urban environment (Nicol and Blake, 2000).

On one hand, there is a growing recognition that natural greenspace is vital to the urban quality of life and hence, the lack of greenspace is considered as a principal problem that planning is supposed to overcome. This was also supported from recent surveys in Flemish cities and towns, pointing to a 'green' environment as a major factor when people decide where to live (Tratsaert, 1998; Verhetsel, Witlox, and Tierens, 2004). It was, however, actually the reality of urban outflow that has provided a strong argument. The 'facts' related to this phenomenon not only got negative attention in the media, but they were not in line with, and even contradictory to the targets of the Spatial Structure Plan for Flanders (1997). It was thus not surprising that the actual migration trend was placed at the centre of an informal but still influential story line that has emerged since the late 1990s and propagates that 'the cities are in need of greenspace as to prevent people from leaving them'.

However, the new discourse was not simply a reaction to the prevailing migration trend. Although there is still a significant outflow of families with children from the cities, the trend has decreased in recent years (De Corte et al., 2003). Nevertheless, there is still a growing attention to (urban) quality of life more generally, including people's health and wellbeing.³⁸ In addition, since the mid-1990s the concern with nature has been gradually included into the local political agendas (see Intermezzo II). Examples of significant projects for the creation of new parks in densely built environments are the 'Green Valley' in Ghent and 'Rail-North' in Antwerp. Not a negligible factor, moreover, is that creating greenspace may act as a prestige project for local policy, and as Crouch (1994) noted, even as a marketing promotion feature, presenting the city as attractive for investment. It appears indeed that not one single discourse has brought about that greenspace is now at the beginning of gaining a stronger position in urban planning and design.

On the other hand, spatial policies such as the Spatial Structure Plan for Flanders (1997) are promoting a densification of development within the urban fabric as a means of protecting the open spaces in the countryside. In this context, it is important to recognise that urban residents who live at increased density will still require adequate greenspace within walking distance if a reasonable quality of life is to be enjoyed (Nicol and Blake, 2000; Beer, Schildwacht, and Delshammar, 2003). In addition, accessibility should not be approached merely in terms of a person's capacity to move from the dwelling place to the green areas (on foot or using forms of private and public transport), but also in terms of residential mobility. Demographic studies in large cities in Belgium have found that particularly the highest income groups are leaving the cities (De Corte et al., 2003). As a result, cities become increasingly 'segregated', whereby the middle and high-income groups tend to live in the suburban 'green' fringes and the lower income classes live in the urban core (Loopmans, 2002).

Against this background of the contradictions between the 'compact city' and the 'green city', a renewed interest has emerged in open-space planning standards, as developed in the 1970s and early 1980s (see Part II, and also: Grahns, 1986). For example, in the Netherlands the standards for urban recreation proposed previously by the Provincial

Council of Zuid-Holland (Stedelijke Recreatie, 1978) were taken over by the Ministry LNV (Peters, 1999). Likewise, Dutch standards (Pannekoek and Schipper, 1975) were proposed for Flanders by the forestry administration in their Long Term Greenspace Plan (1993) and were developed further in the Environmental Nature Report for Flanders (MIRA-S 2000, MIRA-T 2004). Also in the UK open-space planning standards are gaining a renewed attention, for example those proposed by English Nature (2003), English Partnerships and the Housing Corporation (Llewelyn-Davies, 2000).

What has facilitated this revival of standards of greenspace provision? In the next paragraphs an attempt was made to explain this trend in the context of city planning practice. First of all it was notable that from the 1980s onwards, in many countries these standards of provision subsequently went out of fashion. On the one hand, privatisation and local authority cost cutting became common from the late 1970s onwards, not least in the UK (Beer, Schildwacht, and Delshammar, 2003). More fundamentally, there was also the increasing criticism against the strictly 'quantitative' approach (Van Herzele and Wiedemann, 2003b). In practice, it appeared indeed that where residential development took into account official planning standards it often neglected to subsequently provide those green areas with an attractive design (Husslage, 1996). The decreased interest in meeting those standards was also linked with an increased level of confusion as to the nature and role of greenspace in cities - was it an aesthetic issue, an ecological issue or perhaps something more? - a situation that became further complicated as sustainability questions came to the fore in relation to city planning (Beer, Schildwacht, and Delshammar, 2003).

While this confusion persists today, it appears that the new attention for urban quality of life - including the city dwellers' health and wellbeing - is providing a common theme and an appealing story line that might link together many different perspectives on greenspace provision. Moreover, the new story line provides the urban green with a meaning that appeals to how many people experience it in their everyday life.

In the Environment and Nature Report for Flanders - the chapter of 'Urban Environment' (Van Herzele et al., 2000) - the quality of life in the city was linked to both the accessibility and the attractiveness of those spaces. In this context, five basic principles were proposed: Citizen based; Functional levels; Preconditions for use; Variety of qualities; Multiple-use (see Part II). This conceptual framework was also to suggest that the relationship between quality of life and greenspace provision cannot be captured with (quantitative) planning standards alone. Yet, the quantitative aspects of the urban green tend to receive most attention. For example, our article in Flanders' prime planning journal (Van Herzele and Wiedemann, 2003b) has evoked extensive media attention shortly after publication. However, this was with regard to the quantitative results, the more 'objective' facts of greenspace accessibility, rather than to those reporting on the attractiveness of greenspace provision. It was striking indeed to reveal that one third of the urban populations have no greenspace for frequent use, that is within a distance of 800 m. In those people's situation, the quality of the existing greenspace resource is, of course, not an issue.

In parallel with the increased attention for the supply of sufficient green spaces supportive to our urban living conditions, central and local governments are currently investing greater efforts in producing good quality, public data on greenspace provision. It is notable in this context that hierarchic systems of greenspace standards may provide a suitable framework for the collection and interpretation of these data. In addition, modern GIS-techniques may facilitate the analytical work involved. But there is more to these quantitative standards than just being a usable framework for analysis. As it was suggested previously, the revival of quantitative norms should be seen in relation to the contradiction between the 'compact city' and the 'green city' that often forms the socio-spatial context of urban planning today. This contradiction, together with the struggles and uncertainties carried with it, tends to rouse the desire to monitor the provision of greenspace properly. Thanks to GIS-techniques the information on greenspace provision - represented in the framework of normative standards - can be easily acted upon and deliberately argued in the face of the 'hard' sectors such as housing and industry, which typically pursue their claims in terms of employment figures, building needs, flow of traffic, and so on.

GIS fits well with this quantitative turn in planning discussions and, by its very nature it gives the user a predisposition to frame situations from a quantitative perspective. GIS-based techniques of notation, computation and calculation, procedures of assessment and forms of expression and representation form a set of technical practices, which together build a particular form of knowing and impose a particular way of understanding a situation. As Richardson and Jensen (2003) argue, commonly used techniques of analysis construct particular forms of knowledge, providing legitimacy for particular spatial strategies, whilst marginalising other ways of understanding policy problems.

In using the Greenspace Monitoring Tool, the emphasis is typically on the material realities, focusing on those physical features of greenspace that can be measured easily and assessed against quantitative standards: size in terms of hectares, distance in terms of metres or time units, quietness in terms of statistical noise levels, spaciousness in terms of spatial fragmentation, and so on. All of these physical features come to construct the 'facts' of the situation. But there is more to the construction of facts. This also involves the 'transposition' of these facts into well-defined and orderly systems. Data are categorised in geographical scales, area units, statistical sectors, income groups, etc. This systematising logic helps to build a manageable situation, suggesting control over the content of areas, a concept of 'knowing' the urban greenspace. At the same time that it enables, however, it also limits the questions that can be asked about these spaces.

Limitations of geographical approaches to the perceptual qualities of greenspace

In this section, I will discuss the extension of GIS-applications with the assessment of the less tangible, subjective aspects that refer to the perceptual qualities of green spaces. I

start with describing briefly the theoretical base upon which this assessment is made and then discuss the limitations of two different methods of survey, as well as the implications of the systematised approach itself.

Since the 1960s a growing body of empirical research into human-environment relationships has offered insights into how people look at, make sense of, and feel about their living environment. The main interest of this research has been the identification of the perceptive attributes of the environment and the understanding of the individual's cognitive and affective responses to them. These studies often build upon psychophysical techniques where photographs of a variety of environments are shown to large numbers of people to determine the main describing attributes of qualities of places.

Interestingly, a variety of human-environment studies have shown that people's perception and appreciation of the environment is directed by a number of 'dominant perceptual attributes' (Coeterier, 1989), which appear to be generally valid. For example, environmental attributes such as diversity, unity, naturalness and spaciousness have emerged in a variety of studies as related to environmental preference. Dominant perceptual attributes have been identified in the perception of landscapes (Coeterier, 1996), of urban parks (Grahm, 1991; Berggren-Bähring and Grahm, 1995; Pronk, de Boer, and Boerwinkel, 1997), of nature and forests (Kaplan and Kaplan, 1989; Axelsson Lindgren, 1990) and of built environments (Acking and Sorte, 1973; Nasar, 1998; Coeterier, 2000).

The remarkable consistency of cross-cultural universal patterns in people's preferred environments has brought into perspective some promising applications for systematised approaches, particularly the categorisation (and ranking) of the attractiveness of particular green spaces according to dominant perceptual attributes. With the Greenspace Monitoring Tool an attempt was made to make these perceptual attributes operational when comparing greenspace qualities in a city wide and national context. To this end, a survey method was developed which could consequently link these abstract attributes to the appreciation of the urban green spaces.

While this application might be most helpful in drawing attention to the general qualitative aspects of the provision of greenspace, it does not follow an obvious trajectory. While the empirical research in the field of human-environment relationships typically takes the direction from material reality to abstract qualities, the process is now the other way round: the perceptive attributes which previously have been abstracted from time and place now need to be translated into the physical features of localised spaces.

The uncertainties about the link between appreciation and physical features were discussed in Part II. There is, however, another, more substantial problem with this approach. Human-environment studies have acknowledged that the appreciation of a landscape is determined by more than dominant perceptual attributes alone, and that there are also social, symbolic, ethical and affective aspects (Coeterier, 1989). People experience the green spaces they use, not simply as a set of physical features, but as a part of their daily life: as 'places'. That each place has a unique set of social and cultural

associations, which influence its appreciation, has been demonstrated by interpretative studies focusing on the concepts of 'sense of place' (often used by designers and planners) and 'place attachment' (used by environmental psychologists). In practice, this means that fieldworkers, who make their judgments with the help of checklists of parameters and work independently from these local associations, will not necessarily arrive at an evaluation that corresponds with how users and inhabitants appreciate a given space.

It could be argued, therefore, that instead of attaining the information deviously through the evaluation of physical features (the expert-based survey), this should be done more directly by questioning the local people themselves: this is a survey that is entirely based on locally derived, 'subjective' appreciation. This approach has been followed in a number of surveys undertaken in Stockholm (the 'sociotope' mapping by Ståhle and Sandberg, 2002), and in Helsinki (the 'social value maps' by Tyrväinen, Mäkinen, and Schipperijn, *forthc.*). These surveys largely draw on questionnaires (and interviews) as a means of collecting data on the public use and perception of urban green spaces, which were then categorised under dominant perceptual attributes.

The above survey method - although comprehensive in terms of workload - has the potential to reflect more realistically the public's appreciation than is the case with expert-based investigation. Yet, what could be viewed as a strength could also be turned easily into a weakness. Unlike the expert-based approach, using a standard protocol in field survey, the outcome of public surveys do not necessarily provide an insight in what brings respondents to make their judgment about a given perceptual attribute in a particular space. When it is the aim to actually validate locally derived information in planning practice, the connection between people and space should be made transparent. Collecting the information is not enough in itself - it is making sense of it that is important (Beer, 1990: 215).

A further problem needs to be considered. Environmental perception and appreciation are not just related to the valued qualities of the place itself. They also involve the memory of past experiences, the experiences available to people on the way to and from the site, and the presence of other people in the site (Lynch, 1960; Beer, 1990). It follows, therefore, that spaces may be valued as part of a much wider environment. Moreover, it appears that public spaces in the city are linked imaginatively to each other, and are experienced as part of the totality of the city, not something separate (Harrison and Burgess, 1988; Boyer, 1995). On the other hand, people's appreciation of a specific space may be just limited to their favourite routes and places within a much larger space. People do not tend to think in terms of a well-defined geographic space, that is the same for everyone. Rather there are many different 'spaces', each connected to people's particular values and behaviour, past experiences and social relationships. With the survey approach the difficulty arises that the many different 'perceptual spaces' experienced by people do not necessarily correspond with definable geographical spaces on the map.

This points to a more fundamental problem, which relates to the systematised approach itself. The practice of creating more or less manageable pre-set categories and rankings is

a unifying process. However, how people understand their environment cannot entirely be transposed into closed orderly structures of classification and measurement, within the boundaries of geographical spaces. It is a 'horizontal' approach, which considers only the uniform or general characteristics of a situation.

While the systematised approach may provide a pragmatic response to apparently complex realities and as such give a preliminary idea of the conditions in different places, it is concluded here that it may only provide a partial picture of these conditions, not sensitive enough to the needs and aspirations of diverse groups. In consequence, it is also a less appropriate approach if planning aims actually to ameliorate these conditions. So planners should take a step back to here-and-now and come to understand why people do perceive a given space in a particular way. Therefore, appreciation is needed of the underlying values and the social processes involved in people's perception.

Conventional methods of social survey based on questionnaires are widely acknowledged to be an inadequate mechanism for revealing socio-cultural values (Burgess et al., 1988b). Qualitative methods are more suitable for exploring people's values about and experiences of open spaces because such approaches are grounded in the contexts of people's daily lives (Burgess, 1984). Interpretative studies in the field of 'social constructionism', have offered more insight on how the attribution of preferences and meaning is generated in interaction not only with the place, but also with variables of social and cultural context (for example, Burgess, Limb, and Harrison, 1988b; Greider and Garkovitch, 1994; MacNaghten and Urry, 1998).

Implicit in much of the research into human-environment relationships is the emphasis on discovery and interpretation of the construction of preference and meaning, rather than on 'place creation', that is the spatial practices (the activities in the park, how infrastructure is being used) and material realities (the lay out of a park, the choice of tree species) that follow from those constructs. In consequence, where the aim is to enhance or to create meaningful places, qualitative studies do not necessarily provide guidance to effective site-specific action.

In the next section, I will argue that if planners aim to identify those attributes, which a future park should have for supporting people's preferences and needs adequately this can only be achieved by actively involving people in the plan-making itself. This would require a more dynamic approach, which is explorative rather than descriptive and has the potential to facilitate a meaningful discussion on the different options at hand, with all concerned, rather than to deliver answers to pre-formulated questions.

Exploring the perceptual qualities of greenspace through discursive interaction

In this section I draw on open-ended comments about photographs of different physical settings (Figure 22) to develop the above argument further. The photographs were used as

stimuli in the course of ten individual semi-structured or focused interviews (Merton, Fiske, and Kendall, 1990), which in turn formed a part in the multiple sources of information that were used for data collection in the framework of the empirical study in Part III of this thesis.

All interviewees had participated in brainstorming sessions aimed at developing a vision on the creation of a new city park in a former railway yard in Antwerp. The purpose of the interviews was to gain a closer insight into the underlying motivation that formed the basis for workshop participants' opinions with regard to the future park's qualities. The principal question was: 'What do you imagine the future park should look like?' The different photographs were meant to stimulate the expression of personal opinions and feelings about the area.

The interviewees typically started to look at the photographs with an appreciative eye and referred to them when describing what they liked or disliked. By doing so, some of the settings were immediately rejected, for example, the square (h):

'Not this one, with the pavement, no, this is not really the image of a 'park'. It is really dead, I mean there is no green. Add a few flowers here and there, or a fountain, so to brighten it up a bit. Really, it is so...'

However, the image of the park was not only shaped by preferences alone. The settings were constantly tested and judged against how the interviewees expected that these would work in the given situation of 'their' future park. The naturalistic setting (b) and the derelict land (e) in particular encouraged a great variety of comments. For example, (b) was much preferred, but it was seriously doubted whether it would be appropriate to the given situation:

'This is really beautiful, but it is nature. To what extent might it be possible to make the artificial look like the natural? I cannot imagine!'

In some way, the interviewees let themselves and other imagined users interact with the setting and described the different things they were seeing as if they were actually happening. For example, in the case of (b), some reactions were positive about the little birds that would likely be attracted and give them 'an impression of animals', but most of the imagined events were negative: people were trampling the edges of the natural pond, children fell into the pond, dogs were swimming in it, too many ducks were fouling the water which then came to stink, and so on. Similarly, the derelict land (e) evoked positive feelings of freedom, adventure and memories of their childhood. Some interviewees saw children playing creatively with the railway beams, but most saw accidents waiting to happen and residents leaving their garbage bags there. All these negative consequences changed their preferences and they started to reassess the image they would favour.

