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Master thesis

Spatial justice in spatial planning: differences and similarities in theory vs spatial planners' thoughts

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Student	Ing. F.A.J. Wildschut
Master	European Spatial and Environmental Planning
Faculty	Nijmegen School of Management
University	Radboud University Nijmegen
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Student	Ing. F.A.J. Wildschut (s4013948)
Master	European Spatial and Environmental Planning
Internship placement	RVR
University	Radboud University Nijmegen
Faculty	Nijmegen School of Management
Supervisor	Prof. dr. P.M. Ache
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'Die Zukunft ist nicht planbar, aber wir sollten Sie gestalten'

Dezernat für Ökologie und Planung, Region Hannover (2010)

Acknowledgements

I am proud to present to you my master thesis for the Master European Spatial and Environmental Planning at the Radboud University Nijmegen in cooperation with the RVR. The central theme of this thesis is 'regional spatial justice', what implies equal spatial opportunities for people in a region. Choosing this as subject is driven my personal belief for a more 'just' use of space in which all people have equal possibilities; none should be treated different than another is my personal opinion. I believe that spatial planners should play an important role in accomplishing this 'perfect world'. This perfect world requires an integrative approach to spatial planning issues in my opinion. The integral approach should be reflected in spatial planning instruments like spatial visions. What can be observed nevertheless is a neo-liberal shift in spatial planning nowadays, focusing on economic growth. Improving mobility and accessibility is seen as an instrument for doing this. Therefore in this research I focus on the improvement of regional spatial justice by improving mobility and accessibility in spatial visions.

This master thesis research is conducted in cooperation with the RVR. The RVR is a regional spatial planning institution that sees spatial justice issues as one of the guiding principles in their spatial planning tasks. Since the RVR is developing their 'RR' at the moment they were very pleased to provide me an internship for conducting my master thesis research at their institution. I would like to thank Thomas Pott and Frank Joneit who supervised me during this internship. Thomas, many thanks for your warm welcome in your Team Mobility. Every day I came in the office it felt a bit like home. Also the discussions on comparing the European spatial planning systems were very valuable for me. I would like to thank Frank especially on his broad knowledge on mobility, in the RVR, Germany and the Netherlands. Your personal motivation for improving mobility is still inspiring for me. Also I would like to thank you for making use of your broad network for conducting the interviews.

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I would like to wish you enjoyable reading of this master thesis,

Frank Wildschut

Utrecht, 24 December 2016

Abstract

Spatial justice is regarded as one of the guiding principles in the Dutch and German spatial planning systems, even though both scientific debates and the outcomes show a lack of awareness about this issue. This research shows that in the Provincie Zuid-Holland and Regionalverband Ruhr regions spatial planners consider spatial justice as an important spatial planning task. Both the Dutch and German spatial planning systems show further regionalisation of spatial planning tasks due to neo-liberalisation processes. For implementation of spatial justice, spatial planners in the Provincie Zuid-Holland see this institution as suited, where discussion among spatial planners can be found in the Regionalverband Ruhr because the role of the Regionalverband Ruhr is considered less important since they believe that cities can perform this task better. The implementation of spatial justice by improving of potential mobility and person accessibility in regional visions is not discussed in scientific literature yet but considered being important by spatial planners in the Provincie Zuid-Holland and Regionalverband Ruhr, to improve equal chances and quality of life of the inhabitants. Inclusion of the transport networks and accessibility of cities and transport in regional spatial visions is considered as important in both regions to improve spatial justice.

Table of content

List of figures

List of tables

List of abbreviations

Abbreviation	English	Dutch	German
PZH	Province of South Holland	Provincie Zuid-Holland	Provinz Südholland
RVR	Regionalverband Ruhr regional spatial planning association	Regionalverband Ruhr	Regionalverband Ruhr
VRM	Vision on space and mobility	Visie Ruimte en Mobiliteit	Vision Umwelt und Transport
RR	Regionalverband Ruhr regional spatial plan	Regionalplan Ruhr	Regionalplan Ruhr
PKT	Passenger-kilometres travelled per capita	Reizigers-kilometers per hoofd van de bevolking	Passagierkilometer pro Einwohner gereist

1. Introduction

1.1 Introduction to the thesis

'No policy decision is entirely value-free and so it is important to be explicit about the value system that is in place when policy interventions are being developed' (Lucas, van Wee, & Maat, 2016).

Spatial planning aims for approaches and methods to influence people's daily lives spatially and the interventions taken by spatial planners. Development of spatial policy interventions is an integral part of the spatial planning system. Influencing the daily life of people in for example the distribution of people and their activities in space brings great responsibility with it in decision-making processes and the development of policy interventions. Taking this responsibility into consideration, ethical principles should be used and be promoted through policy decisions and policy interventions. Furthermore by taking ethical principles into account during spatial decision-making processes, spatial planners can be more confident about the justness in the development of new policy decisions.

Soja (2009) advocates in favour of the improvement of one particular ethical principle in spatial planning: the improvement of spatial justice. The author vows for 'an intentional and focused emphasis on the spatial or geographical aspects of justice and injustice'. A more 'fair and equitable distribution in space of socially valued resources and the opportunities to use them' should be the result of this improvement of spatial justice Soja (2009, p. 2). Improvement of democracy, diversity and equity in spatial plan-making processes and outcomes (Fainstein, 2014) is one of the manners to achieve spatial justice.