In their study on rationality in decision-making, Kornov and Thissen (2000) make a distinction between what one 'likes' (preferences) and 'sees' (expectations). Both

expectations and preferences define how a person participates in decision-making. What people expect or see is not only affected by their norms and values (that is, what they would like), but also by their past experiences, by the availability of information and examples of similar spaces and, not at least, by relational aspects of the environment: those inhibiting or facilitating the development of social relationships with others.

Returning to the photographs: in the end, all of the interviewees selected the setting of an open grass area (d) as their favourite image of the park. However, it would be too simple to conclude that this setting meant the same thing for everyone. Rather than constructing 'one image' there were several different versions, which differed from person to person, as the following series of quotations illustrates:

- *'An open park will interconnect the currently isolated neighbourhoods with one another.'*
- *'An open park is easier to maintain.'*
- *'The women can unroll their carpets here and watch the children nearby.'*
- *'A place where I can breathe and look a bit further.'*
- *'Openness provides social control.'*
- *'The historical form of the railway yard should be retained.'*



a



b



c



d



e



f



g



h

Figure 22: Photographs of different physical settings

(Source: Photographs d and e by Patrick Dictus ; b, c, and g by the author; a, f, and h by Hardwin De Wever)

People react to and experience environmental settings as the places in which their daily or occasional activities take place (Beer, 1990: 145). When formulating their preferences and expectations about what they would like in the future they are usually limited to their own experiences, whether these experiences are direct, or indirect (that is at second hand through the media of hearsay). Moreover, individual concerns, social relationships and responsibilities set the boundaries within which they construct their image.

The variety of experiences and their 'situational' nature make it difficult for the planner to think clearly about how to plan and design a particular greenspace that connects with everyday life and people's real concerns. Individual inquiry can only provide the planner with fragments of the desired image and gives no guidance on how to assemble these fragments into a meaningful combination that makes sense to most of the people affected. Instead, exploratory processes are needed in which participants, together with their perceptions, problems, and ideas for solutions, meet and interact.

Images are not fixed or given: through discursive interaction people can share, test out and develop their views with others and build shared meanings. Preferences and expectations are subject to argumentation, or as Beauregard (1995) has argued: 'Discourse shapes our sense of the future through the public negotiation of imagined futures.' When people engage in an interactive dialogue, preferences and expectations can diverge and develop along with perceptions of problems and solutions (Forester, 1998; Innes and Booher, 1999). In an exploratory process of interaction, people 'come to see' familiar elements in new ways, to see possible relationships between them, and to encounter unexpected ideas.

Given that people's understandings are both 'situational' and 'transformative' in nature, it is argued that research should concentrate on discursive interaction or talk itself as a material basis of planning practice, rather than factual evidence. As is the case in a planning situation, people's preferences and expectations may be highly context-dependent, open to rethinking and alteration and hence unpredictable, so more emphasis should be given to the underlying considerations and the paths of reasoning rather than to their results. As planning is a dynamic processes this approach would provide better perspectives to practical application.

Part III of this thesis presents an empirical study, which builds on the above ideas when focusing on the actual dynamic of the construction of meaning in discursive interaction. It draws on the case study of the visionary process for an urban development project in a 24 ha former railway yard in the north of Antwerp. The case presents a unique example of how an active strategy of internal and external negotiation, together with the early involvement of public actors, has led to the consensus for creating a new 17 ha park in that area. Part III deals with the informal workshops involving 'key actors' from the public, which were organised in parallel and interactively with the formal visionary process. A full description of the process - including how the Greenspace Monitoring Tool has supported a 'green' scenario in the negotiations on land use decisions - as well as a view on the approach of participatory planning for large-scale urban greenspace, was given elsewhere (Van Herzele, 2001b).

PART III

Local knowledge in action: valuing non-professional reasoning in the planning process *

Introduction

Planning and acting on questions of physical space have increasingly become socially embedded practices, shifting from serving an abstract 'public interest' to actively engaging the public. Central to this approach is a greater emphasis on the exchange of knowledge and the development of ideas through communication with users, residents, and community groups. With the communicative planning approach gaining ground, the role of non-professional forms of knowledge and understanding also becomes an important issue. Contemporary practices tend to be more open to a wider variety of inputs than more traditional forms of professional expertise. Great attention is currently given to means of organization such as platforms and rules of discussion that help participants to express themselves. At the same time, however, the question of substance - that is, the knowledge, arguments, and ideas used to justify decisions and actions on the ground - is often overlooked. As a result, in many cases the public's potential for challenging established views and reformulating problems in ways that allow creative ideas and solutions remains largely underused.

The emphasis on organization over substance can be related to uncertainties about the role of non-expert knowledge and how to reconcile this with expert forms of knowledge in constructive ways. Difficulties about these questions often begin with the fact that process facilitators encounter fundamental differences between planning officials and the public in the way they understand and value local environments. These differences, if insufficiently understood, may result in constraints on fruitful dialogue and constructive problem solving, as has been shown in many examples of planning practice throughout

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Europe (e.g., Greenhalgh and Worpole, 1995; Malbert, 1998; Enserink and Monnikhof, 2000; Van Herzele, Collins, and Tyrväinen, 2005). From cases observed in California, Campbell and Marshall (2000a) described how predicating decision-making based on non-technical knowledge remains a difficult issue. Among other things, they noticed a lack of 'interpretative frameworks' available to planners to help them to better understand the different forms of non-expert knowledge and views.

This article aims to contribute to the planning practice that actually makes sense of local knowledge when working out what action to take in a particular situation. It first builds on theoretical insights into the structuring or 'framing' of a situation as a direction for action. At the same time, these concepts take into account the dynamics of cognitive processes and the embedding of cultural meaning and experience.

It then uses the case study of an urban renewal project in Antwerp aimed at creating a new public space in the city. This project belongs to the interdisciplinary field of urban design, merging particular aspects of urban planning, architecture and landscape architecture. The article deals with the very early phase of the project during which a vision for the future role of a large 'vacant' area was developed. The creative tasks of the visioning were consigned to three architects, supported by a landscape architect. In addition, two 'creative workshops' with lay actors were organised. The ill-defined planning situation, the various local expectations related to the area, and the interactive approach adopted together made a compelling case for exploring the way that space is created when professional practice and everyday life intersect.

The emphasis of the case study research was on the practice of urban design as a site-specific action and in particular on the interaction between lay participants and architect-planners. The 'talks' of the participants were used as the main empirical source to explore the way that places are both represented and imagined and how this influenced the material outcomes of the process. While local knowledge was the central focus of the case study research, its potential in the planning process required consideration of the professionals' perspectives as well. It was noted how specifically distinctive they were, and it was then questioned how much these differences mattered in practice: how were they reconciled in the resulting plan and in what respect were they in agreement or in conflict with one other?

Knowledge in action: shaping realities through frames

Planning aims to be an activity that 'makes a difference' by transforming something in the environment with the intention of adding value to people's lives. In addressing the practice of creating place, Healey's (1997) concept of the 'soft infrastructure' provides us with a helpful starting point. In contrast with the blueprints of the 'command and control' models of planning systems, and the ends-means policy sequences of the rational process model, she considers the relation between policy and action to be framing and enabling, rather than linear. She writes that 'framing ideas' act as the driving force of a

broadly based coordinated transformation of knowledge and values into actions (p. 284). The challenge is to set in motion processes through which to review and reflect upon existing ideas and organizing routines, and to generate new ones that are widely owned among the relevant stakeholders (p. 268). Therefore, collaborative planning should be built upon the grass roots of the real concerns of specific stakeholders as they interact with each other in specific situations in place and time. These interactions produce what Healey calls the 'soft infrastructure' of individual instances of framing processes. This is the terrain of planning practices through which participants engage in public reasoning about projects, creating localized frames of reference for future use (p. 312).

According to Forester (1989: 157), we should understand planning practice as the work of selectively 'shaping attention'. Perceiving and making sense of the social reality of complex, information-rich situations requires a measure of selectivity and organization (Schön and Rein, 1994). In 'The Reflective Practitioner', Schön (1983) argues that practitioners must devise a clear formulation of what the problem actually is, rather than choosing between various alternatives as the solution to a problem. This requires a skill, not of 'problem-solving' but of 'problem-setting':

'When we set the problem, we select what we will treat as the 'things' of the situation, we set our boundaries of our attention to it, and we impose upon it a coherence which allows us to say what is wrong and in what directions the situation needs to be changed. Problem-setting is a process in which, interactively - along with everyone who must solve it - we name the things to which we will attend and frame the context in which we will attend to them.' (p. 40)

Structuring or framing a situation is considered to be the most important step influencing the rest of the activities and the results of the planning process. This is partly due to the ill-defined or 'wicked' nature of planning situations where defining the problem or situation clarifies the solution considerably (Rittel and Webber, 1973; Sancar, 1993). Schön and Rein (1994: 29) see the struggles of actors over the framing of a situation as symbolic contests about the social meaning of a specific issue, where the meaning implies not only what is at issue but what is to be done. 'Framing' then, refers to a particular way of representing knowledge, interpreting problems, and providing an evaluative framework for judging how to act (Schön and Rein, 1994; Hillier, 2002). So 'frames' refer to underlying structures of belief, perception, and appreciation (Schön and Rein, 1994: 23).

The above insights suggest that in real-world situations, people may react to proposals for urban change in a variety of ways, guided by their interpretive 'frames', which are embedded in local cultures and histories. They make connections between their localized interpretation of a planning situation and the solutions presented in planners' proposals. However, how 'framing' may occur when non-professional people actively engage in the creative work of planning, alongside the planners, remains unclear from above theories. As participants in the 'coming-into-being' of plans, they will bring their own professional and socio-cultural frames to the tasks in which they engage. How, then, can professional planners relate their planning practice to the frames of those stakeholders with whom they interact?

Since frames are perspectives from which a given planning situation can make sense and be acted on, their identification might well be crucial to supporting mutual understanding and actually validating 'local knowledge in action'. Schön and Rein (1994) acknowledge that frame discourse is difficult to assess. Although frames determine what counts as a fact and what arguments are taken to be relevant and compelling, they are largely 'tacit' and part of the 'taken-for-granted' world, and hence, we are often unaware of their powerful role in organizing our perceptions, thoughts, and actions (p. 34). If planners aim to achieve a better understanding of the way in which people frame how they think about how to act, the implicit process must be made explicit. Therefore, the question is, What factors account for the ways in which issues are framed? Borrowing from Healey's (1997) terms, these can be defined as both 'systems of meaning' and 'ways of reasoning'. The former refers to the underlying appreciative systems of our values and preferences, which shape the interpretive frames through which meaning is made, whereas the latter are the cognitive processes or 'tracks' 'on which our mind runs and by which we frame realities. A brief overview is given below that explores what can be learnt from apparent evidence and empirical studies.

Systems of meaning

An increasing body of research since the 1960s has provided empirical evidence that planning and design professionals and those without any training in this field appreciate physical settings in fundamentally different ways (e.g., Groat, 1982; Herschberger, 1988; Hubbard, 1994; Garcia-Mira, Arce, and Sabucedo, 1997; Nasar, 1999; Gifford et al., 2000). In particular, the public's aesthetic attitude may lead to frustrations among professionals, for example, as expressed in an enquiry among landscape architects and architects on public participation in the Boston Southwest Corridor Park plan (Crewe, 2001). The empirical evidence of a value bias or 'appreciation gap' has been explained in terms of the socialization of the professionals into their culturally prescribed role (Uzzell and Lewand, 1989; Hubbard, 1994). Campbell and Marshall (2000b: 299) suggest that a profession such as town planning will attract people with similar values. Furthermore, to the extent that similarities exist, they will be reinforced both by the professional education and training which planners receive and by the experience of the job itself. For example, Wilson (1996) investigated the architectural preferences of architecture students and found that their preferences generally reflected those of the school of architecture that they attended. There is also evidence that an architect's appreciation is often based on philosophical theories and ideologies of influential writers and practitioners.³⁹

The apparent appreciation gap between planners and the public that they serve has been related to the planners' failure to reflect the plurality of interests in society. This has long been a matter of concern since the 1960s (e.g., Gans, 1969) to the present day (e.g., Crewe, 2001) and points to a clear need for practitioners to find out about their users' needs and preferences. In searching for usable knowledge for viewing environments from a lay perspective, designers can rely on the vast extent of research in the field of human-

environment relations, which offers insights into how people look at, make sense of, and feel about their living environment (Van Herzele and Wiedemann, 2003a). Such research can be useful in gaining a much-needed insight into the potential stakes that people may have in their local environment and the claims for attention that these bring into play. Most of this research, however, shows an implicit emphasis on the discovery and interpretation of preferences and meaning, rather than on the construction of meaning.

During the last decades, the employment of social constructionist approaches including aspects of phenomenology and symbolic interactionism has gained increasing popularity in empirical studies (e.g., Burgess, Limb, and Harrison, 1988b; Greider and Garkovitch, 1994). These studies illustrate how cultural groups construct and redefine their realities through ongoing social interaction. The emphasis, however, is largely on the construction of our concepts of the environment, rather than on the material realities that lead to and follow from those concepts. An example of the latter is the work of Iedema (2001), who illustrated how a planning project gradually moved from temporal kinds of meaning-making (face-to-face-talk) towards increasingly durable kinds of meaning-making (printed reports, designs, buildings).

Generally, social interactionist empirical studies can expand our understanding of how preferences and the meaning of place are embedded in the culture and histories of particular places. When design is seen as a participatory process, and the role of people is moved beyond users and perceivers of - or informants on - their living environments, however, current research does not necessarily provide guidance for effective site-specific action. How may local actors, drawing on their shared understandings, negotiate over appropriate courses of action in a particular place and time? Then, the dynamics of discourse becomes an important material base for the construction of preferences and the meaning of place.

Through interactive discourse, public understandings are articulated, filtered, and even changed (Healey and Hillier, 1996; Forester, 1998 and 1999; Innes and Booher, 1999). Preferences and expectations diverge and develop along with perceptions of problems and solutions and thus lead toward ideas for action as the process unfolds. Consequently, the results are typically open-ended and cannot be anticipated in the planning process. Therefore, with regard to planning concerned with actually valuing the public's input, there is a need to identify not merely what participants 'like to see' or 'expect to see' but, more importantly, what participants 'come to see' and how this can be reconciled with the professionals' planning work.

Ways of reasoning

There is a growing field of inquiry about the nature of professional reasoning, observing how knowledge is actually used by experts within professional practice. In particular, the nature of reasoning in design has been studied at length, and it is commonly accepted that in response to the ill-defined nature of the task - without clear goals, starting points or methods - designers have developed a distinct type of approach that identifies them from non-designers.

Akin (1986) observed architects designing in laboratory conditions and described how they use particular strategies of 'decomposing' and 'recomposing' as a way of making complexity more manageable. Decomposing refers to breaking down design problems into subsets that are easier to analyze (e.g., design concept, solar orientation and functional proximity). Partial solutions are developed, tested with one other, and methodologically combined into larger and larger solutions (recomposing). The comprehensive solution emerges at the very end. It is an iterative process, which usually requires several cycles to review, amend, and adapt before the final design is worked out. For example, an initially defined aim may not remain valid throughout the design process because of the lack of means to achieve it, and in the end the available means may help to redefine the aim. Archea (1987) writes that architects - like 'puzzle-makers' - work in a manner that is antithetical to problem solving because they cannot explain the desired effects prior to their realization through the design process.

The importance of problem setting was highlighted in Schön's (1983) work. Evidence from empirical research (Akin, 1990; Cross, 2001) suggests that problem framing is the key design activity that leads the way to creative solutions. Rather than providing an anticipated solution to a known problem, it seems that creative strategies produce a new way of framing the situation that stimulates and pre-structures the emergence of innovative design concepts. Akin (1990) found that expert architects are conditioned to employ creative strategies even when the problem does not warrant it. He suggests that design strategies are not merely driven by a designer's complex task and their personal knowledge and skills. They seem also to be influenced by the emphasis and value that architectural education places on creativity and unique designs. Designers' cognitive processes seem to be shaped by the 'appreciative systems' related to the expectations of their job.

While empirical explorations of designers' cognitive styles are becoming more common, studies on how non-professionals engage in design practice are largely absent. Furthermore, despite the increasing adoption of multidisciplinary approaches in current urban design practice, reconciling design thinking with other cognitive styles has not been an area for special attention.

Local knowledge has its own reasoning processes. For example, Healey and Hillier (1996) wrote from their observation of a public meeting that statements, claims, and arguments are expressed in complex and dynamic ways rather than using the neat singular constructions preferred by the planning system. People who engage in consensus building have been compared with 'bricoleurs': bringing in a collection of materials to choose from in order to form a subset, which in combination can be useful for managing a problem (Innes and Booher, 1999). In 'bricolage' the end product is decided by the way the materials at hand can be assembled (Levi-Strauss, 1966: 16) or the way that contextual knowledge is put together by 'learning through doing' (Irwin, 1995: 126).