An instrument for policy interventions used by spatial planners the Netherlands and Germany is the spatial vision. Spatial visions are useful instruments to take spatial justice into account, either in the decision-making process or in its outcomes. Spatial plans presenting future visions are one of the most important spatial planning policy instruments in the Netherlands as well as in Germany (e.g. Blotevogel, Danielzyk, & Münter, 2014). They are seen as 'models of the future referring to specific territorial contexts (normally a territorial jurisdiction), developed by public and private groups and presented to their wider communities with the aim of gaining a greater sharing of long-term spatial goals' (Fabbro & Mesolella, 2010). Being a model of long-term spatial goals, spatial visions imply a comprehensive approach to all 'pillars' of spatial planning.

In the Netherlands, there has been a movement in which 'comprehensive national visions were replaced by more fragmented, regional strategies' (Gerrits, Rauws, & de Roo, 2012, p. 337) leading to a current situation in which regions are responsible for the development of spatial visions nowadays in most cases (Waterhout, Othengrafen, & Sykes, 2013, p. 151). Even though a unanimously confirmed definition of a region cannot be found in scientific literature, the Dutch 'provincies' and 'stadsregio's' and the German 'Länder' and 'Regionalverbanden' are exemplary for a region. Growing importance of the position of 'regions' in spatial planning is also noticed (e.g. (Jones & Woods, 2013, p. 33)). Waterhout et al. (2013) notice an '(almost) completely abolishing' of national spatial planning in the Netherlands (Waterhout et al., 2013, p. 146). Moreover, Blotevogel et al. (2014, p. 103) signal in Germany an authority transfer in spatial planning from national spatial planning to, inter alia, regional spatial planning. Regional spatial planners accordingly think of their role in spatial planning as becoming increasingly important: their ethical principles directly or indirectly influence the improvement of spatial justice in spatial decision-making processes.

Spatial justice in spatial visions can be improved by developing certain spatial mobility and accessibility measures. Both mobility and accessibility impact the use of space, in which certain measures can influence (in)justice. Transport planning, including the improvement of mobility and accessibility, 'gained prominence over spatial planning' in the Netherlands (Wolsink, 2003); (Roodbol-

Mekkes, van der Valk, & Korthals Altes, 2012, p. 382) and often overrules comprehensive spatial planning in Germany (Franke & Strauss, 2010; Hamedinger et al., 2008; Kühn & Fischer, 2010; in Blotevogel et al., 2014, p. 102). Dutch spatial visions such as the national 'Structuurvisie Infrastructuur en Ruimte' are focussing on transport planning. Regional spatial planning institutions are asked for further elaboration of these visions on a regional level (Alpkokin, 2012). In order to improve spatial equity, over the last decade a shift can be observed from focus on mobility to focus on accessibility since 'the goal of the transport network is ultimately to provide travellers access to desired destinations' (Martens, 2013, p. 3).

Scientific debates are not yet primarily focussing on improvement of democracy and diversity as outcomes of spatial decision-making processes or policy decisions, which both are important aspects of spatial justice.

The 'Provincie Zuid-Holland' (hereafter: PZH) and the 'Regionalverband Ruhr' (hereafter: RVR) are two regions responsible for regional planning and development of spatial visions. At this moment these regions are in the decision-making process of development of their spatial visions, which are called the 'VRM' and 'RR', respectively. With respect to the importance of spatial justice in the Dutch and German spatial planning cultures (Hajer & Zonneveld, 2000), it can be assumed that spatial justice is used as an important value influencing the decision-making processes and its outcomes.

Wide debates can be found in scientific literature on the definition, function and possible measures to influence the research themes of this thesis, which include regions, spatial visions, mobility, accessibility and spatial justice (hereafter: research themes). However, scientific research has not yet investigated how mobility and accessibility can serve to improve spatial justice in the decision-making processes on spatial visions and its outcomes. Discovering spatial planners' thoughts on the research subjects will be of great support for both the PZH as the RVR in their regional spatial planning tasks. The explorative research in this thesis is not intended as providing final answers on how to improve spatial justice in spatial visions through improvement of mobility and accessibility, but it rather seeks to open up the debates about these themes and their role in a 'fair and equitable distribution in space of socially valued resources and the opportunities to use them' (Soja, 2009, p. 2).

The following sections present the research objectives, research questions and societal and scientific relevance. By means of these, arguments and the content of this thesis are presented in order to explore the improvement of spatial justice in the PZH and the RVR by improvement of mobility and accessibility in spatial visions. These sections will altogether form the research framework for analysing conceptual, theoretical and empirical data on the research subjects.

1.2 Research goals

Getting to know spatial planners' thoughts on the research themes region, spatial visions, mobility, accessibility and spatial justice (1) serves the decision-making processes and outcomes of the development of the Visie Ruimte en Mobiliteit and the Regionalplan Ruhr and (2) contributes to the scientific debate. This is expressed in the research goals. Two types of research goals are distinguished by Verschuren & Doorewaard (2007, pp. 16-17): the internal and external goal. In this thesis both an internal and external goal will be defined. The following internal research goal is defined for this thesis:

> *To explore similarities and differences in scientific research and thoughts of spatial planners on improvement of regional spatial justice through mobility and accessibility in spatial visions developed by the Provincie Zuid-Holland and the Regionalverband Ruhr respectively.*

The external goal in this thesis is defined in twofold:

> (1) *To critically comment on scientific debates on the research themes region, spatial vision, mobility, accessibility and spatial justice and the possible relations between those;*

(2) *To gather valuable input for the decision-making process on the Regionalplan Ruhr in regard to the research themes region, spatial vision, mobility, accessibility and spatial justice and the possible relations between those.*

1.3 Research questions

The research goals as provided in this thesis lead to the following research question:

What similarities and differences can be found in scientific literature and regional spatial planners' thoughts on the definition, function and measures for improving spatial justice in spatial visions through improvement of mobility and accessibility by the Provincie Zuid-Holland and the Regionalverband Ruhr?