A practical problem associated with public reasoning is that the line of reasoning may not be made explicit. Innes and Booher (1999) found that participants who were seeking a consensus typically did not engage in logical arguments such as 'We should do this for

the following reason' or 'We can give up this benefit in return for that one'. As a consequence, they may feel misunderstood when issues are being framed in terms of resolution of disputes, compromise and other traditional means of negotiation. Similarly, Healey and Hillier (1996) suggested that speakers may feel or believe they have a valid claim without being able to reason it out or to justify it explicitly, and it may be that being explicit is an unfamiliar form of reasoning for many participants.

The above overview of apparent and empirical evidence, although divided into systems of meaning and ways of reasoning, does suggest that a complex interrelationship exists between both of them. The analysis of discourse from the case study enabled the latter aspect to be explored more fully. At the same time, however, an attempt was made to identify cultural meanings that shape the arguments involved in the production of space.

The case of the Antwerp-North railway yard

Antwerp is the largest city in Flanders, an autonomous region in the north of Belgium. On the north side of the city, between the historical center and the port of Antwerp, an open space of 24 ha is currently awaiting transformation (see Figure 23). The area has been used as a railway yard by the national railway company for the past 125 years, but it is now in the process of closing the site. The surrounding neighbourhoods form part of a densely built city district housing more than 35,000 inhabitants. Within the whole nineteenth-century belt of Antwerp, it is one of the most socially deprived areas, afforded the least attention in urban design.



Figure 23: The Antwerp-North railway yard (Source: Photograph by the author)

The city government recently took on a key role as organiser and facilitator in the transformation and reuse of this area. In April 2001, a three-step planning procedure was established. The first step aimed to reach an internal consensus on the future role of the area. During formal 'thinking days' with city administrators and politicians, a consensus was reached that the main function of the area would be a city park. In parallel with the formal negotiations, two 'creative workshops' ⁴⁰ were organised, with key actors representing the local interests (see Figure 24). The outcomes of these public workshops were discussed and implemented in the formal procedure and form an integral part of the 'Consensus Note'. This is the final document, which contains a development concept and a series of spatial and qualitative requirements for design to reach the shared vision. It was approved by the city government in September 2001, and shortly after, the results of the visionary process were presented in a public exhibition. In the next step of the planning procedure, which started in October 2002, external negotiations were carried on with the property owner, and currently the city is making a land-use plan and conducting the further project development in cooperation with other parties involved.

This article deals with the first step of the planning procedure, where the participants of the 'creative workshops' were able to frame their ideas for the redevelopment of this area, in particular the creation of a city park. Concentrating on the early phase of planning, when solutions are sought at a preliminary sketchy level and ideas are raised and examined, many to be discarded later, this case has provided a valuable context for research. The workshops were designed as a practical experiment in a 'real-world' planning situation. The practical purpose was to mobilize a diverse range of actors with a stake in the place. The research purpose was to examine how opinions were constructed and ideas developed within the given planning context.

An informal setting was created, giving participants freedom to raise their issues and to pursue their ways of thinking. Interaction in such a diverse group ⁴¹ was used to encourage a wide range and form of understanding, to facilitate the expression of ideas, to illuminate different perspectives through debate within the group and to involve citizens more actively. The group included representatives of neighbourhood groups, local schools, ethnic minorities, public agencies (culture, sports, housing, crime prevention, sustainable development, etc.), business actors, regeneration practitioners, health workers, youth workers, a priest, and so on. ⁴² The workshops started with a short presentation of preliminary ideas by two planning team members, which were then discussed in smaller groups of six to eight people. Representatives from each group presented the main concerns identified and ideas generated. Each presentation was followed by a plenary discussion. During the second workshop, new ideas and solutions were presented in response to the outcome of the first workshop and issues were explored in more detail.



Figure 24: The first creative workshop in ‘Het Oude Badhuis’ (Source: Photograph by the author)

Taking into consideration that ‘talk’ is a main constituent in the invention of a planning concept, the discussion during the workshops was used as the main empirical source.⁴³ In addition, multiple sources of information were used for data collection (Yin, 1994): informal conversations with participants, maps drawn by participants, letters from participants, written comments from the exhibition, and focused interviews with participants.⁴⁴ In addition, the professionals’ perspectives were also considered.⁴⁵ This was based on observation of their presentations, analysis of planning working documents, and informal conversations. In September 2002, the opportunity arose to test the findings through an analysis of group discussions, which took place during a ‘Planning for Real’ event⁴⁶ held in the preparation stages of an architectural competition.

Data analysis and interpretation emphasized the content of the arguments presented, as well as the particular ways of reasoning used in verbal representation and how these could be categorized. Pre-formulated category systems - those constructed in advance of actual observation of interaction in a particular setting - were avoided to prevent distortion of features of the interactive phenomena under investigation (Psathas, 1980: 8).

First, the recurring themes related to the framing of space that were evident in participants’ statements were defined. The narrative of the participants was taken as a basis, working up from this narrative to a listing of initial content categories (Strauss and Corbin, 1998). Then the identified categories were reviewed to clarify the meaning of the content and to compare possible overlap. This often required a return to the data set. Next, cognitive processes were identified within each category, and it was determined how these were used in the work of framing. Finally, it was explored how specifically distinctive these processes were from the professionals’ perspectives. Consistent with the approach adopted for this case study, data analysis and concept construction were undertaken simultaneously. Five inductively derived ‘interpretive frames’ emerged, representing the main content categories of talk organised around particular ways of reasoning. In the case of each frame, the ways in which these differences have actually mattered in terms of putting ideas into practice were then explored.

Local knowledge in action: framing ideas in practice

The analysis of the communicative acts from the ‘creative workshops’ has revealed a rich pattern of knowledge and understanding. This was not surprising, however, considering the diversity of the participating group, involving people from different professions, cultures, and so on, and the variety of knowledge and life experiences. Although the arguments used to justify the various claims for attention and ideas were different and characteristic of individuals, it was striking how the participants repeatedly employed shared ‘interpretive frames’. With these frames, the participants collectively and actively played with options and choices, problems and solutions. In the following analysis, the focus is not merely on the results as such but also on the interactions between the participants’ and the planners’ ways of reasoning. Excerpts of participants’ talk as well as quotes from planning documents that are suggestive of these interpretive frames are provided under the headings in this section.

‘Context of place’

The future park was seen as part of a wider pattern of places, connected to daily life within the neighbourhoods. Participants repeatedly started from their perception of this context when expressing their arguments. For example, they believed that the surrounding neighbourhoods were too isolated from each other, and the first thing they did was to connect them by drawing paths across the area (see Figure 25). It was argued that the place should not become ‘a green buffer which stops everything’. They identified places of special character, even remote places, and made connections from these places to the future park. It was stressed that the connections should not only be constructed but be visual too, so that they could see whether they might go to the park or from one neighbourhood to another. Later, the idea was developed further with a proposal to strengthen the connections visually by surrounding them with lines of trees, which clearly lead the visitor to recognizable entrances.

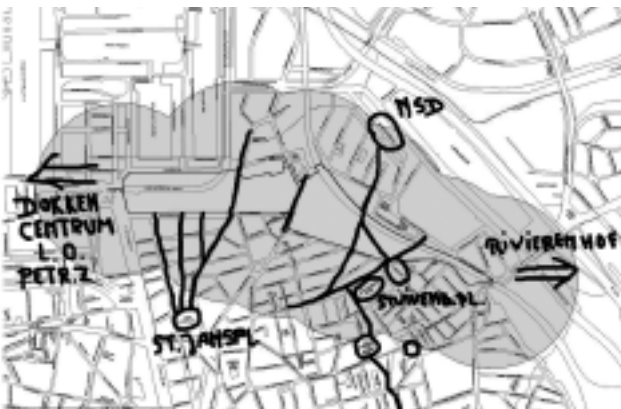


Figure 25: Crossroads drawn by the participants of the creative workshops

Participants were not only concerned with the physical environment. The context of place was primarily the 'real', lived-in world, and a multifaceted picture was made by linking the social, cultural, economic, and policy aspects of neighbourhood and city life with the future park. From this perspective, consideration was also given to a variety of functional levels, ranging from the surrounding neighbourhoods to the whole city and even wider. On one hand, the image of the neighbourhoods influenced their perception of the future park. For example, the image of a 'flaneerstrip' (a kind of promenade) was seen as 'too manicured' and unfamiliar with the neighbourhoods' lifestyle (see Figure 26). On the other hand, the local context was seen as a dynamic phenomenon. The participants hoped that the development of a park in this area would turn the current negative image of deprived neighbourhoods into a positive one. People from outside should be attracted to the park to make the neighbourhoods more important within the context of the whole city, thus 'putting the place on the map'. However, an important precondition was that this broader level should not be interpreted as being for large-scale functions or events. The balance between both levels needed careful attention so that the park would be of significance in the every day life of the people who lived nearby as well as a valued symbol of where they lived.



Figure 26: 'Flaneerstrip' (Source: Hardwin De Wever and co-workers)

The dynamics of the context of place was also regarded with an element of uncertainty. For example, the proposed development of a business area in the western part was the subject of heated debate during the second plenary discussion:

- A: *'Will it be possible to dispose of those offices? When you look at all those surrounding vacant buildings, is there any need at all? I cannot get such logic into my head!'*
- B: *'I do not agree to making it as green as possible, you know the city must finance everything and this is really the best place for commercial functions.'*

C: *'Indeed, if it has to happen, this is the right place.'*

B: *'The Noorderlaan has an enormous amount of traffic, I cannot imagine having a pleasant picnic with all those trucks above my head.'*

D: *'The Noorderlaan as a noise belt? This is fatalist thinking! If you leave the Noorderlaan bridge in place, then you have a problem. If you move it then you can also develop attractive green over there.'*

E: *'The railway station of Groenendaal would be a better place. We are not going to develop office blocks here now we suddenly have the chance, are we?'*

F: *'Let's think conceptual again! If we take all these economic and infrastructural conditions into account already now, we will have given over the area from the outset.'*

(The last remark came from a city landscape architect, who was not a member of the planning team.)

The discussion went on like this, relevant facts being raised and possible future developments in the surrounding areas being aired, along with proposing solutions such as land exchange or compensations for greening the neighbourhoods. The architects' preferred choice of office development was also based on a practical assumption. This centered on the likely success of the external negotiations with the property owner. Referring to the above discussion, one of the participants complained:

'Regarding my suggestion that the business area should be located near areas which are also undergoing redevelopment such as the Asia dock, the architect replied: 'The surroundings: we'll see about that later.'

During their presentation, the architects took account of the wider context in a different way. In contrast with the participants' reasoning, they appeared to start from the object, the concept of the park, and their reasoning developed, therefore, much more from the inside outwards. Linking up with the context was a challenge to deal with rather than a starting point for planning. For example, in an extract from a planning working document⁴⁷:

'The basis from which to start is the interpretation of the (not yet) abandoned railway yard of Antwerp North as the 'VOID'. As a possible scenario the 'IMPLANT' is preferred, whereby the void may survive with its own logic as an independent character inside the city... The structure must be developed so that it can be easily logged in on the surrounding public space (transformer spaces)... the void as an operating base for the surrounding functionality.'

'Coherence of the whole'

A striking characteristic throughout the group discussions was the importance of coherence, seeing the park as a functional and visual unit. The architects presented their

first sketch of the park concept using the metaphor of a body ('head', 'belly', and 'tail') dividing the area into a number of functional areas for business, sports area, forest, and so on (see Figure 27). Next, images visualizing the character of each zone were presented. From the participants' point of view, the concept was unacceptable because it was perceived as a 'patchwork quilt' of functions. Like the architects, the participants preferred a variety of functions, but not as separated units: functions were seen as interwoven, tied together in one large space. Interwoven functions allow for interaction between activities and, in consequence, bring different people into contact: young and elderly people, diverse cultures, and so on. Suggestions were also made during the interviews:

'More interaction is needed, places to meet different people, where different social groups can come together.'

'Small-scale activities can easily be combined, for example walking with grandparents on a path and ten footballers playing on a field nearby.'

'Animals, for example in a children's farm, can easily bring people together.'

The participants brought attention to the relationships between the different physical parts and functions and asked whether the concept as a whole made sense. For example,

'The presentation of the area as a body 'from head to tail' is interesting from several perspectives. It allows us to distinguish between different functions. But at the same time it must be said that such functions do not work in an autonomous way: the whole body must be appreciated. This means that functions have to support one another and thus be interwoven.'

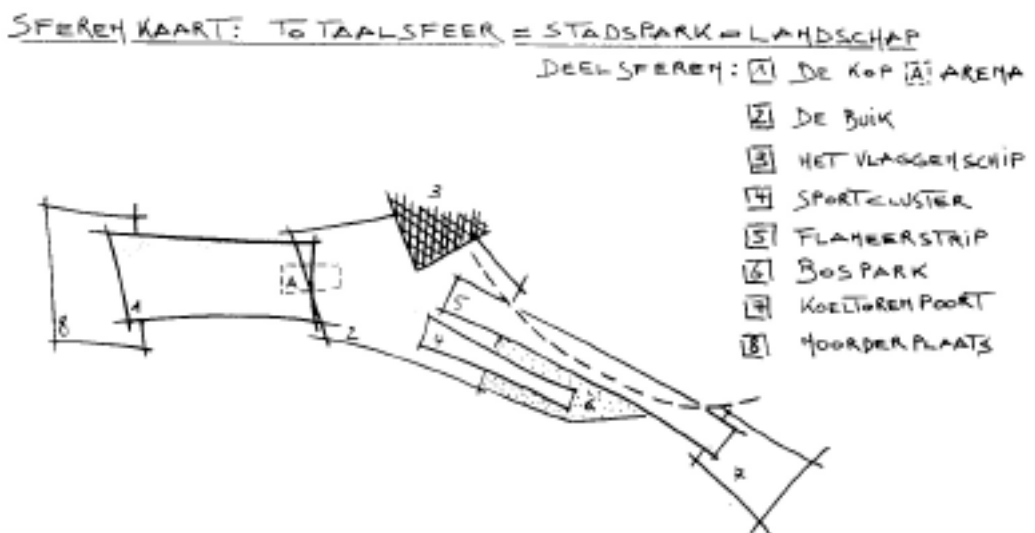


Figure 27: A first sketch made by the architects (Source: Hardwin De Wever and co-workers)

During the discussions various concerns were also raised about the coherence of the park's form. Although the approach of presenting park images was very much appreciated, the characters were perceived as too desolate and not green enough, and above all, what was missed was the character of the park as a whole, the total experience. As a participant reflected after the first workshop:

'This is a drawback of architects: they may have thought through images but the whole picture has not been mastered.'

Participants were concerned about the possible fragmentation in the perception of the area. One group asked that the 'belly' should be accentuated as the center, the 'navel' of the park. This should be perceived as a green unit and should not be broken up by infrastructure. Similarly, in appealing for the preservation of the area as a unity from the west to the east, it was proposed to move the 'head' (the business area) as much as possible to the west. A major concern was that the office blocks would act as a 'wall' so that one would perceive the park as ending where the buildings rose. Throughout the workshops, they put forward ideas to support the coherence of the area, for example, a jogging path and panorama points where the area as a whole could be surveyed.

The participants wanted to enjoy forms and functions together, culminating in a great harmonious whole. They agreed that 'the interweaving of different functions should be more integrated within the greening.' Observations suggest that the architects were reasoning about functions and forms in a rather separated way. This was reflected in their working documents where three lists of preconditions for development were presented: morphological, functional, and ecological. Similarly, in the first workshop, the architects presented their concept for the area in two parts: the functions and then the images. The participants, on the other hand, automatically linked both facets. For example, they complained that the sharp boundaries between functions did not correspond with their 'image of the park'. The functions as they were presented were conceived as an assemblage of loose pieces of contrasting images. Observations suggest that the architects were also aiming to plan a coherent whole, but they attempted to create unity by means of structural layers, rather than by interrelating forms and functions. In the second workshop, they presented their 'green under-layer' concept of structure:

'The green under-layer is a bundling of FACTS (facts and preconditions) which guarantee the desired development strategy. The images are individualized perceptions of reality. The image is always directed from the green under-layer of development, but is of secondary importance in the development strategy.'

In response to this concept, some participants expressed their concern that the most important issue was that the area should become a park. The architects assured them that the green under-layer would link everything together, all the places, that it must be seen as a development strategy and that the main idea remained the development of a park. The participants, however, did not use this abstract structural concept during their subsequent conversations.