In order to answer this question the following research sub questions will be used:

1. *What definitions, functions and measures are assigned to regions, spatial visions, mobility, accessibility and spatial justice and what are their current roles in the Dutch and German spatial planning cultures?*

2. *What are spatial planners' thoughts in the Provincie Zuid-Holland and Regionalverband Ruhr on:*

   a. *The definition and function of the Provincie Zuid-Holland and the Regionalverband Ruhr?*

   b. *The definition and function of spatial visions in the Provincie Zuid-Holland and the Regionalverband Ruhr?*

   c. *The definition, function and measures concerning the improvement of mobility in the spatial vision documents of the Provincie Zuid-Holland and the Regionalverband Ruhr?*

   d. *The definition, function and measures concerning the improvement of accessibility in the spatial vision documents of the Provincie Zuid-Holland and the Regionalverband Ruhr?*

   e. *The definition, function and measures concerning the improvement of spatial justice in the spatial vision documents of the Provincie Zuid-Holland and the Regionalverband Ruhr?*

3. *What are spatial planners' thoughts in the Provincie Zuid-Holland and Regionalverband Ruhr on improvement of regional spatial justice through improvement of mobility and accessibility in spatial visions by the Provincie Zuid-Holland and Regionalverband Ruhr?*

1.4 Scientific and societal dimensions

The overall relevance of conducting this thesis relies on both scientific and societal dimensions. The main purpose of this thesis is to 'develop valid knowledge to support organisational problem solving in the field' (Saunders et al., 2009, p. 7). This support can be either indirect or direct. Indirect support adds knowledge to scientific debates on the research themes, whereas direct support is "information" that is fed back to the regional spatial planners who collaborated to this thesis and is used for developing the VRM and the RR. Supporting indirectly and directly prevents the formation of a 'relevance gap' in this thesis, which is 'the separation of knowledge producers and knowledge users' (Ibid.). Preventing a 'relevance gap' is also explicitly aimed for by Frank Joneit, working for the RVR. Frank Joneit stated that 'the RVR would like to learn from the research outcomes' and 'explore if the RVR is seen as the right governmental institution for mobility and accessibility planning in the RVR' (F. Joneit, personal comment, 3-4-2014). At the moment the tasks of the RVR do not include mobility and accessibility planning. Best practices are sought for at governmental, societal and knowledge institutions as well as the private sector cooperating in the development of spatial visions. The indirect and direct support can in this way be seen as the *scientific relevance* of this thesis and are related to the first external goal of critically commenting on the scientific debates. In addition to the knowledge producers and users are the knowledge dependents, which are indirectly influenced persons. For these people, knowledge is developed to be used in practice and regarding this thesis, these people

include the inhabitants of the PZH and RVR. This thesis is *societally relevant* for indirectly influenced persons since the outcomes could improve spatial justice and thus these persons' daily lives, depending on the implementation of it in the spatial decision-making process and outcomes. In the following paragraph, both the scientific relevance and the societal relevance of this thesis are presented more extensively.

For exploration of the *scientific relevance* of this thesis, it is important to elaborate on the direct support this thesis provides. Five research themes are explored this thesis: the region, the spatial visions, mobility, accessibility and spatial justice; since they all have influence the organisation of space and peoples' lives. These main topics themselves are part of scientific spatial planning debates, which is partly due to ongoing changes in the spatial planning systems of the Netherlands and Germany (see chapter 2 for more information on this). Below a short overview is provided of the debates regarding the research themes and the adjustments of this thesis to these debates:

- Regional planning: the definition and functions
  - o The definition and functions of regions are highly debated in scientific research (e.g. Agnew, 2013; Jessop, Brenner & Jones, 2008). Theoretical insights and spatial planners' thoughts as postulated in this thesis serve as input for this debate. Besides, the role of the region as institution to develop mobility and accessibility measures in order to improve spatial justice has not been explored yet.
- Spatial visions: definition and functions
  - o Spatial visions are seen as highly important spatial policy instruments in the Netherlands and Germany (e.g. Blotevogel et al., 2014, p. 84). Definitions and functions differ depending on the governmental level responsible for the development and the location in space. Focus in this thesis is on the definition and role of spatial vision documents as policy instruments for including mobility and accessibility measures in order to improve spatial justice, by exploration of scientific debates and spatial planners' thoughts. This has not yet been investigated before.
- Mobility: definition, functions and measures
  - o Mobility is defined as getting from A to B. 'Classic' mobility measures in spatial planning, which include both cost and time measures, are explored on the expected improvement of spatial justice in spatial visions. Including spatial justice like this, is relatively new in spatial planning research. Moreover, it is investigated if mobility is still seen as an important instrument for spatial planning, since the role of mobility is often criticized in scientific debates (e.g. Martens, 2013).
- Accessibility: definition, functions and measures
  - o Accessibility is widely regarded as the 'only proper performance criterion' to improve transport and land-use systems (Martens, 2013, p. 3). Distinguished are the individual, land-use, transportation and temporal components and infrastructure-, location-, person- and utility-based measures (Geurs & van Wee, 2004). This makes it possible to improve equity by taking accessibility spatially (van Wee & Geurs, 2011). Spatial planners' thoughts are confronted with the scientific debates. In practice the components and measures are explored on their expected role in improving spatial just outcomes of spatial visions, a new scientific relation.
- Spatial justice: definition, functions and measures
  - o Spatial justice is seen as a guiding principle in the Dutch and German spatial planning systems. The discussion on spatial justice gained a renewed interest by the article written by Soja (Soja, 2009). This article resulted in the emergence a widespread debate, to which for example Fainstein (2014) responded. Fainstein's investigation of spatial justice measures in decision-making processes and the outcomes is used extensively in this thesis, especially its definition of the three major values of spatial justice: democracy, equity and diversity (Fainstein, 2014). In this thesis scientific knowledge is developed by exploration of spatial planners' thoughts on improvement