'Imagination of use'

When asked which qualities they preferred, the participants started thinking about the way they aimed to use the park. They saw themselves walking across the area and hearing the sounds, seeing the views and panoramas. They thought about what the place might offer them and others: what opportunities and constraints were there? For example,

- A: *'A large space where one can move, play basketball and volleyball... In Central Park, New York, people can play sports freely, spontaneously and among different generations. This should be enabled by the park design and equipment.'*
- B: *'For 20 to 30 years there has been a need for children to play football, For example, the new residents from Yugoslavia will start to play football automatically, if you create an open space. You need to take this reality into account.'*

C: *'If you want to play a sport for yourself, you should not to have to leave the children alone at home. You could bring them along to the park, because there is also something for them.'*

The participants regarded acting in an independent, free way when using the park environment as very important. There was a substantial requirement for putting limits on the planned and the designed. They preferred a large space inviting and enabling activities, but not designed for specific functions. For example,

'People must have the opportunity to use the space in a creative way. For example, do not plan picnic places, just provide the opportunities for people to have a picnic.'

'Just point in the direction, so that people are invited to do it. For example, I have seen a skate park in New York's Central Park with varying configurations, so that young people react: we gonna skate here!'

Provisional arrangements encouraging and allowing improvisation and creative use were proposed, such as 'small and movable football pitch', 'railway beams for making huts', and so on. Free forms of use were generally referred to, for example,

'Art in the park? Yes, if it is sturdy so that one can climb on it.'

The reasoning with regard to the 'imagination of use' was most explicit during the interviews when it was asked what the park should look like. During the work of framing ideas, the interviewees typically described various experiences of sitting, walking, playing, and so on, and then translated them into desired park images. Also the interviewed landscape architect began by saying:

'When I enter a park, I would like to have an experience of space. I enter, and this might be quite an enclosed space, with many trees and shrubs, but there is a space somewhere, where I have the feeling that here I can breathe, here I can look much further.'

However, immediately afterward, he switched to talking about the square meters required, the location and how it could flow into the sports fields, describing the geometry and paving materials. The rest of his talk was focused on elements of design, while occasionally reflecting on the opportunities for use. Starting from the design he had in mind, he tried to imagine, as an observer, how places could be used:

'A nice little square could be created next to the engine shed, a sort of city square. It should be linked up with something, you must not site such a square in the middle of the park, but connect it to a building or a location of hard character, and then you can set it up perfectly with hard and water elements. There kids will go skating, and, ... hopscotch will be played and also some football, and... mothers will probably go there with their buggies, there are more benches and it will generally be a bit more intensively used.'

The architects' presentations suggested that the basis of their reasoning was much more plan-bound. Instead of starting out by talking about what people would be able to enjoy there, they presented photo montages of the characters of place within which large pictures of people undertaking various activities were pasted (Figure 26). Although the collages were a nice and stimulating fantasy, experience of use seemed to be fixed in the visualization.

'Continuity in time'

It was proposed that the park should reflect 'the history of the railway' This was seen as a means not only of preserving the physical form but also of acknowledging the memory of past functions, in this case, the function of the railway. For example,

'We must uphold the quality of the original elongated form.'

'Let us open up the former river 'het Schijn' again, but keep it in the context of the railway, using railway beams and such.'

'You cannot disassociate this place from the people who have worked here for years.'

Instead of looking backwards in a static way and favoring the status quo, these considerations seemed to demonstrate dynamic thinking in the continuation of qualities and experiences from the past into the future. The history of the railway yard relates to people's memories and the continuation of these past experiences holds expectations for what the future will hold. In this perspective, the preservation of the old railway buildings was not merely aimed at helping to remind residents and visitors of the past. A strong preference was expressed for devising new functions, for example, using the engine-repair shed as a museum, an academy, and so on (see Figure 28). Furthermore, it was claimed that many old materials could be used creatively in a playful combination: little signals, beams, a wagon for children to play in, and so on.

It seemed that it might not be sufficient just to preserve a few railway buildings and the infrastructure here and there. The participants suggested that the history of the railway needed to be linked with the identity of the whole park. This view emerged during the second workshop, after the architects' presentation about their new ideas on the structural composition of the park. Inspired by a suggestion from the first workshop, a historical aspect was added to the 'Implant' scenario:

'From a historical point of view this scenario implies that the 'Void' remains readable (spatially and functionally). The orientation of the overall space (east-west) is based on the natural hydrological structure of the former Schijnbeek valley.'

However, the participants claimed that the identity of the whole was still missing. One participant proposed that 'the memory of the railway' could be part of the future park's identity, but without dominating it too much. A practical proposal for realization of this idea emerged after the presentation of the 'green corridor' concept that incorporated morphological preconditions (25 m width), as well as functional (east-west link for 'soft' traffic) and ecological preconditions (collection of rainwater and soil sanitation). The idea did not generate much enthusiasm. The main concern was that elderly people and children would not use it because of the long distance involved. In response to this problem, one of the participants hit upon a new idea on how place and collective memory can be linked in a way that works for people: she proposed that a little train could bring people from one side to the other. This would allow the old rails to be preserved and used. Later in the discussion, the little train idea was picked up again and proposed as part of the wider urban structure.

For the participants, the place (and its context) was seen as a dynamic phenomenon in the continuity of time, from the memorable past to the present and to different times in future. Reasoning from the past was particularly apparent among the local residents, who brought it into play in the mixed discussion groups. A more general concern emerged with regard to the future. The participants were already worried about how the place would look and work for the people during and after its creation; for example,

'See that the place doesn't turn into the biggest rubbish dump of Antwerp!'

The architects' notion of time seemed to be more restricted to the particular project. Informal interviews revealed that they were more ready to discard existing features and start with a clean slate and that they regarded the place as a challenge to build and design great things that were new, striking and not yet dreamed of.



Figure 28: The engine-repair shed (Source: Photograph by the author)

'Interconnection of action'

For the participants, thinking about planning issues was not a goal-oriented activity starting with fixed objectives as the best way to achieve these aims. It was rather an interactive process in which problems, solutions, and preferences developed alongside the perception of these issues and their interrelationships. It appeared that expectations were not limited to the visionary process but rather looked beyond this. Participants were thinking about the process as a whole, and they did not make a distinction between conventional sequential phases such as planning, design, and management. They explored problems and options both forward in time from the plan to the management and backward from the management to the plan. From the earliest phases of exploring the concept, they had already developed their opinions about design and management; for example,

'The center of the park, 'the belly', needs a 'belly guard' from the outset. Someone who informs, supervises and prevents conflicts from arising'.

'The roadside along the Slachterijstraat could be given to the local residents for planting and maintenance.'

The participants felt also stimulated into thinking about benches, tables for card playing, water taps, and so on. But even more notable was their reasoning in another direction. For example, the consequences of the need for maintenance of the park determined the preferred image of the park and their vision on planning:

'Who's going to pay for the maintenance of this 24 ha area, year after year? The City is in deep debt. So, think of the maintenance costs now and keep the park design minimalistic and simple.'

'For security reasons 'the head' shouldn't be a dead area during the evening. A concept must be developed which allows round-the clock use of spaces.'

Participants even thought about the organization beyond the planning stage. What happened afterwards was very important to them. For example, concerns about undesirable uses and whether they could be prevented were central to various discussions, such as,

'Consider how you can preserve the local use of sports areas. Otherwise it will be captured by outside sports clubs before you know it.'

'Pay attention to terraces and cafés, see that it will not become an elite business.'

In contrast with the participants' integrated thinking about the planning process, the planning team focused much more on the actual purpose of the task: devising a strategy for development to be discussed during negotiations with outside bodies.

Reconciling local knowledge with professional practice?

Both observation of the discussions and the informal reactions and interviews after the workshops led to the belief that a common understanding between all participants was a significant outcome. By thinking simultaneously on different scales and times and making multiple links with real life, the participants summarized and balanced their multiple arguments concerning the wider and the local, the past and the future and the provisional and the planned. In this way, they were able to shape a common image of the future park. This lively image was as much concerned with a dynamic phenomenon of urban culture, community life, and railway history, as with a definable physical object. As their involvement was not only about the development of a shared vision but about aiming to make worthwhile practical changes, it is crucial here to consider not only the participants' reasoning itself but also how their reasoning differed from that of the architects involved and what consequences this had for putting ideas into practice. As a starting point for discussion, a conceptual framework representing the key differences of both interpretive frames is suggested (see Table 5). Reference is then made to the final planning concept (see Figure 29) and preconditions for development.

Table 5: Key differences in interpretive frames in the case of the Antwerp North railway yard

	<i>Participants</i>	<i>Architects</i>
Context	From context to object	From object to context
Coherence	Forms and functions interwoven	Structure directs forms and functions
Use	Free experience of use	Plan-bound observation of use
Time	From memorable past to future	Project time
Action	Interconnected action	Linear sequence

Context of place

It appears that the combination of participants' thinking 'from the outside in' and the architects' 'from the inside out' has provided extremely practical ideas. While the architects' interpretive frame was initially limited mainly to the planning object, and the context was rather seen as a challenge, they clearly widened their scope. In their concept of the body, 'ribs' were added as 'visible axes with recognizable entrances, acting as soft green connections enabling the northern and southern neighbourhoods to be opened up and to link up existing urban fragments.' The implementation of the participants' input was not limited to spatial terms. For example, the participants' proposed balance between the wider and the local level was included as a precondition: 'The attraction of functions must operate at a wider city level, but at the same time have a small-scale character'. Also, the participants' concerns about the dynamics of the context were incorporated: 'The site development must be evaluated alongside other developments which are due to take place in the surrounding area, for example, in the Asia dock and the Groenendaal station'. A similar precondition was made for the office development in the western part of the area. However, the basic idea - discussed in depth in the second workshop - was not challenged in the final plan.

In connection with the object and context, both lines of reasoning seemed to be highly complementary. Building on the participants' input, the development proposal seemed better suited to the social culture of the site. On the other hand, starting from their own views, the architects made an attempt to 'de-familiarize' the space to some extent. This was not always accepted (e.g. the 'flaneerstrip'), although some distance from daily life was appreciated. For example, a participant (local resident) commented in an interview:

'The idea of let's bring the neighbourhood life into the park seems pleasant. But personally I would like to stop it a moment over there.'

Both interpretive frames have a clear potential to complement each other and to result in a sort of balance between daily life and the more unfamiliar.

Figure 29: The final planning concept (Source: De Wever and Lambert, 2003)

In contrast with the participants, for whom images and activities together formed the coherence of the place, the architects did not make this automatic connection. For them, both form and function were devices for making sense of the place, however, they were not necessarily linked to each other but directed by structure. From the preconditions for development, it is evident nevertheless that the architects compromised to some extent with the participants' argument about the need for the coherence of the whole:

Despite the various preconditions concerning coherence, the green area remained described mainly in terms of structure, for example: ‘the green corridor which interconnects the diverse spatial fragments (‘back bone’).’ The potential conflict of both interpretive frames can be illustrated from the interview with the city landscape architect (as a participant):

people simply want a pleasant park, keep it simple! Each of the interpretations of what the place must be has come closer together, but is still different.'

It seemed problematic to combine both interpretive frames and as one interviewee put it, there was the danger that simple compromise would result neither in a pleasant park nor a pleasant urban park landscape.

Imagination of use

In contrast with the participants who were shaping the place from imagined and free experiences, the architects acted as observers from a distance of how their designs could be used. In their imagination and subsequent visualization through images, they put people in various activities in spaces after they had been designed. As such, they presented a colourful juxtaposition of different activities in the same image, which were not necessarily coherent with each other.

One of the architects mentioned how much inspiration they had gained from the participants' statements. They appreciated the examples given, for example, the Emsher Park, which was helpful in exploring just what people wanted in a park. He valued the fact that such inputs made things more concrete:

'It's really great that you can stick a face on it, that you hear people discussing it.'

The participants' discussions had enabled the architects to move their stance as observers from the outside in imagining the use of space and to empathize with how real people experienced it. The obvious potential of this interpretive frame was met by addressing real needs. For example, undesirable function zones (e.g., the forest) were cancelled, and the 'belly' was enlarged and accentuated more as a green and open unity for 'non-organised recreation'. However, the more intangible ideas of the participants for bringing more freedom into the plan - for example, by making explicit preconditions for open and flexible patterns of use - were not fully used in the final plan.

Continuity in time

People experience their living environment both in reality and in the imagination over a long period of time. In this project, the architects started from the point of view of the place as a 'void' - emptiness is indeed a physical reality - while the participants started from the concept of a place that was full of memories and expectations for the future. Nevertheless, the architects made the precondition of 'the preservation and reuse of three of the railway buildings because of their opportunities for development and historical meaning (seeing the railway as memory)'. Other ideas (e.g., a former bridge which connected the northern and southern neighbourhoods and a former river valley) were integrated into their structural composition. However, in response to the

participants' request to retain a part of the old and to integrate it with the new, the architects highlighted the visual physical aspects of the place. Despite the inclusion of 'the railway as memory' as an important principle in the preconditions, they held to their own concept of structural composition and adopted only those ideas that readily fitted into their abstract structural layer approach. Although the participants' interpretive frame has shown the potential for providing a reflection of historical processes within a structural layer, the dominance of the visual over other kinds of content in park design remains a clear challenge.

Interconnection of action

While the architects focused more on the visionary process, the participants already anticipated the phases of the project and made connections between planning, design, and management. It can be concluded that the final plan benefited from the participants' integrated thinking of the planning process, judging by the many preconditions for development concerning the future use and management of the park. Even a 'public management structure' was required explicitly:

'At each step of development broad attention must be given to a strategy of follow-up, maintenance and management of the future implementation.'

Although the participants' interpretive frame has the potential to improve the coherence of planning outcomes by acknowledging the interrelationships between project phases, their ideas were not always appreciated by the architects. One of the architects even expressed some resentment:

'They start thinking in great detail of things which are not on order yet, for example about fences and little gates. They zoom in on bits and pieces while you must think on big lines.'

On the other hand, he felt regret about the limitations of the visionary process to integrate many useful suggestions by the participants which ran a little ahead of the design outcome.

Conclusions

The case study presented involves a multifaceted story of how people come to see a future park and how their ideas materialized (or not) in the vision plan of an urban design project. As with the results of any productive activity, the end products of planning (texts, sketches, maps) seem impenetrable once they are solidified. As the construction unfolds, meanings become divorced from the social interaction that created them (Iedema, 2001). If one wants to examine the 'coming-into-being' of a plan, one needs to attend the course of its creation: the talk and action through which places are imagined, represented, and gradually solidified into a plan. In this case, attending the 'messy' practice of interactive work helped to gain a better understanding of the argumentation employed.

The analysis was focused on the 'interpretive frames' through which knowledge and meaning were articulated and framed in ideas. Despite the seemingly unstructured conversation, in the analysis of the participants' talk, a number of shared frames were identified. These were labeled as: 'context of place', 'coherence of the whole', 'imagination of use', 'continuity in time', and 'interconnection of action'. Frames became apparent through the participants' particular ways of reasoning. For example, it became evident through their repeated attempts to link the surroundings (context) with the park concept (object) that not only did the local residents want to reach the park easily, but they also wanted their neighbourhoods to be connected with the whole of city life and for them to command wider respect. This example also shows that planners need to go beyond the identification of preferences of physical features and uncover in some way the particularities of the participants' 'systems of meaning', which influence their ideas about what is to be done.

Systems of meaning are embedded in local culture and experience and cannot be determined fully during ad hoc meetings. Whereas occasional groups working on a particular task may challenge accepted views and reformulate problems in ways that produce creative new directions for action, they do not allow the time and space to explore the socio-cultural contexts in which that meaning is formed.⁴⁸ Sometimes, confrontation may be helpful: for example, when participants framed the imagined park as a coherent whole they explicitly built on the great value they attached to the integration of different ages and cultures. This was largely a reaction to the architects' 'patchwork' proposal. Careful attention should be given to the conditions under which local knowledge may become explicit. People in small groups talking to one other in their own words, in their own ways, are most likely to develop shared understandings while uncovering the taken-for-granted assumptions that underlie their apparently 'natural' understandings.

As the case study was concerned with the actual implementation of public input, the professionals' perspectives were also considered. Substantial differences emerged, not only in the levels of attention and meaning given to issues of concern but, more important, in the way they made sense of the planning situation. For example, while the participants imagined the park (the object) starting from the standpoint of daily realities of neighbourhood life (the context), it was clear that the architects attempted to integrate the object into the context while framing the planning situation as a more independent character inside the city.

The differences identified emphasize the importance of reconciling both perspectives in the course of structuring or framing the planning situation. Rather than comparing different perspectives on the same problem and narrowing attention and choice, the emphasis is on allowing change of the problems themselves, leading to new ways of looking at the situation and novel solutions. Schön's reflective practice (1983) can be regarded as a background condition. The question, however, is what the professionals should be reflecting. The range of reflection on one's own practice may extend from the strategies of problem solving, through an understanding of the problem, to the

interpretive frames from which these understandings derive. The experiences from this case study suggest that Schön's reflection-in-action remains a contentious issue when lay actors are invited to the creative planning work.