of spatial justice by taking mobility and accessibility measures. In this process, it is asked whether there is a preference of importance within Fainstein's values and whether the PZH and the RVR are regarded as being the right governmental institutions to improve spatial justice.

Exploration of the research themes as mentioned above is also of *societal relevance* since implementing this knowledge in spatial decision-making processes and outcomes of spatial visions can influence peoples' daily lives. At this moment, both personal and spatial inequalities increase worldwide. As mentioned by Riccardo, Rodríguez-Pose, & Storper, 2011, p. 1092 inequalities on the regional level have also tended to increase. In practice, personal and spatial inequalities could imply a decrease of possibilities to be mobile or to have access to certain places. An ongoing neo-liberal turn is taking place in spatial planning systems in the Netherlands (Waterhout et al., 2013); (Gerrits et al., 2012) and Germany (Stiens (2000, p. 527); in Hesse & Leick, 2013, p. 347) focusing on reaching economic targets, thereby potentially ignoring the influence of spatial planning on personal level. Although both in Germany and the Netherlands spatial justice is one of the guiding spatial planning principles, research shows that focus should be kept on the maintenance of potential mobility and accessibility of places. The spatial vision could therefore be an instrument having a sincere societal relevance and this thesis influences the development of these instruments.

1.5 Research design

A research model is a schematic reflection of the research and its global coherent steps to fulfil this (Verschuren & Doorewaard, 2007, p. 67). The research model visualises the steps to be taken in order to be able to compare theoretical insights with spatial planners' thoughts at the end of this thesis (Figure 1). The first step is to develop a conceptual framework based on an exploration of the definition, functions and possible measures to improve spatial justice of the research themes region, spatial vision, mobility, accessibility and spatial justice (A). Second is the development of the conceptual framework, in which is shown what is explored in this thesis (B). Exploration of the different research themes in practice is performed in the PZH and RVR and is visualised in a written presentation of the empirical data (C). The next step is comparing the conceptual framework with thoughts of regional spatial planners in the PZH and the RVR in order to find similarities and differences (D). The final step contains the lessons learnt and the recommendations for further research (E).
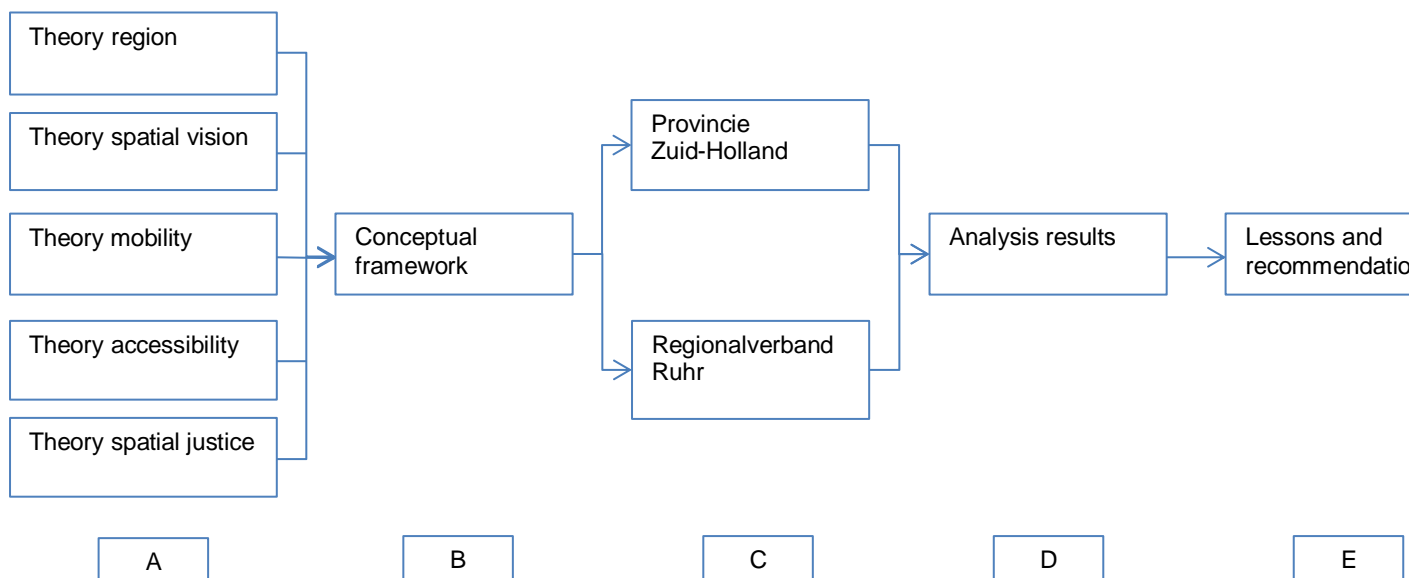
Figure 1: Research model visualising the different paths taken in the five sequential steps of research as performed in this thesis (Wildschut, 2016)

1.6 Outline of the thesis

The internal research goal is to get to know spatial planners' thoughts on the research themes the region, spatial visions, accessibility, mobility and spatial justice and to investigate how these thoughts can subsequently be used for improving spatial justice. The following outline of the thesis is deducted from the research model and serves for giving an overview how this is explored and analysed exactly.