On the one hand, the findings show that part of the participants' reasoning has clearly complemented those of the professionals', since they have extended their perspectives and have encouraged them to produce a meaningful combination that was qualitatively different from the concept on the table at the outset. This was particularly true for the 'contextual' interpretive frame. The architects even used their newly extended contextual frame during the last formal thinking day in their argument of the need for crossroads in the park, explaining that the local residents needed to break out from their isolation. But the findings also suggest that with regard to another part of the participants' reasoning, local knowledge has had less effect on the professionals' framing work. Although many of their views were implemented in the final plan, this was often limited to an adjustment of the solutions proposed, making them more responsive to local needs. Where the professionals' reflections were operating within their systems of understanding (Schön, 1983: 282), these have not led to a new interpretation of the planning situation.

This case study also illustrated that various opportunities for implementation were missed, which was partly due to the limitations of a sequential planning process. It was shown that distinct interpretive frames do not necessarily work well together, for example, as illustrated where professionals and participants thought about coherence in different terms. These findings point to a clear need to concentrate attention on what happens at the overlapping boundaries where different frames converge, to uncover what makes it so difficult for professionals to reflect on and to break out of their own frames. One particular area is the importance of making the public true to life in professionals' frames. Planners need to recognize that their own ways of reasoning and acting are formed by their education and experience and embedded in their work and conversations with colleagues. Attending to the public's reasoning may actually help to relate their practice to people's 'lifeworlds', not only as a means of learning from the participants' points of view, but also through seeing participants' faces and their behavior, feeling their resentment or enthusiasm.

POSTSCRIPT

*'You take a spade, dig a little hole and put a little tree in, with the roots at the bottom of course. What is so difficult about that?'*⁴⁹

This is how the Director of Flanders' Forest Expansion Unit sought to express his frustration with the complexities involved in proceeding from ambitious policies to action on the ground. This touches on a major theme throughout this thesis. The various empirical accounts of planning practices have shown that the interrelations of these practices with the discourses out of which they evolve and the physical conditions that constitute both the context and the material results of planning, are essentially characterised by ambiguity, conflict and 'messiness'.

The transition from imagination, ideas and concepts to action, however much it is 'planned' beforehand, typically follows a 'labyrinth-like', non-linear logic. What actually comes about (or not) from planning practice is the result of an unanticipated interplay of multiple agendas and tactics, underlying values and identities, rather than what can be readily associated with a routine procedure for solving an univocal and well-defined problem. That holds true more than ever in our near-chaotic times of rapid change and increasing interweaving and interference of varying goals and perspectives, which multiple actors bring to the table.

In this Postscript, I first reflect on the research approach undertaken in this thesis. Then I sum up the conclusions from the empirical studies. Finally, I point to some striking issues that emerge from the whole of these studies and end with introducing some directions for new research.

Experiences from actual planning practice

This thesis has focused on planning practices. It was the central assumption that we can learn from practice in order to improve practice, particularly by moving it closer towards people- or place-responsive approaches. The research undertaken was essentially based on the idea that empirically documented accounts of practices - the activities of planners,

their interactions with other actors in the process, and the material effects of these - can contribute to learning. From this point of view, it is the experience from actual rather than ideal planning practices that has the potential to play a role in improving practice. In the framework of this thesis, case studies of action-oriented practice were considered as the most preferred research method, since they might enable 'how' and 'why' questions to be answered, such as how did these practices come about and why do planners think in particular ways (Yin, 1994).

Fulfilling the learning potential of these kinds of case studies thus means that the researcher engages in the 'real-world' context of a specific planning situation, sometimes even as an actor in the process itself. This happened in the framework of this thesis, for example, when playing the role of an external expert, a presenter of GIS-based results or a facilitator in public workshops. Collaborating knowingly in the process puts the researcher in a privileged position to investigate and may provide the opportunity of learning progressively by doing, observing and self-reflection. Learning then occurs at different stages in the process, through interpretation and reinterpretation and in interaction with the specifics of the situation.

But it is crucial not to treat this position uncritically. Experience of a planning-related problem or situation does not have its own intrinsic meaning waiting to be discovered: experience is understood from a particular standpoint and through the 'pre-understanding' of the person exposed to this experience (Watson, 2002). The choice of a particular point of view leads to placing things in a specific relationship to each other and hence, to the reader of this kind of 'practice writing'. It was asserted that this relational way of knowing, the way of personally implicating yourself and others with the subject, can go hand in hand with objectivity, analysis and experimentation (Palmer, 1987).

With this purpose in mind and inspired by 'practice' researchers such as Flyvbjerg (1998), an effort was made, in presenting the material in sufficient detail, to place it thoroughly in context, both in time and space, by documenting sequences of events and, like Forester (1993 and 1999), to use examples of direct quotations, so as to provide the readers with a sufficient basis to form their own judgment about the cases and to draw additional or even different conclusions. According to theorists in experiential learning, there is not only the effect of learning from new experiences, but also the discovery of new meaning in previous experiences.

It was not the prime intention of this thesis to formulate 'hard' conclusions that could be applied generally. Instead, the purpose was to present the material in a way that allows the readers to interpret the meaning and usefulness of it, so that it might contribute to what Hillier (2002) called 'the ability to unpack the messiness of the situation' in other cases of action-oriented practice. In this respect, perhaps one of the most difficult problems that has to be faced when trying to draw on understandings or ideas developed in a different context is that of how transferable are they: what is unique to a particular time and place, and what is more general? (Watson, 2000.) Again, it is empirical and

contextualising detail leading to deep situational understanding that is important when judging the extent to which there are sufficient points of similarities to make some kind of 'reflective transfer' (Schön, 1983) which might be useful when dealing with new problems and conditions.

Summarising conclusions from the empirical studies

Part I of the thesis concentrated on the question of how forest expansion discourse in Flanders, having its origins in a relatively small group in a defensive position, could gain prominence in current land use debates. In tracing back the development of this discourse, the emphasis was on the genealogy of discourse-actor relationships within the historical perspective of decades of struggle over the forest situation in Flanders. The empirical study has revealed that this struggle, and the particular forest image employed, were related to the identity of the forester as a professional, in the forest as well as more broadly in national forest policy, nature conservation and land use planning. It was suggested that these deeper concerns were underlying the rhetoric of forest expansion.

The study has drawn particular attention to the powerful effects of 'organising' ways of representation. Through an appealing 'story line' the previously unnoted problem of the low forest cover in Flanders could be turned into a new policy claim. Moreover, this story line has facilitated its 'sponsors' to move their cause forward across shifting policy arenas and changing institutional contexts, and impose their agenda on spatial planning policies and practices.

It was questioned then what makes a story line effective (or not) in moving its strategic idea forward along the various trajectories from concepts and ideas to actual implementation that are constitutive of a long-term policy process. Two major strands emerged that might be applied more generally. Firstly, the story line may acquire authority along the process of its translation into more durable forms such as legislation and budgets. However, as policy is an ongoing process, this is no guarantee for securing the main strategic idea over time. In order to facilitate the work in the policy process, the story should be kept alive in the continuous process of sense-making that gives meaning to that policy. So a balance should be found between attaining 'durability' on the one hand, and keeping the 'fluidity' of the narrative form on the other, in order that the story line can still be passed on, shared socially and discussed, and hence remains attractive for actors to engage in. Secondly, in order to engage different actors, it is important to provide a common ground. However, actors tend to relate the debate to themselves and so tend to give selective emphasis to different elements. So a story line must allow its sponsors to maintain their differences and 'autonomy', as long as it is compatible with the common project.

The case of the Ghent Park Forest was used to explore what happened to forest expansion discourse when it came to interfere with different actors in the context of an actual planning situation. In this case, out of very different discourses (forestry, spatial

planning, nature conservation) an urban forest concept was developed which came to motivate a widening circle of actors (public officials, environmental groups, politicians). However, despite all efforts to change the forest's image through its representation, even by renaming the project, it could not really take hold of local people's imagination. The cultural assumptions of place and identity appeared to be determined not only by the appreciation of the present landscape, but also by the material practices (maintenance, agricultural production) and the social relations that these bring about. It was suggested that if policy discourse leaves those deeper values unaffected, its implementation in new practices is likely to fail.

In *Intermezzo I*, I took further the issue of the interplay between discourse and practice, particularly the role of factual argument and normative prescription in moving from ideas to actual plans. The development of forest expansion discourse was further explored. This analysis revealed that the emphases in argumentation, and the conceptualisations of the forest (as a resource, an amenity, a 'green structure') accordingly, have changed over time, while the very idea of forest expansion has largely remained the same over the considered timescale. It was suggested that the arguments were adapted to the prevailing discourse of the time: sustainable development, biodiversity, quality of life, etc.

However, such 'packaging' was not the only strategy available to facilitate the move from discourse to practice. The analysis of the Park Forest Ghent case study has revealed that forest expansion proponents demonstrated their neutrality and authority by basing their argument on scientific evidence and factual information and attributing interests to certain parties (the 'common' interest to themselves and 'personal' interests to the public).

It was acknowledged that factual evidence and normative prescription (performance targets, 'best practice', quantitative standards) might have an important role to play in facilitating the implementation of a particular policy on the ground. Normative prescription not only enables 'abstract' discourse to be addressed technically by providing material for analysis, but it is also a political tool when drawn upon by planners to shape problem definitions, and so advance their positions and forward their ideas in the arenas of negotiation with political representatives, business, the public and other private sector actors.

Normative prescription was discussed more generally in the context of the multi-layered governmental landscape in Flanders. It is often contended that the current centrally prescribed criteria draw local governments into the implementation of policies, rather than engaging them in the policy work itself. The example of environmental policy was used to demonstrate that such criteria may also enable a certain innovation in local policy discourse, may provide local planners with a stronger argument when selling their ideas to political representatives, and make abstract discourses more concrete.

In Part II, I presented the Greenspace Monitoring Tool as a 'touchstone' for current and future policy by comparing the provision of green spaces (quantitative and qualitative) between and within cities. This tool can provide a clear and easily understood picture of the problems concerning greenspace provision at different functional scales (from the neighbourhood to the peri-urban level). It was shown, for example, that the most significant deficiencies appear at the functional levels of the quarter and the neighbourhood. These are the green spaces that are likely to be visited and enjoyed on a regular basis, and hence, will contribute the most to the quality of urban life. In addition, the tool allows for the explanation (for example, barrier effects) and the identification of the deficiencies to be addressed, and for monitoring change on an on-going basis.

The analysis has provided a store of factual information that is appropriate to put into practical guidelines regarding what needs to be done. This tool is a prime example of how 'facts' were used as a material base both in the spatial analysis of greenspace provision and in its representation in the Environment and Nature Report, which aimed to provide the basis for environmental policy in Flanders

Furthermore, I described how the Greenspace Monitoring Tool was developed further in relation to three important practical aspects: analysis, representation and exploration. I demonstrated that the tool not only had analytical potential, but that the numeric and cartographic 'facts' presented brought some aspects to the forefront and left other aspects in the background. As such, through selecting and emphasising, they could have some political effect. It was also shown that the transparent working procedure enabled, in a very concrete and direct way, informed discussion with various actors in the explorative environment of a planning situation.

In Intermezzo II, the desire to monitor the provision of greenspace, and the role of GIS-based applications in this, were placed in the wider context of the contradictions that are now evident in discourses on the 'compact city' and the 'green city'. The systematising logic of GIS helps to build a manageable situation, which can be deliberately argued in planning negotiation. It should be acknowledged, however, that this approach has some serious limitations where it concerns the perceptual qualities of greenspace. How people understand their environment cannot entirely be transposed into closed orderly structures of classification and measurement and within the boundaries of geographical spaces. It is a 'horizontal' approach, which considers only the uniform of general characteristics of a situation. So it is less appropriate if planning aims actually to ameliorate these conditions in response to the needs and aspirations of diverse groups. Therefore, an understanding of the underlying values and the social processes involved in people's perception and appreciation is needed. In this respect, qualitative studies into human-environment relationships are more suitable because they are grounded in the contexts of people's daily lives.

However, it was asserted that in much of this qualitative research is the emphasis on discovery and interpretation of the construction of preference and meaning, rather than on 'place creation'. Where the aim is to enhance or to create meaningful places, such

studies do not necessarily provide guidance on effective site-specific action. By means of a practical example I have demonstrated that people, when involved in a planning situation, not only tend to express what they 'like' (their preferences), but also what they 'see' (their expectations) in the given situation. When formulating preferences and expectations, and hence their images of what they want for the future, people are usually limited to their own experiences, social relationships and responsibilities. So exploratory processes are needed in which participants, together with their perceptions, problems, and ideas for solutions, can meet and interact. Images are not fixed or given: through discursive interaction people can share, test out and develop their views with others and build shared meanings. Given that people's understandings are both 'situational' and 'transformative' in nature, it was argued that research should concentrate on discursive interaction as a real basis of planning practice.

Part III is concerned with the actual dynamic of the construction of meaning in discursive interaction. It drew on the case study of the visionary process for an urban development project in a former railway yard in Antwerp. The empirical study involved a multifaceted story of how people 'came to see' a future park and how their ideas materialised (or not) in the vision plan. The analysis was focused on the 'creative' stage of the process and examined the 'interpretive frames' through which knowledge and meaning were articulated and framed in ideas. A number of shared frames were identified and labelled as: *'context of place'*, *'coherence of the whole'*, *'imagination of use'*, *'continuity in time'*, and *'interconnection of action'*. As the case study was concerned with the actual implementation of public input, the professionals' perspectives were also considered. It was shown that for each of the interpretive frames the professional and non-professional ways of reasoning differed substantially. This was demonstrated not only in the level of attention and meaning given to issues of concern but more importantly, in the way they made sense of the planning situation. For example, while the participants imagined the park (the object) starting from the standpoint of daily realities of neighbourhood life (the context), it was clear that the professionals (architects) attempted to integrate the object into the context while framing the planning situation as a more independent character inside the city.

The study revealed that the outcomes of the visionary process have depended critically on the consequences of these differences. With regard to the interpretive frame 'context of place', the participants' reasoning 'from the outside in' has complemented and widened the professionals' view 'from the inside out', and has subsequently led to novel solutions. However, the findings also suggest that the differences of other interpretive frames have led to an adjustment of the solutions proposed rather than they had led to a new interpretation or 'reframing' of the planning situation itself.

When the aim is to value local knowledge more fully in design activities that lead the way to creative and people-responsive solutions, it is of crucial importance to reconciling both perspectives in the course of structuring or framing the planning situation. Given the difficulties evident from this study, it was concluded that research should concentrate attention on what happens at the overlapping boundaries where the professional and

non-professional frames converge, in order to uncover what makes it so difficult for professionals to reflect on and to break out of their own frames.

Styles of greenspace planning

To this point I have summarised the conclusions of the three empirical studies, as well as the two intermezzos that sought to interconnect them. In the next paragraphs I aim to present some of the striking issues that have emerged from the overall work of the thesis, and which may be important for further investigation.

In all of these separate studies of practices it was the aim to gain a better understanding of how planning situations in particular contexts of time and place were identified, represented and acted upon in decision-making. In this respect, planning was primarily referred to as the imaginative and interpretative work involved in framing ideas and translating these into policy texts, plans, and actions on the ground. By putting together the experiences from the empirical studies it became possible to reveal how largely different styles and routines of planning practice are shaping the work of planning in Flanders today. On the one hand there are 'outputs-driven' styles, and on the other the more 'collaborative' styles.

While each style may aim to ensure the optimal supply of accessible and attractive greenspace, they vary greatly in their orientation, their use of knowledge resources, the role they assign to the users of green spaces, and how policy and action are being related.

The outputs-driven styles

The outputs- or performance-driven planning styles have basically a linear orientation that is primarily directed to meet the pre-formulated goals. In this respect, they are often referred to as a 'means-end' approach. They operate with systems of targets and strategies (see Part I: the afforestation programme for Flanders) and the allocation of incentives in ways that best meet the preset goals and directions (see Intermezzo I: the subsidies to local governments in the framework of the environmental covenants). The goal-oriented approach is highly dependent on the predictability of outcomes. Therefore, much effort is given in the 'objective' monitoring of performance by means of indicators (see Part II: the Nature and Environment Report for Flanders) and polls to obtain public opinion on the status of greenspace supply (for example, Mens en Ruimte, 1999).

The strength of the outputs-driven style is in its strong and clear focus, around which planning decisions can develop. This style tends to favour expert knowledge and control. The largely generalised nature of this kind of knowledge makes it easy to develop unifying and widely tested solutions that can be easily passed, disseminated and translated into action. Furthermore, this style draws on professional assumptions and unitary conceptions of the public interest, which often become equated with 'consumer

satisfaction'. The users of the greenspace resource are mainly considered as beneficiaries, rather than being given a more active role in the process.

In order to proceed from policy to action, this planning style tends to adopt a criteria-led approach, which is typically linked with legislative rules and/or systems of incentives. Although it is not inherent in the outputs-driven style that knowledge is limited to the quantitative, systematised and technical kind, or that the relation between policy and action should take a top-down form, both of these characteristics are widespread in actual cases. While the criteria-led approach continues to be dominant in planning practice, it is faced with serious difficulties. A major weakness is the perceived gap between the formulation of performance criteria and the implementation in practice. However excellent the criteria are formulated, in practice this approach all too often fails to influence. As a consequence, plans often turn out to be different from the original goals or they remain a plan on paper or just an abstract vision (see Part I),

This problem is being recognised in practice. Therefore, efforts to proceed from policy to action are often complemented by the pursuit of political influence. Much effort is being made for finding the support of all the powerful players, for example through political bargaining and networking (see Part I). Media attention, promotion campaigns, public education and 'sensitisation' are used to attract public attention and support. Furthermore, political influence is also being pursued in more subtle ways, such as through selective ways of representation. For example, it was shown how professional representation could be used as a means of influencing public policy (see Intermezzo I, Part II).

The collaborative styles

The collaborative planning styles represent a wide range of approaches in dialogue, decision-making, and action, which may differ according to who is being engaged, the scope of agendas under discussion and how these processes are linked (or not) to formal government. Collaborative platforms may range from ad-hoc meetings with project-based coalitions of public actors (see Part I), to activities of co-operative design with local people (see Part III). Nevertheless, generally they can be characterised by their non-linear orientation. Even if pre-formulated concepts and ideas are the starting point, these tend to be open for discussion, rethinking and transformation.

Collaborative planning styles promote planning with people rather than for people (Van Herzele and Heyens, 2003). Especially when they involve the wider public as local 'experts' and even 'inventors' of plans, they are open to a wide variety of input and knowledge. As they enable processes within which joint discovery and mutual learning between participants and public officials can occur and shared meaning can be built, there is a great chance that outcomes will be more sensitive and responsive to local conditions and needs. Another challenge underlining participation is to develop ideas, plans, and actions that are 'owned' by people, add value to their lives and are rooted in local culture (Van Herzele, Collins, and Tyrväinen, 2005).

Given the difficulties faced of controlling participatory processes and fitting them into project time schedules, much attention is being paid to ways of organising and managing these processes properly. However, even if these processes are being designed efficiently and fairly, it is largely overlooked that diversity also involves different ways of reasoning, which cannot always be readily validated, let alone that they can be easily reconciled with one other in a constructive manner (see Part III). It is argued here that if planners fail to acknowledge this substantial question, they tend to miss a great deal of what is going on.

Although there is much agreement in principle, collaboration or participation remains a contentious issue in current planning practice in Flanders. In particular it is raising difficult questions in relation to the quality of planning outcomes and the social consequences of these. Part of such controversy relates to the social differences in power and access to participation platforms, the balance of participatory outcomes with the interests of minorities, the long-term demands of generations and the needs of the city as a whole. But underlying this debate is also the deeper concern of professional competence and taking responsibility for the public good.

A major limitation of the collaborative style is the reality that the overall impact on the decision-making is still marginal. This is largely due to the lack of any formal authority. But there are also other reasons. As mentioned previously professionals often fail to capture the insights that local knowledge can offer. This is also linked with their pre-set attitudes towards the importance and value of local input, as well as with their failure to problematise their own insights. For example, when members of the public express views, which are contrary to those of the public officers, these are often disregarded as being of self-interest (see Intermezzo I). Another problem is that often outcomes from participatory processes cannot be readily linked to concrete tangible action. If participants cannot see how their efforts make a difference, they may get disillusioned and frustrated.

The co-existence of distinct styles of planning: synergy or conflict?

The comparison of planning styles does not mean that a once and for all choice has to be made between them. Outcomes from performance-driven processes are not ipso facto superior to those of collaborative processes. Each of the styles has strengths and limits and works best under different circumstances. For example, the outputs-driven style works well if all parties agree that the goal is to provide all citizens with public greenspace within a five-minute walk, but not if there is conflict over criteria of the minimum size of these spaces, or conflict over whether houses should be demolished to create these spaces. In Intermezzo II, it was also noted that unitary criteria have serious limits with regard to the perceptual qualities that green spaces should have for supporting the aspirations and needs of diverse groups adequately. So collaborative approaches that actively involve people in the plan-making itself are necessary in defining these qualities.

A comparison of planning styles does suggest that whatever their differences, they are both faced with serious problems of implementation: there is still a gap between rhetoric and action. This brings about that in actual cases of practice, the choice of a particular style of planning is often complemented by elements of the other. While new forms of collaborative approaches are emerging, this does not mean that they simply come to replace the traditional outputs-driven model. Paradoxically, collaborative approaches are promoted increasingly by governments and institutions that traditionally adhere to the outputs-driven style. The successes of Local Agenda 21 and the principle of 'subsidiarity' do not provide a sufficient explanation for this. It is the failure of the outputs-driven style of planning that makes collaborative approaches desirable. Participatory practices are frequently used to anticipate conflict, to overcome public mistrust in the formal planning system, and to solve many of the other difficulties with top-down and expert-based planning.

On the other hand, it is notable that, with the rise of collaborative planning and the multiplicity of formal and informal arenas of negotiation this brings about, criteria-led approaches are gaining more importance. In *Intermezzo II*, it was suggested that in the context of struggle, uncertainty and contradiction so typical of many of these forums, expert-based evidence and normative prescription may provide planners with helpful tools to argue with in the face of political representatives and private actors, who often pursue their claims in terms of employment figures, building needs, flow of traffic, and so on.

So in actual cases of planning practice, the collaborative and outputs-driven styles of planning show several interrelationships, as the former tends to fill the gaps of the latter and vice versa.⁵⁰ However, in practice the shifting from one style to another is likely to be conflicting, rather than offering reciprocal benefits. For example, a major problem may occur when the public is allowed to enter into a outputs-driven planning process. This happened in the case of the Ghent Park Forest (Part I). During the public meetings the initiators of the project reminded the participants what the goals and responsibilities were and presented the planning results. There were several attempts by the public to question the goals of this plan, but their requests were typically disregarded. This is not surprising, as the outputs-driven style does not have the tools for dealing with unknown consequences.

Finally, the distinction of planning styles may be a helpful starting point in raising some relevant questions for future investigation. The problem lies indeed not only in the planning styles themselves, but more fundamentally in the political and institutional context in which planners find themselves and have to work in. It could be questioned then what are the practical circumstances or conditions, which might favour or inhibit particular styles from operating in synergy or in conflict? Do these experiences from practice lead to innovation in styles? And if they do so, what would be the effect on how the urban 'green' is looked at, valued and spoken of, and, ultimately, how it is designed and managed?

References

- Aarts M.N.C. 1998. *Een kwestie van natuur: een studie naar de aard en het verloop van communicatie over natuur en natuurbeleid*. Doctoral dissertation, Department of Communication and Innovation Studies, Wageningen University, (in Dutch).
- Acking C.A., Sorte G.J. 1973. How do we verbalize what we see? *Landscape Architecture* 64: 470-475.
- Akin Ö. 1986. *Psychology of architectural design*. London: Pion Ltd.
- Akin Ö. 1990. Necessary conditions for design expertise and creativity. *Design Studies* 11(2): 107-113.
- Albrechts L. 1999. Planners as catalysts and initiators of change. The new Structure Plan for Flanders. *European Planning Studies* 7(5): 587-603.
- AMINAL. 1993. *Langetermijn planning groenvoorziening*. By Mens and Ruimte and the Flemish Association for Public Greenspace under the authority of the Forest and Greenspace Administration, (unpublished report, in Dutch).
- Antrop M. 1989. *Het landschap meervoudig bekeken*. Kapellen: Pelckmans, (in Dutch).
- Antrop M. 1997. The concept of traditional landscapes as a base for landscape evaluation and planning: The example of Flanders Region. *Landscape and Urban Planning* 38: 105-117.
- Archea J. 1987. Puzzlemaking: What architects do when no one is looking. In: (Y.E. Kaley, ed.) *Computability of Design*. New York: John Wiley.
- Axelsson Lindgren C. 1990. *Upplevda skillnader mellan skogsbestand. Rekreations- och planeringsaspekter*. Doctoral dissertation. Stad & Land Nr. 87. Sveriges Lantbruksuniversitet, Alnarp, (in Swedish).
- Beauregard R.A. 1995. If only the city could speak: The politics of representation. In: (Ligett H., Perry D.C., eds) *Spatial practices: Critical explorations in social/spatial theory*. Sage Publications: London, New Dehli.
- Beer A.R. 1990. *Environmental planning for site development*. London: Chapman and Hall.
- Beer A.R., Delshammar T., Schildwacht P. 2003. A changing understanding of the role of greenspace in high-density housing and the need for urban greenstructure planning - a European perspective. *Built Environment* 29(2): 132-143.
- Bentley I., Alcock A., Murrain P., McGlynn S., Smith G. 1985. *Responsive environments: A manual for designers*. Oxford: Architectural Press.
- Berggren-Bärring A-M, Grahn P. 1995. *Grönstrukturens betydelse för användningen*. Doctoral dissertation. Rapport 95:3. Sveriges Lantbruksuniversitet, Alnarp (in Swedish).
- Billig M. 1987. *Arguing and thinking: A rhetorical approach to social psychology*. Cambridge: Cambridge University Press.
- Bogaert D. 2004. *Natuurbeleid in Vlaanderen: Natuurontwikkeling en draagvlak als vernieuwingen?* Doctoral dissertation, Katholieke Universiteit Nijmegen. Brussel: Instituut voor Natuurhoud, (in Dutch).
- Boyer M.C. 1995. The great frame-up: Fantastic appearances in contemporary spatial politics. In: (Ligett H., Perry D.C., eds) *Spatial practices: Critical explorations in social/spatial theory*. London, New Dehli: Sage.
- Bryant C.R. 1995. The role of local actors in transforming the urban fringe. *Journal of Rural*

- Studies* 11(3): 255-267.
- Burgess J. 1984. *In the field: An introduction to field research*. Hemel Hempstead: Allen and Unwin.
- Burgess J., Harrison C.M., Limb M. 1988. People, parks and the urban green: A study of popular meanings and values for open spaces in the city. *Urban Studies* 25: 455-473.
- Burgess J., Limb M., Harrison C.M. 1988a. Exploring environmental values through the medium of small groups. Part One: Theory and practice. *Environment and Planning A* 20: 309-326.
- Burgess J., Limb M., Harrison C.M. 1988b. Exploring environmental values through the medium of small groups. Part Two: Illustrations of a group work. *Environmental and Planning A* 20: 457-476.
- Burningham K., Cooper G. 1999. Being constructive: Social constructionism and the environment. *Sociology* 33(2): 297-316.
- Burningham K. 2000. Using the language of NIMBY: A topic for research, not an activity for researchers. *Local Environment* 5(1): 55-67.
- Bussey S.C. 1996. *Public use, perceptions, and preferences for urban woodlands in Redditch*. Doctoral dissertation, University of Central England, Birmingham.
- Campbell H., Marshall R. 2000a. Public involvement and planning: looking beyond the one to the many. *International Planning Studies* 5(3): 321-344.
- Campbell H., Marshall R. 2000b. Moral obligations, planning and the public interest: a commentary on current British practice. *Environment and Planning B* 27: 297-312.
- Carles J., Bernàldez F., de Lucio J. 1992. Audio-visual interactions and soundscape preferences. *Landscape Research* 17: 52-56.
- Coeterier J.F. 1987. *De waarneming en waardering van landschappen*. Doctoral dissertation, Landbouwwuniversiteit Wageningen, (in Dutch).
- Coeterier J.F. 1996. Dominant attributes in the perception and evaluation of the Dutch landscape. *Landscape and Urban Planning* 34: 27-44.
- Coeterier J.F. 2000. *Hoe beleven wij onze omgeving? Resultaten van 25 jaar omgevingspsychologisch onderzoek in stad en landschap*. J.F. Coeterier, (in Dutch).
- Crampton J. 2001. Maps as social constructions: Power, communication and visualisation. *Progress in Human Geography* 25 (2): 235-252.
- Crewe K. 2001. The quality of participatory design: The effects of citizen input on the design of the Boston Southwest Corridor. *Journal of the American Planning Association* 67(4): 437-455.
- Cross N. 2001. Strategic knowledge exercised by outstanding designers. In: (Gero J. and Hori K, eds) *Strategic knowledge and concept formation*. Sydney: University of Sydney Press.
- Crouch D. 1994. *The popular culture of city parks*. Working Paper N°9. Gloucester: Comedia.
- Deconinck M. 1982. *Etude de la répartition des espaces publics de loisir de plein air dans les agglomérations urbaines: Analyse de leur rayonnement, de leurs fonctions et de leurs utilisateurs: Le cas de l'agglomération bruxelloise*. Doctoral dissertation, Université Libre de Bruxelles, (in French).
- De Corte S., Raymaekers P., Thaens K., Vandekerckhove B., François G. 2003. *Onderzoek naar de migratiebewegingen van de grote steden in de drie gewesten van België*. Unpublished report. Cosmopolis VUB and Mens en Ruimte, Brussels, (in Dutch).
- Demeritt D. 2002. What is the 'social construction of nature'? A typology and sympathetic

- critique. *Progress in Human Geography* 26(6): 767-790.
- De Vries S., Verheij R.A., Groenewegen P.P., Spreeuwenberg P. 2003. Natural environments – healthy environments? An exploratory analysis of the relationship between greenspace and health. *Environment and Planning A* 35: 1717-1731.
- De Wever H., Lambert E. (eds) 2003. *Antwerp, Spoor Noord : A city park off the beaten tracks*. Ghent: Ludion.
- Dryzek J. S. 1990. *Discursive democracy: Politics, policy, and political science*. Cambridge and New York: Cambridge University Press.
- Dryzek J.S. 1993. Policy analysis and planning: From science to argument. In: (Fischer F. and Forester J., eds) *The argumentative turn in policy analysis and planning*. London: UCL Press.
- Dua V. 1988. Meer ruimte voor bos? In: *Ruimte voor groen, deel I*. Vijfde Vlaams Wetenschappelijk Congres over Groenvoorziening, Gent, 16 September en 18 November 1988. Vereniging voor groenvoorziening, (in Dutch).
- Ducheyne T., Vanhove W., van Altena A. 2004. *Doorlichting van het beleid duurzame ontwikkeling in de gemeenten die een convenant internationale samenwerking afsloten met de Vlaamse Gemeenschap*. Onderzoek in opdracht van de Vlaamse Minister van Ontwikkelingssamenwerking, (in Dutch).
- Dufrane F. 1973. De economische en sociale rol van grote boscomplexen. In: *Standpunten inzake Groenvoorziening*, Symposium Mechelen, 12 mei 1973, Vereniging voor Groenvoorziening, (in Dutch).
- Eder K. 1996. *The social construction of nature*. London: Sage.
- Embo T. 1999. Een echt stadsbos voor Gent. In: *Ommeekeer*, November 1999: 13-17, (in Dutch).
- English Nature 2003. *Providing accessible natural greenspace in towns and cities: A practical guide to assessing the resource and implementing local standards for provision*. Centre for Urban and Regional Ecology, School of Planning and Landscape, University of Manchester.
- Enserink B., Monnikhof R.A.H. 2000. Impact assessment and public participation: Facilitating co-design by information management. Paper presented at the 20th annual meeting of the International Association for Impact Assessment, 19-23 June 2000, Hong Kong.
- Erdmenger C. 1998. *Environmental management instruments: A guide for local authorities*. The International Council for Local Environment Initiatives, Freiburg.
- Fainstein S.S. 2000. New directions in planning theory. *Urban Affairs Review* 35(4): 451-478.
- Fischler R. 1995. Strategy and history in professional practice: Planning as world making. In: (Liggett H., Perry D.C., eds) *Spatial Practices: Critical Explorations in Social/Spatial Theory*. Thousand Oaks: Sage.
- Flyvbjerg B. 1998. *Rationality and power: Democracy and practice*. Chicago: University of Chicago Press.
- Forester J. 1989. *Planning in the face of power*. Berkeley: University of California Press.
- Forester J. 1993. Learning from practice stories: The priority of practical judgment. In: (Fischer F. and Forester J., eds.) *The argumentative turn in policy analysis and planning*. London: UCL Press.
- Forester J. 1998. Rationality, dialogue and learning: what community and environmental mediators can teach us about the practice of civil society. In: (Douglas M. and