Firstly, the conceptual framework presents a critical analysis of a mix of concepts, definitions and parts of theoretically scientific literature focussing on definitions, functions and (if applicable) spatial measures of the research themes. Also an overview on changing roles of the research themes in the Netherlands and Germany is provided. Both the critical analysis and overview are used for the development of a hypothesis (chapter 2). In the methodological framework a research approach, operationalisation of the conceptual framework, research strategy, case selection and research material and data analysis are presented. These serve for gathering empirical data on the research themes (chapter 3). Two cases, to know the PZH and the RVR, serve for the presentation of the empirical data on the research themes in practice. The PZH and RVR clearly present the different dimensions of the research question and are based on spatial planners' thoughts, all of them working in regions at a spatial, governmental or knowledge institution (see chapter 4). A comparison of the conceptual literature and the empirical data as presented in the PZH and RVR is provided in order to confirm or reject the hypothesis (see chapter 5). At last conclusions, lessons learnt, recommendations for further research and an advice to the RVR are supplied based on an answer to the research question (see chapter 6).

2. Conceptual framework

2.1 Introduction

By analysing scientific literature, the research themes region, spatial vision, mobility, accessibility and spatial justice are explored in this chapter. This conceptual framework serves for answering the first research sub-question:

1. *What definitions, functions and measures are assigned to spatial visions, mobility, accessibility and spatial justice and what are their current roles in the Dutch and German spatial planning cultures?*

Since the research themes are widely debated in scientific literature, particular aspects of these themes have been selected for further analysis. Based on a critical analysis of relevant scientific literature, an argued choice for using a mix of concepts, definitions and parts of theory on the research themes is given. Focused is on (1) the definitions, functions and measures of the research themes (see §2.2-2.6); and (2) their role in the Dutch and German spatial planning systems (see §2.7-§2.10). Defining the definitions, functions and measures in this chapter creates the possibility to explore concrete spatial solutions to spatial planning issues in practice. Practices are explored and analysed by means of spatial planners' thoughts later on in practice in the PZH and the RVR (see chapter 4). By exploration of the roles of the research themes in the Dutch and German spatial planning systems, knowledge is gained on ongoing developments in regard to the research themes. Looking at the research goal (see §1.2) the issue of (causal) relations between the research themes occurs. Not on every subject relations between the different research themes could be found in scientific literature. These gaps are mentioned throughout the chapter and set pace for recommendations for further research (see §6.5). The conceptual model presents an overview of the expected (causal) relations between the different research themes in §2.11. At the end of this chapter, a hypothesis is presented. The hypothesis is based on the analysis of scientific literature in this chapter and will either be confirmed or rejected (see §5.3). The following paragraphs 2.2-2.10 serve as basis for exploration of the research themes in practice; the boxes at the end of every sub-paragraph include the definition/function/measures as used further on in the research to operationalise the conceptual framework.

2.2 The region

2.2.1 Definition of the region

Widely accepted is the fact that a clear definition or classification on 'what a region is' cannot be given. Some views comprise that 'the 'region' typically conjures up to the idea of a homogeneous block of space that has a persisting distinctiveness due to its physical and cultural characteristics' (Agnew, 2013, p. 7). Two categorizations of 'the region' are used in this thesis, as defined by Agnew (2013) and (Jessop, Brenner, & Jones, 2008) in this thesis. These categorizations originate from analysis and summary of previously performed research in multiple disciplines within spatial planning.

Agnew defines in his article 'Arguing with regions' (Agnew, 2013) four categories of 'the region' and matches these to 'different disciplinary and epistemological imperatives' (Agnew, 2013, p. 7). The author does this in order to 'highlight the uses and limitations of different understandings of regions and their various theoretical biases' (Agnew, 2013, p. 6). Agnew identifies the following four conceptions: (1) regional 'communities', 'which can share identities as well as other socio-political characteristics'; (2) geopolitical 'territories', which are 'historically based lines of geographical fracture both between and within states'; (3) geographical 'networks', 'which tie together regions through hierarchies of cities and their hinterland'; and (4) regional 'societies', sharing 'a wide range of social and cultural characteristics' (Agnew, 2013, p. 15).

A different way of defining a region is carried out by Jessop et al. (2008). In their research they search for a categorization of a new spatiotemporal fix to resolve problems associated with one-dimensionalism. In this, they distinguish four dimensions of socio-spatial relations and their associated patterning of socio-spatial relations: (1) 'territory': 'constructive of inside/outside divides; constitutive role of the 'outside'; (2) 'place': construction of spatial divisions of labour; differentiation of social relations horizontally among 'core' versus 'peripheral' places, (3) 'scale': construction of scalar divisions of labour; differentiation of social relations vertically among 'dominant', 'nodal', and 'marginal' scales; and (4) networks/reticulation: building networks of nodal connectivity; differentiation of social relations among nodal points within topological networks (Jessop et al., 2008, p. 393). Based on these definitions and 'by cross-tabulating each socio-spatial dimension considered as a structuring principle with all four socio-spatial dimensions considered as fields of operation of that structuring principle' (Jessop et al., 2008, p. 396), they define the region as a place (Jessop et al., 2008, p. 395).

In this thesis these four conceptions as defined by Agnew (2013) are used to determine the thoughts of spatial planners on what they think 'a region' is since this is based on a literature analysis of various researches. Besides these involve 'adopting a certain kind of region as a case study for a specific phenomenon or using regions as the basis for undertaking comparative analysis' (Agnew, 2013, p. 15); similar to this thesis.

| The region | Definition | Regional communities, geopolitical territories, geographical networks or regional societies |

2.2.2   Function of the region

Especially since the early 1990s economic geographers noticed a 'resurgence of regions': 'a re-emergence of regional economies and new spaces of economic governance across the globe' (Jones & Woods, 2013, p. 33). This created an increasing amount of discussions on topics including the region, regionalism, regional borders and regional identities in the scientific debate, governance, planning and politics 'and across various spatial scales of the international geopolitical and economic landscape' (Paasi, 2009, Moisio & Paasi, 2013; in Jones & Paasi, 2013, p. 1) since this regionalism 'has not occurred similarly everywhere' (Jones & Paasi, 2013, p. 2). Until 1989 regionalism was regarded as a socio-political order on the global level which divided the world, the current theory defines a 'new regionalism' in which the world can be divided in

> '*meso-scale regions based around world cities challenging the division of the world into a set of mutually exclusive state territories' (for example Scott, 1998, 2001) or 'a world whose shape is increasingly complex and difficult to define according to a single regional measure or a limited set of criteria because of globalization and increased geographical differentiation of cultural and economic processes at a range of scales*' (for example Schwarz & Dienst, 1996; Cox, 1998, 2009; MacLeod, 2001; Brenner, 2004, 2009; in Agnew, 2013, p. 7).

In economic and political geography, this new regionalism approaches regions as 'the only scale through which order can be re-established following the collapse of the nationally configured Fordist-Keynesian institutional compromise' (Harrison, 2013, p. 57). Agnew (2000, p. 101) states that: 'regional economic and political differences seem, if anything, to be strengthening'. In line with the overall debates regarding 'the region', new regionalism as such is not a clearly defined subject. Different subjects in the current debate can be named. Among these subjects are (1) 'new regionalist claims for competitiveness, social cohesion and identity in promoting regional development' (Jones & Paasi, 2013, p. 2) and the fact that 'regions are focal points for knowledge creation, learning and innovation – capitalism's new post-Fordist economic form' (Morgan, 1997; Scott, 1998; Storper, 1997; in Harrison, 2013, p. 57). Moreover, it is discussed that (2) regionalisation and region-building processes take place at and across various spatial scales (Agnew, 2013, p. 7); (Jones & Paasi, 2013, p. 2) and is often cross-disciplinary (Jones & MacLeod, 2004, p. 435). Regions are thought of as

important sites for fostering new post-national identities, increasing social cohesion, and encouraging new forms of social and political mobilization' (Keating, 1998; in Jones & MacLeod, 2004) and are 'often progressing from abstract discourses to concrete plans, maps and ultimately political and governmental action' (Jones & Paasi, 2013, p. 2).

Scott and Storper (2003, p. 581) state that as a result of globalization 'city-regions are locomotives of the national economies within which they are situated, in the sense that they are the sites of dense masses of interrelated economic activities that also typically have high levels of productivity by reason of their jointly-generated agglomeration economies and their innovative potentials'. This is due to the clustering of different types of economic activity that attract people into dense regional clusters or agglomerations (Scott & Storper, 2003). They take over the tasks of central governments, and thereby regions are 'faced with the choice of either passive subjection to external cross-border pressures, or active institution-building, policy-making, and outreach in an effort to turn globalization as far as possible to their advantage (Scott, 2008, p. 136) 'to promote those local levels of efficiency, productivity and competitiveness' (Scott, 2008, p. 146). Jones & MacLeod (2004, p. 435) contrarily question the economic role of regions by saying that: 'it would be seriously misleading to imply some *necessary* relationship between regions, economic prosperity [...]. In the light of seeing a region as economic locomotive, a narrow neo-liberal view, social needs should not be forgotten'. In general, even though an ongoing debate can be found in literature about exact functions, authors agree on the fact the importance of the functioning of regions is currently only increasing more and more.

The region	Function	To take the lead in identifying the compelling social need and to promote those local effects of efficiency, productivity and competiveness

2.3 Spatial visions

2.3.1   Definition of spatial visions

As spatial policy instruments, spatial visions are developed during spatial planning decision-making processes. But not only during the decision-making process but also during implementation of the spatial vision its measures and spatial visualisations impact spatial developments. Although in scientific literature a clear definition of spatial visions cannot be found, spatial visions always serve for visualisation of a certain spatial future perspective. For example Ache sees a vision as:

> '*A model of the future for a region and its inhabitants, it is a strategy for the development of the spatial and settlement structures, it is a test routine for everyday decisions and actions. A vision is an encouragement for the future based on past experiences. A vision is not just a regional marketing strategy created by a marketing agency and spread widely by adverts throughout the media-world. It is far more a concept that is developed and discussed in regional co-operation and where finally a regional consensus is found*' (Ache, 2000, p. 440).