- Friedmann J., eds.) *Cities for citizens: Planning and the rise of civil society in a global age*. Chichester: John Wiley & Sons.
- Forester J. 1999. *The deliberative practitioner: Encouraging participatory planning processes*. London: MIT Press.
- Freeman C. 1996. Deflecting development: Competing pressures on urban green space. *Planning Practice & Research* 11 (4): 365-378.
- Friedmann J. 1987. *Planning in the public domain: From knowledge to action*. New Jersey: Princeton University Press.
- Gamson W.A., Modigliani A. 1987. The changing culture of affirmative action. In: (Braungart R.G., Braungart M.M., eds.) *Research in Political Sociology: Vol.3*. Greenwich, CT: JAI Press.
- Gans H.J. 1969. Planning for people, not buildings. *Environment and Planning A* 1:33-46.
- Garcia-Mira R., Arce C., Sabucedo J.M. 1997. Perceived quality of neighborhoods in a city in northwest Spain: An individual differences scaling approach. *Journal of Environmental Psychology* 17: 243-252.
- Gifford R., Hine D.W., Muller-Clemm W., Reynolds D'Arcy J., Shaw K.T. 2000. Decoding modern architecture. A Lens Model approach for understanding the aesthetic differences of architects and laypersons. *Environment and Behavior* 32(2): 163-187.
- Graham S., Healey P. 1999. Relational concepts of space and place: issues for planning theory and practice. *European Planning Studies* 7(5): 623-646.
- Grahn P. 1986. *Grönplanering för människor*. Stad & Land N° 44, Sveriges Lantbruksuniversitet, Alnarp (in Swedish).
- Grahn P. 1991. Landscapes in our minds: People's choice of recreation places in towns. *Landscape Research* 16: 11-19.
- Grahn P. 1994. Green structures: the importance for health of nature areas and parks. *European Regional Planning* 56: 89-112.
- Grahn P., Stigsdotter U.A. 2003. Landscape planning and stress. *Urban Forestry and Urban Greening* 2(1): 1-18.
- Greenhalgh L., Worpole K. 1995. *Park life, urban parks and social renewal*. Gloucester: Comedia.
- Greider T., Garkovitch L. 1994. Landscapes: The social construction of nature and the environment. *Rural Sociology* 59: 1-24.
- Groat L. 1982. Meaning in post-modern architecture. An examination using the multiple sorting task. *Journal of Environmental Psychology* 2: 3-22.
- Gustavsson R., 1999. Local distinctiveness in landscape character. In: (M.B. Usher; ed.) *Landscape character: Perspectives on management and change*. Macaulay land use Research Institute and Scottish Natural Heritage, The Stationery Office Ltd.
- Hajer M., Zonneveld W. 2000. Spatial planning in the network society: Rethinking the principles of planning in the Netherlands. *European Planning Studies* 8(3): 337-355.
- Hajer M. 1995. *The politics of environmental discourse*. Oxford: Oxford University Press.
- Harley J.B. 1992. Deconstructing the map. In: (Barnes T.J. Duncan J.S., eds.) *Writing worlds: Discourse, text and metaphor in the representation of landscape*. London: Routledge.
- Harrison C., Burgess J. 1988. Qualitative research and open space policy. *The Planner*, Nov. 1988: 16-18.
- Harrison C., Burgess J., Millward A., Dawe G. 1995. *Accessible natural greenspace in towns and*

- cities: A review of appropriate size and distance criteria*. English Nature Research Report N° 153. English Nature, Petersborough.
- Hart R. 1979. *Children's experience of place*. New York: Irvington.
- Harvey D. 1996. *Justice, nature and the geography of difference*. Oxford: Blackwell.
- Healey P. 1985. The professionalisation of planning. *Town Planning Review* 56: 492-507.
- Healey P. 1993. Planning through debate: The communicative turn in planning theory. In: (Fischer F. and Forester J., eds.) *The argumentative turn in policy analysis and planning*. London: UCL Press.
- Healey P., Hillier J. 1996. Communicative micropolitics: A story of claims and discourses. *International Planning Studies*. 1(2): 165-184.
- Healey P. 1997. *Collaborative planning: Shaping places in fragmented societies*. London: Macmillan.
- Healey P. 1999. Sites, jobs and portfolios: economic development discourses in the planning system. *Urban Studies* 36(1): 27-42.
- Healey P., de Magalhaes C., Madanipour A., Pendlebury J. 2003. Place, identity and local politics: analysing initiatives in deliberative governance. In: (Hajer M.A., Wagenaar H., eds) *Deliberative policy analysis: Understanding governance in the network society*. Cambridge: University Press.
- Healey P. 2003. Editorial. *Planning Theory and Practice* 4(3): 245-247.
- Herschberger R. 1988. A study of meaning and architecture. In: (Nasar J.L., ed.) *Environmental aesthetics: Theory, research and applications*. New York: Cambridge University Press.
- Hillier J. 2002. *Shadows of power: An allegory of prudence in land-use planning*. London and New York: Routledge.
- Hillman M., Adams J., Whitelegg J. 1990. *One false move: A study of children's independent mobility*. Policy Studies Institute, London.
- Holm S. 1998. *The use and importance of urban parks*. Doctoral dissertation, The Royal Veterinary and Agricultural University, Copenhagen.
- Hubbard P. 1994. Professional vs lay tastes in design control – an empirical investigation. *Planning Practice and Research* 9(3): 271-287.
- Husslage W.J.G. 1996. *De stedelijke groenstructuren van Europa: De functies van groene en blauwe longen/adere door Europese steden*. Alphen aan den Rijn: Samson H.D. Tjeenk Willink, (in Dutch).
- Iedema R. 2001. Resemiotization. *Semiotica* 137 (1/4): 23-39.
- Innes J. 1995. Planning theory's emerging paradigm: Communicative action and interactive practice. *Journal of Planning Education and Research* 14 (3): 183-89.
- Innes J. E., Booher D.E. 1999. Consensus building as role playing and bricolage: Toward a theory of collaborative planning. *Journal of the American Planning Association* 65(1): 9-26.
- Irwin A. 1995. *Citizen science: A study for people, expertise and sustainable development*. London: Routledge.
- Kaufman J.L. 2000. Thinking alike. *Journal of the American Planning Association* 66: 34-47.
- Kaplan R., Kaplan S. 1989. *The experience of nature: A psychological perspective*. Cambridge: Cambridge University Press.
- Kaplan S., 1991. Parks for the future: A psychological perspective. In: (Sorte, G.J., ed.) *Parks for the future*. Stad & Land nr. 85, Swedish University of Agricultural Sciences, Alnarp.

- Katteler H., Kropman J. 1975. *Openluchtrecreatie binnen en buiten de woonkern: Kompensatie of komplement?* ITS, Nijmegen, (in Dutch).
- Kennedy J.J., Dombeck M.P., Koch N.E. 1998. Values, beliefs and management of public forests in the Western world at the close of the twentieth century. *Unasylva* 49 (192): 16-26.
- Konijnendijk C.C. 1999. *Urban forestry in Europe: A comparative study of concepts, policies and planning for forest conservation, management and development in and around major European cities*. Doctoral dissertation, University of Joensuu.
- Konijnendijk C.C. 2003. A decade of urban forestry in Europe. *Forest Policy and Economics* 5: 173-186.
- Kornov L., Thissen W.A.H. 2000. Rationality in decision- and policy-making: Implications for strategic environmental assessment. *Impact Assessment and Project Appraisal* 18(3): 191-200.
- Levi-Strauss C. 1966. *The savage mind*. London: Weidenfeld & Nicholson.
- Liggett H. 1996. Examining the planning practice conscious(ness). In: (Mandelbaum S., Mazza L., Burchell R., eds.) *Explorations in planning theory*. New Brunswick: Rutgers University.
- Loopmans M. 2002. From hero to zero: armen en stedelijk beleid in Vlaanderen. *Ruimte & Planning* 22 (1): 39-49.
- López Barrio I., Carles J. 1995. Madrid. Acoustic dimensions of inhabited areas: Quality criteria. *The Soundscape Newsletter*, 10.
- Llewelyn-Davies 2000. *Urban design compendium*. English Partnerships and The Housing Corporation, London.
- Lust N. 1980. Bosbouw op bio-ecologische basis. In: *Natuurbewoud en landschapszorg in Vlaanderen*, Derde Vlaams Wetenschappelijk Congres over Groenvoorziening, Antwerpen, 17-18 oktober 1980, Vereniging voor Groenvoorziening (in Dutch).
- Lust N., Van Miegroet M. 1977. Bosbouw en recreatie. In: *Groenvoorziening en openluchtrecreatie: naar een openluchtrecreatie-plan voor Vlaanderen*, Tweede Vlaams Wetenschappelijk Congres over Groenvoorziening, Leuven, 30 September - 1 oktober 1977, Vereniging voor Groenvoorziening (in Dutch).
- Lynch K. 1960. *Image of the city*. Cambridge, Mass. London: MIT Press.
- Lynch K. 1994. *Good city form*. Cambridge, Mass. London: MIT Press.
- Macnaghten P., Urry J. 1998. *Contested natures*. London: Sage.
- Malbert B. 1998. *Urban planning participation: Linking practice and theory*. Doctoral dissertation, Chalmers University of Technology, Gothenburg, Sweden.
- Matthews M.H. 1987. Gender, home and environmental cognition. *Transactions of the Institute of British Geographers* 12: 43-56.
- Mens en Ruimte, 1999. *Maatschappelijke waardering van groen en landschap*. Ministerie van de Vlaamse Gemeenschap, Brussel, (unpublished report, in Dutch).
- Merton R.K., Fiske M., Kendall P.L. 1990. *The focused interview: A manual of problems and procedures*. New York: Free Press.
- Muys B. (spokesman), De Schuyter J., Desmet J., Dua V., Kayaerts B., Lust N., Maddelein D., Pieters A., Steenackers J., Vanhaeren R. 1988. Bosuitbreiding. In: *Ruimte voor Groen, deel II*. Vijfde Vlaams Wetenschappelijk Congres over Groenvoorziening, 16 September en 18 November 1988, Gent. Vereniging voor Groenvoorziening, (in Dutch).

- Nachtergaele J., De Vreese R., Vanhaeren R., Van Slycken J. 2002. Realizing urban forests in Flanders: A policy perspective. In: (Randrup, T.B., Konijnendijk, C.C., Christophersen T., Nilsson, K. eds.) *COST Action E12 Urban Forests and Trees, Proceedings N°2*. Office for Official Publications of the European Commission, Luxembourg.
- Nasar J.L. 1998. *The evaluative image of the city*. Thousand Oaks: Sage.
- Nasar J.L. 1999. Perception and evaluation of residential street scenes. In: (Nasar J.L., Preiser W.F.E., eds.) *Directions in person-environment research and practice*. Aldershot: Ashgate.
- Nicol C., Blake R. 2000. Classification and use of open space in the context of increasing urban capacity. *Planning Practice and Research*, 15: 193-210.
- OB/planningscel 2001. *Het grootstedenbeleid van de federale regering: Spoorwegemplacement en omgeving*. Consensusnota (unpublished public document, in Dutch).
- OECD, 1997. *Better understanding our cities: The role of urban indicators*. OECD Publications, Paris.
- Oliver P.E., Johnston H. 2000. What a good idea! Frames and ideologies in social movement research. *Mobilization* 5(1): 37-54.
- Pannekoek en Schipper 1975. *Tuinen, deel 4: Openbaar groen en recreatie*. Amsterdam, (in Dutch).
- Pelfrene, E., 2000. In- en uitwijking in Vlaamse steden en gemeenten: Analyse naar leeftijd en ruimtelijke structuren voor de periode 1996-1998. *Stativaria* nr. 24, Ministerie van de Vlaamse Gemeenschap, Brussel (in Dutch).
- Peters K.B.M. 1999. *Kwaliteit van de recreatieve omgeving: Handreikingen*. In opdracht van Directie Groene Ruimte en Recreatie van het ministerie LNV. Stichting Recreatie, Kennis- en Innovatiecentrum, (in Dutch).
- Palmer P. 1987. Community, conflict, and ways of knowing: Ways to deepen our educational agenda. In: (Kendall J. et al., eds) *Combining service and learning: A resource book for community and public service*. National Society for Internships and Experiential Education.
- Potter J., Wetherell M. 1987. *Discourse and social psychology: Beyond attitudes and behaviour*. London: Sage.
- Pronk D.M., de Boer T.A., Boerwinkel H.W.J. 1997. *Aantrekkingskracht van parken op stadsniveau*. IBN-DLO rapport n° 274, Wageningen, (in Dutch).
- Psathas, George 1980. Approaches to the study of the world of everyday life. *Human Studies* 3: 3-17.
- Rein M., Schon D. 1993. Reframing policy discourse. In: (Fischer F. and Forester J., eds) *The argumentative turn in policy analysis and planning*. London: UCL Press.
- Reneman D., Visser M., Edelmann E., Mors B., 1999. *Mensenwensen: De wensen van Nederlanders ten aanzien van natuur en groen in de leefomgeving*. Reeks Operatie Boomhut nr. 6, Intomart, Den Haag, (in Dutch).
- Richardson T., Jensen O.B. 2003. Linking discourse and space: Towards a cultural sociology of space in analysing spatial policy discourses. *Urban Studies* 40(1): 7-22.
- Rittel H.W.J., Webber M. 1973. Dilemmas in a general theory of planning. *Policy Sciences* 4: 155-169.
- Rydberg D., Falck J. 2000. Urban forestry in Sweden from a silvicultural perspective: a review. *Landscape and Urban Planning* 47: 1-18.

- Röling N., Maarleveld M. 1999. Facing strategic narratives: An argument for interactive effectiveness. *Agriculture and Human Values* 16: 295-308.
- Sager T. 1994. *Communicative planning theory*. Aldershot: Ashgate.
- Sancar F. H. 1993. An integrative approach to public participation and knowledge generation in planning and design. *Landscape and Urban Planning* 26(1-4): 67-88.
- Sandercock L. 1998. The death of modernist planning: radical praxis for a postmodern age. In: (Douglass M, Friedmann J., eds) *Cities for citizens: Planning and the rise of civil society in a global age*. Chichester: John Wiley&Sons.
- Schön D. 1983. *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön D., Rein M. 1994. *Frame reflection: Toward the resolution of intractable policy controversies*. New York: Basic Books.
- Schütz J.-P. 1999. Close-to-nature silviculture: is this concept compatible with species diversity? *Forestry* 72(4): 359-366.
- Shields, R. 1995. A guide to urban representations and what to do about it: Alternative traditions in urban theory. In: A. King (Ed.) *Re-presenting the city: Ethnicity, capital and culture in the twenty-first century metropolis*. London: Macmillan.
- Stähle A., Sandberg A. 2002. *Sociotopkarta för parker och andra friyto i Stockholms innerstad*. Stockholms stadsbyggnadskontor. Rapport 2002:2. Stockholm, (in Swedish).
- Stedelijke Recreatie. 1978. Nota van de Provinciale Raad voor de Recreatie en Natuurbescherming in Zuid-Holland. In: (Nijhof P., ed.) *Planologische kengetallen*, September 1980. Samson – Alphen aan den Rijn, (in Dutch).
- Steino N. 2000. Architecture in planning: An independent rationale or a multi-rationality approach? Unpublished paper for course in planning theory, Aalborg University, Denmark.
- Strauss A., Corbin J. 1998. *Basics of qualitative research: grounded theory procedures and techniques*. CA: Sage Newbury Park.
- Tack G., Hermy M., Van Den Brempt P. 1993. *Bossen van Vlaanderen*. Leuven: Davidsfonds, (in Dutch).
- Talen E., Ellis C. 2002. Beyond relativism: Reclaiming the search for good city form. *Journal of Planning Education and Research* 22: 36-49.
- Tratsaert K. 1998. *Stads(v)lucht maakt vrij: Analyse van de verhuisstromen en een bevraging van de verhuismotieven en woonwensen van jonge gezinnen in het Leuvense*. Hoger Instituut voor de Arbeid, Katholieke Universiteit Leuven, (in Dutch).
- Tyrväinen L., Mäkinen K., Schipperijn J. (forthc.). Mapping social values and meanings of green areas in Helsinki, Finland, (submitted paper).
- Uzzell D. L., Lewand K. 1989. The psychology of landscape. *Landscape Design* 189:34-35.
- Van Herzele, A., 1998. *Indicatoren stedelijk milieu*. Vlaamse Milieumaatschappij (VMM), Mechelen. Unpublished report, (in Dutch, with English paper).
- Van Herzele A., Wiedemann T., Van Overmeire M., Claeys I. 2000. Stedelijk milieu. In: (Van Steertegem M., ed.) *Milieu- en Natuurrapport Vlaanderen MIRA-S 2000*. Leuven: Garant, (in Dutch).
- Van Herzele A., 2001, Challenges of neighbourhood participation in city-scale urban greenspace planning. In: (Randrup, T.B., Konijnendijk, C.C., Christophersen T., Nilsson, K. eds.) *COST Action E12 Urban Forests and Trees, Proceedings N°2*. Office for Official

- Publications of the European Commission, Luxembourg (in press).
- Van Herzele A, Wiedemann T. 2003a. A monitoring tool for the provision of accessible and attractive urban green spaces. *Landscape and Urban Planning* 63: 109-126.
- Van Herzele A., Wiedemann T. 2003b. Monitor voor bereikbaar en aantrekkelijk groen: De betekenis van de groene ruimte voor de kwaliteit van de leefomgeving hanteerbaar gemaakt voor discussie, afweging en besluitvorming. *Ruimte & Planning* 23(2): 98-110, (in Dutch).
- Van Herzele A., Heyens V. 2003. *Het park met iedereen: Ideeënboek voor participatie in groen*. Ministerie van de Vlaamse Gemeenschap, Afdeling Bos en Groen. Available at: <http://www.bosengroen.be> (in Dutch, translation in English in press: 'Interactive greenspace: People participating with professionals in parks and woodlands')
- Van Herzele A. 2004. Local knowledge in action: Valuing non-professional knowledge in the planning process. *Journal of Planning Education and Research* 24(2): 197-212.
- Van Herzele A., De Clercq E., Wiedemann T., De Bruyn L., Degans H. 2004. Stedelijk milieu. In: (Van Steertegem M., ed.) *Milieu- en Natuurrapport Vlaanderen MIRAT 2004*. Leuven: Garant, (in Dutch).
- Van Herzele A., Collins K., Tyrväinen L., 2005, Involving people in urban forestry: A discussion of participatory practices throughout Europe. In: (Konijnendijk C.C., Nilsson K., Randrup T.B., Schipperijn J., eds) *Urban Forests and Trees in Europe*. Springer Academic Publishers.
- Van Herzele A. 2005. The integration of urban forest discourse in spatial planning, Belgium: The Ghent Park Forest case study. In: Final report of COST Action C11: Greenstructure and Urban Planning.
- Van Herzele A., De Clercq E., Wiedemann T. 2005. Strategic planning for new forests in the urban periphery: Through the lens of social inclusiveness. *Urban Forestry and Urban Greening* (article in press).
- Van Miegroet M. 1971. De postitie van het bos in Vlaanderen. *Groene Band* 1: 1-43, (in Dutch).
- Van Miegroet M. 1994. *Natuurgericht beheer van bossen*. Monografieën Stichting leefmilieu 33. Kapellen: Uitgeverij Pelckmans, (in Dutch).
- Van Miegroet M., Van Herzele A., Dua V. 1982. *Het kapverbod*. SEB (Sociale en Economische Betekenis van het Bos) rapport n°3. Centrum voor Bosbedrijfsvoering en Bospolitiek, Rijksuniversiteit Gent, (in Dutch).
- Van Tatenhove J.P.M., Leroy P. 2003. Environment and participation in a context of political modernisation. *Environmental Values* 12: 155-74.
- Van Woerkum C.M.J. 1997. *Communicatie en interactieve beleidsvorming*. Houten: Bohn Stafleu Van Loghum, (in Dutch).
- Van Woerkum C. 2002. Orality in environmental planning. *European Environment* 12: 60-172.
- Verhetsel A., Witlox F., Tierens N. 2004. Woonwensen en woonbehoeften van jongeren in Vlaanderen en Brussel. *Ruimte & Planning* 24(1): 18-46, (in Dutch).
- Wagner P. 1990. *Sozialwissenschaften und Staat. Frankreich, Italien, Deutschland 1870-1980*. Frankfurt/M and New York (in German).
- Watson V. 2002. Do we learn from planning practice? The contribution of the practice movement to planning theory. *Journal of Planning Education and Research* 22: 187-187.

- Wiedemann T. 1996. *Indicatoren voor de versnippering van de open ruimte, toegepast op enkele studiegebieden in Vlaanderen*. Thesis in geography, University of Ghent, (in Dutch).
- Willaert D. 1999. Stadsvlucht of verstedelijking? Een analyse van migratiebewegingen in België. *Planologisch Nieuws*, 19: 109-126, (in Dutch).
- Wilson M. 1996. The socialization of architectural preference. *Journal of Environmental Psychology* 16: 33-44.
- Whatmore S, Boucher S. 1993. Bargaining with nature: The discourse and practice of 'environmental planning gain'. *Transactions of the Institute of British Geographers* 18(2): 166-178.
- Wynne B. 1992. Misunderstood misunderstandings: Social identities and public uptake of science. *Public Understanding of Science* 1: 281-304.
- Yiftachel O. 1999. Planning theory at the crossroad: The third Oxford conference. *Journal of Planning Education and Research* 18(3): 267-270.
- Yin R.K. 1994. *Case study research: Design and methods*. Second edition. Applied Social Research Methods Series Volume 5. Thousands Oaks: Sage.

Endnotes

- 1 For a review of various forms of social constructionism with regard to the environment, see, for example: Eder, 1996; Burningham and Cooper, 1999; Demeritt, 2002.
- 2 For example, Whatmore and Boucher (1993) explored the different 'narratives of nature' that were used by developers and planning officers in the negotiation of environmental planning gains and how these were used to legitimate the development of green belts and 'sites of special scientific interest'.
- 3 In his discussion on the dilemmas of the 'radical planning model', John Friedmann (1987: 404) posits a 'optimum critical distance' between planners and the front line of action: 'Planners must be part of the action, but not entirely a part... The position implied by 'critical distance' suggests that if planners remain too distant and aloof, trust may be dissipated. Alternatively, though trust may be gained by closer involvements with the action, the ability to mediate theory effectively in the thick of the action may plunge to zero.'
- 4 Examples of prominent authors supportive to a communicative approach are John Forester (1989, 1999), John Dryzek (1990), Tore Sager (1994), Judith Innes (1995), Patsy Healey (1993, 1997).
- 5 Prescribed procedures, methods and tools are increasingly becoming a routine demand in communicative planning practice. This is, for example, reflected in the growing number of handbooks for practitioners, describing participatory appraisals (e.g. Priority Search), consensus building techniques (e.g., Planning for Real, Strategic Choice) and monitoring tools (e.g., Community Indicators).
- 6 The question if academics can play a role in improving practice by documenting, analysing and reflecting on the experience of practice, was recently examined by Vanessa Watson (2002), drawing on ideas from the fields of experiential learning and cognitive psychology.
- 7 For a comparison of concepts and policies for forests in and around European cities: see Konijnendijk 1999 and 2003.
- 8 This recognition has motivated a number of promotional campaigns, and a EU-funded Life Environment project (1999-2002) aimed at broadening the public support.
- 9 I borrowed the term 'sponsorship' from Rein and Schön (1993:158) who used it in a somewhat different sense when referring to policy analysts who play a critical role in naming the policy terrain and specifying how frames, policy designs, and policy actions are to be linked.

- 10 A large part of the documentary sources consisted of internal material on the Park Forest Ghent Project. They include (draft) reports, correspondence, minutes of meetings. For confidential reasons no quotations were included from this material. The Association for Forest in Flanders (the former Flemish Forestry Association) made available its comprehensive collection of articles in newspapers and magazines on the topic. The recorded events were: election debate 'nature and greenspace in Ghent' (September 2000), the public hearings on the 'Spatial Structure Plan for Ghent' and the 'Delineation of the metropolitan area of Ghent' (May 2002), four public information meetings on the Park Forest Ghent (October-November 2002), an information meeting for the farmers (December 2002), the 'Urban Forest Debate' (March 2003).
- 11 The interview data consist of nine in-depth interviews (recorded on tape), and numerous clarifying, informal interviews with key actors in the process.
- 12 In 1925 in the Zoniënwood near Brussels a '*canton pittoresque*' was installed for the visitors and artists: on a surface area of 39 ha the management was directed to the creation of various picturesque tree shapes (Tack, Hermy, and Van Den Brempt, 1993).
- 13 The overemphasis on wood production has had an important effect on how forests as well as foresters were looked at, valued and spoken of. For example, in the national forestry administration there was even the practice of awarding 'prize-medals' for productivity (Lust pers. comm. 2004).
- 14 In 1950, the Belgian state owned 79% of the forest cover in the four entirely Walloon provinces and only 9% in the four entirely Flemish provinces (Van Miegroet, 1971).
- 15 It is remarkable that this argument is still used, for example, by Minister Vera Dua (a forester) in an interview with a local newspaper about the creation of urban forests (De Gentenaar, 24 November, 1999).
- 16 On the institutionalisation of nature policies in Flanders: see Bogaert (2004: 94-144).
- 17 For example, it was said that FFA members were on a 'black list' (Lust, pers. comm. 2004).
- 18 For a description of nature policy in Flanders during the 1989-2002 period, see Bogaert (2004).
- 19 At a European level, close-to-nature forestry has been promoted by the organisation Pro Silva since 1989. Since then the concept has been extended to include the conservation and enhancement of biodiversity (see also: Schütz, 1999). The concept was recently implemented in the forest administration's 'principles of sustainable forestry'.

- 20 The idea of professional control has been institutionalised in The Forest Decree 1990, which requires a management plan, also in privately owned forests.
- 21 See also Kennedy, Dombeck, and Koch (1998), Rydberg and Falck (2000) on the adaptation of professional management concepts in the U.S. and Scandinavia.
- 22 Underlying their discussions was a deeper concern with the particular image of the forest and the forester's role. Key features of this image were 'mature' (the belief that the growth of 'a fully valuable forest' takes a century), 'large-scale' (ranging from a minimum of 100 to a few hundred hectares), 'managed' ('the silvicultural measure is an absolute necessity'). For example, the idea of leaving forests unmanaged evoked images of abandoned forests 'wasting away by ageing', endangered by fires and turning into 'artificial and unattractive steppe-like areas' (Dufrane, 1973).
- 23 The struggle for formal recognition of the forest in land use planning is still ongoing. This largely explains why the forest administration in Flanders prefers to employ a traditional 'forest' definition (5-15% open spaces of max. 0.5 ha each).
- 24 This forest definition was included in the Forest Decree (1990).
- 25 The negotiation process around the SSF has been well described by Albrechts (1999).
- 26 In addition, in the 1990s, in the face of the reality of urban outflow, themes of urban quality of life gained an increasingly prominent place on political agendas (Van Herzele and Wiedemann, 2003a). Hence, urban forest discourse was strengthened with the message that urban forests would improve urban life and prevent people from leaving the cities.
- 27 The approach has proven to be extremely effective in advancing the urban forest idea in land use planning. Endorsed by the results of location studies, the forestry administration is currently taking a prominent role in the negotiation processes for the establishment of regional land use plans within the framework of the delineation of urban areas.
- 28 However, the new name was not welcomed by all of the project's sponsors. In their magazine (Snepl N°1, 2004) nature activists criticised that Bossanova had weakened the urban forest in the Kastelensite into 'the so-called Park Forest'.
- 29 Later on, Bossanova made a partnership with the Flemish Land Agency (FLA), because of its good contacts and experiences with the agricultural sector. The FLA started an agro-economic investigation in the area (see also: Van Herzele, 2005).
- 30 100 short field interviews were made in the framework of a recreation study (January-March 2004: spread over week- and sundays, as well as four types of weather).

- 31 Farmers hoped that the afforestation of the City's land would consequently reduce the afforestation (in terms of hectares) of their own land.
- 32 'Hutsepot' (hotchpotch) is the name of the adjacent neighbourhood. Thinking of the diversity of actors involved it was also used as a metaphor: 'a dish with a little bit of everything in it'.
- 33 It appeared that those deeper layers of discourse were not only affected by the unfavourable physical realities of the Flemish forest, but were to a great extent directed by the 'strategic narratives' (a term used by Røling and Maarleveld, 1999) that came to place a particular interpretation upon these 'facts', and which gained widespread currency in forestry circles. In this context, it is notable how professional education by powerful personalities within the sphere of academia have been of great influence. Examples are the idea of forest as the natural climax vegetation of nearly the whole of Flanders (Prof. Van Miegroet), and the powerful metaphor: 'the forest is the natural skin of the earth' (Prof. Schalck).
- 34 Like the foresters', local identities are socially constructed and must be seen in a historical context. The present landscape, for example, is created by generations of farmers. In consequence, the announcement of an afforestation plan might be interpreted as being disrespectful to the farmers' creation, and hence their cultural and professional identity (see also: Aarts, 1998).
- 35 That is not to say that forest expansion proponents do not recognise the importance of deeper layers of discourse. For example, in the introduction to the forest expansion story line (Muys et al., 1988) a particular idea about the farmers' attitude was expressed: 'A certain aversion to trees and forests exists among farmers. It is probably the result of an ancient tradition of land reclamation, in combination with modern farming principles of utility.' This assumption, whether plausible or not, represents the farmers' attitude as inevitable and unchangeable.
- 36 To Henri Lefebvre the social process of 'fact-construction' extends from face-to-face talk to the ways we produce the structures that constitute and produce our social space. This idea was elaborated further by Iedema (1999, 2001), who showed that the construction of 'facts' also involves their transposition into increasingly durable and propagative semiotics, such as printed matter, technologised kinds of representation such as architectural design, and even the organisation of our spatial environment.
- 37 Five interval classes were delimited between the lowest and the highest average income per neighbourhood, according to natural breaks. This is the default classification method in ArcView. This method identifies breakpoints between classes using a statistical formula (Jenks's optimisation). This method is rather complex, but basically the Jenks's method minimises the sum of the variance within each of the classes. Natural Breaks find groupings and patterns inherent in the data. The resulting classes ranged from low (1) to high (5) income. (Van Herzele, De Clercq, and Wiedemann, 2005).

- 38 This was also reflected in the development of recent research. Studies in the Netherlands (De Vries et al., 2003) and Sweden (Grahm and Stigsdotter, 2003) found a positive relationship between the proximity of green areas and human health. In Flanders, the 'Centre for Health and Environment' was established in 2001 (Department of Human Ecology, Free University of Brussels). Among its tasks is a pilot study into the relationships between greenspace and human health in Flemish cities.
- 39 For example, Steino (2000) reported on the Skejbygaard area-plan for Aarhus, Denmark, that architects promoted their artistic ideas of 'irrationality' over issues such as crime prevention and traffic safety. This was ascribed to their fundamental approach based on a deconstructionist philosophy, which questions the traditional views and ways of doing things.
- 40 The workshops were held in June 2001 in a local community center and lasted three hours. Forty people attended at least one workshop, and twenty-one attended both.
- 41 The participant group was selected by using a checklist of possible benefits and constraints related to the creation of a park, combined with a survey of the social networks in the area. The statistical profile of the group was different from that of the average citizen in the sense that the average income and education were higher and participants were more active in city and/or community affairs. The advantages of groups such as this for social learning and mobilization are the high levels of motivation, strong linkages with other community groups, and its legitimacy due to substantive and symbolic representation (Sancar, 1993). For this study, these advantages as well as the potential for a creative input to the visionary process were regarded as more important than statistical representativeness.
- 42 Many participants had multiple roles in relation to the area: for example, as a local resident, as a member of a neighbourhood committee, and as a director of an organization of local tourism.
- 43 Various participants had a formal position in the city administration, and the purpose was that they would feel comfortable to break out from their formal and agreed-on positions, to express their personal views, and to play with ideas. Therefore, instead of making tape records, detailed notes were taken throughout the group brainstorming sessions and plenary discussions.
- 44 In an attempt to look beyond the public statements, in particular the underlying motivations that formed the basis for their opinions, individual semi-structured or focused interviews (Merton, Fiske, and Kendall, 1990) were conducted with ten participants (of different professional and social backgrounds) in September-October 2001. All interviewees were questioned on the same topics by using an interview guide: the desired park image, function of the park, and personal perception of the workshops. To stimulate the expression of personal opinions and feelings about the area, eight color photographs were used as stimuli. All interviews were tape recorded.

- 45 The planning team consisted of three architects and one landscape architect.
- 46 More than one hundred individuals (local residents) participated in thirteen discussion groups. All discussions were recorded on tape.
- 47 The architects sometimes invented terms or borrowed them from other domains (e.g., electricity, computers).
- 48 Burgess, Limb, and Harrison (1988a) write that the use of once-only groups is valuable for qualitative research because they provide a forum in which people can share and test out their views with others. However, they acknowledge that groups need much more time to explore feelings about environmental values that are deeply held and that clearly reflect a complex interpretation of individual experiences and collective beliefs about nature, landscape, and society.
- 49 'Ge pakt een schop, graaft een putteke en steekt er een boomke in, met de wortels vanonder hé! Wat is daar nu toch zo moéilijk aan???' (Theo Vitse, personal communication, September 2003)
- 50 Van Woerkum (1997) used the metaphor of a 'pendule' to indicate the interdependency between means-end and interactive strategies of policy-making: when the former strategy reaches a dead-lock, the latter is resorted to, and vice versa.

'A tree on your doorstep, a forest in your mind': I borrowed this title from the inscription on the umbrellas distributed among the participants of the International Policy Research Symposium held in Wageningen, 11-14 November 2001: 'The Changing Role of Forestry in Europe - between Urbanisation and Rural Development', organised by the Forestry Chair Groups and Alterra-Green World Research of the Wageningen University and Research Centre (WUR).

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