The definition of Ache (2000, p. 440) of a spatial vision is one where the spatial plan is the outcome of a cooperative consensus-oriented process visualizing future spatial developments. The definition given by Dühr, Colomb, & Nadin (2010, p. 223) differs slightly from the previously presented definition; in a way that Dühr et al. (2010, p. 223) do not grant a spatial vision the function of future model:

> '*An instrument to coordinate many (and often divergent) interests and to reach agreement where many uncertainties about complex spatial processes and future development exist.*'

Both previously presented definitions define spatial visions as consensus based instruments. Nevertheless, the definition of spatial visions given by Fabbro & Mesolella (2010, p. 26) is used in this thesis to explore its function in the PZH and RVR since it summarizes the previously presented definitions:

'Models of the future referring to specific territorial contexts (normally a territorial jurisdiction), developed by public and private groups and presented to their wider communities with the aim of gaining a greater sharing of long-term spatial goals' (Fabbro & Mesolella, 2010, p. 26).

Spatial visions	Definition	Models of the future referring to specific territorial contexts (normally a territorial jurisdiction), developed by public and private groups and presented to their wider communities

2.3.2   Function of spatial visions

Spatial visions are 'one of the planning methods for addressing future goals, particularly when both technical and political decisions are difficult to elaborate and pursue directly' (Fabbro & Mesolella, 2010, p. 26). Themes such as 'communication, scientific themes, political languages and ethical values are closely interconnected in a spatial vision' (Fabbro & Mesolella, 2010, p. 26). This interconnection can be displayed in a spatial vision by both iconographic and written language. Spatial visions require dealing with issues as private and public participation, either during the development or outcomes of the policy document.

Visions can be regulative, strategic (Fabbro & Mesolella, 2010, p. 27-28), symbolic, communicative, creative, stimulating and widely shared amongst citizens (Ache, 2000, p. 441). Ache (2000, p. 440) points out the function of a spatial vision:

'It has to be easily understood, comprehensible and clear. In spite of all the visionary elements it has to be realistic and consent must be achievable. It has to be challenging for creativity and must not simply call the building inspectorate on scene. In the minds of the inhabitants and actors, a vision has to create images of a future which is worth aiming for. A vision has to define an intellectual frame for the principles that determine daily political action. It has to stimulate decision-making processes and, without losing its structure, be interpretable and flexible. It must also stay open to the possibility of unforeseen changes.'

Importantly, in addressing future goals, 'a vision as such, does not in itself cause an effect, it has to be pro-actively pursued' (Ache, 2000, p. 441). As spatial planning tool, spatial visions serve for accommodating spatial planning processes. Several issues can thus be dealt with, including those that will be discussed next like mobility planning (see §2.4), accessibility planning (see §2.5) and spatial justice (see §2.6).

Spatial visions	Function	Gaining a greater sharing of long-term spatial goals. In spite of all the visionary elements it has to be realistic and consent must be achievable. It has to be challenging for creativity and must not simply call the building inspectorate on scene. In the minds of the inhabitants and actors, a vision has to create images of a future which is worth aiming for. A vision has to define an intellectual frame for the principles that determine daily political action. It has to stimulate decision-making processes and, without losing its structure, be interpretable and flexible. It must also stay open to the possibility of unforeseen changes

2.4 Mobility planning

2.4.1   Definition of mobility

Mobility is often thought of either as getting from A to B or as 'the ease with which a person can move through space' (Martens, 2012, p. 1040). This thus focusses 'on the quality of the transport network as such' (Martens, 2013, p. 3). Kaufmann (2012, p. 13-14; in Martens, 2012, p. 1040) distinguishes mobility and potential mobility. In this thesis is focused on potential mobility. Potential mobility 'refers to the ease with which a person can move through space' (Martens, 2012, p. 1040). 'An increase in

mobility implies that a person travels over longer distances, more frequently, or both. In contrast, an increase in potential mobility only implies an increase in a person's capacity to overcome distances in space – it does not imply the actual realization of this capacity' (Sager, 2005, p. 3-4; in Martens, 2012, p. 1040). Given this distinction, in this thesis the primary focus will be on potential mobility since this focusses on a person's chance for being mobile. A person's potential to get from one place to another is influenced by various aspects including personal choices, external influences and spatial measures. Potential mobility thus is about 'integrating everyday life and 'normal' activities' (Cass et al., 2005; in Stanley & Vella-Brodrick, 2009, p. 94).

Potential mobility	Definition	The ease with which a person can move through space

2.4.2   Function and measures to mobility

The function of potential mobility is thus to improve the ease to move through space for a person, to increase 'a person's capacity to overcome distance in space – it does not imply the actual realization of this capacity (Sager, 2005, p. 3-4; in Martens, 2012, p. 1040). Since a person's choice influences its everyday life and opportunities in life; also does its potential mobility. This can for example depend on a persons' potential to make choices about 'the purchase of a private car, choice of a dwelling and lifestyle choices for work, household and leisure' (Dijst, Rietveld and Steg, 2013; in van Wee, Annema, & Banister, 2013, p. 27). These personal choices reflect two important factors: (1) the ability of making a choice for being potentially mobile due to a personal lifestyle and (2) a spatial component in the ability for being mobile.

Three measures to influence potential mobility are the use, the costs and easiness of use of transport modes. This causes that different modes of transport can influence a person's mobility. Personal movements are made by using private transport modes including travelling by car, by bike and by foot, and by public transport modes including train, tram, metro and bus. Personal ability to use a transport mode influences the ease of attending activities.

The potential to use transport modes can be influenced by spatial planners in (regional) governments, for example by use of certain spatial measures or investing in transport infrastructure to optimise persons' opportunities in daily life. In improving a person's opportunity to get from A to B, mobility and space clearly relate to each other. Three often used indicators to improve a persons' potential mobility are costs, time and speed. As Schafer (2006, p. 27) points out: 'differences in travel costs and associated urban land-use characteristics lead to different levels in mode shares at a given level of PKT per capita' [PKT = passenger-kilometres travelled per capita, Wildschut]. A different level in mode shares influence the time it takes to get from A to B. A person's travel can take longer or shorter depending on the transport mode used and the speed of it. This choice can then again be based on the price per kilometre (Dijst, Rietveld and Steg, 2013; in van Wee et al., 2013, pp. 36-37). Price, time and speed represent 'classic' potential mobility measures explored in mobility research and applied in practice.

Scheiner & Kasper (2003) advocate for the use of a fourth measure to improve potential mobility, the 'personal lifestyle approach' since 'transport planning cannot persist with an assumption that space and mobility enjoy a straightforwardly causal relation' (Kasper & Scheiner, 2003, p. 330). In their research personal lifestyle is defined as "regular patterns of behaviour, which represent structural situations as well as habitual behaviour and social affinities" (Lüdtke 1996, p. 140; in Kasper & Scheiner, 2003, p. 320). By including a 'personal lifestyle approach', mobility measures could become more effective say Scheiner & Kasper (2003). This implies a different governmental approach to improving personal mobility. Thus 'a broader concept of planning is required that includes a more individualized, demand-oriented scheme with a broad array of organizational, infrastructural, constructive, and political measures' (Scheiner & Kasper, 2003, p. 331). In relation to mobility the

following measures for improving the 'personal lifestyle' are distinguished: motorization, deregulation of labour in relation with economic globalization and decline of fixed time-regimes (Wolf & Scholz, 1999; in Scheiner & Kasper, 2003, p. 320).

| Mobility | Function | To improve the ease to move through space for a person and to increase a person's capacity to overcome distance in space |
| | Measures | Price, time, speed and personal life-style measures like motorization, deregulation of labour in relation with economic globalization and decline of fixed time-regimes |

2.5 Accessibility planning

2.5.1   Definition of accessibility

Accessibility can be defined as putting potential personal transport in a broader perspective: 'the extent to which land-use and transport systems enable (groups of) individuals to reach activities or destinations by means of a (combination of) transport mode(s)' (Geurs & van Wee, 2004, p. 128); and 'the ease with which destinations can be reached from a given location in space' (Martens, 2012, p. 1041).

Comparably to mobility, in accessibility a distinction can be found between person accessibility and place accessibility. 'Person accessibility is an attribute of a person: a person has accessibility (or not) to a certain set of locations. Place accessibility, in turn, is an attribute of an (activity) location: a location is accessible, or inaccessible, for a certain set of people or from a certain set of other locations' (Martens, 2012, p. 1041). A visualisation of person vs place accessibility can be found in figure 2) This thesis will, as is also chosen for by Martens (2012), focus on person accessibility 'as people and not locations are the recipients of socially valued goods' (Martens, 2012, p. 1041).
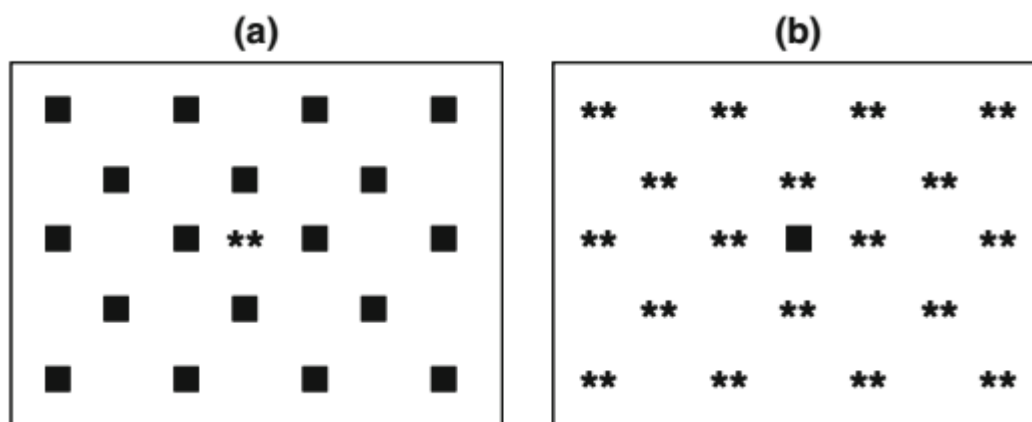
Figure 2: Person accessibility (a) versus place accessibility. The borders of each diagram indicate the area that can be travelled within e.g. a certain time budget or time-money budget (Dijst, 1995, p. 28; in Martens, 2012, p. 1041)
** = person, ■ = activity location

Person accessibility	Definition	Person accessibility is an attribute of a person: a person has accessibility (or not) to a certain set of locations
	Function	To improve land-use and transport developments and policy plans on the functioning of the society in general
	Measures	Infrastructure-, location-, person- or utility-based. Components to influence the improvement of accessibility are transport, land-use, temporal and individual

2.5.2 Function and measures of accessibility

The function of accessibility is related 'to the role of the land-use and transport systems in society (…) give individuals or groups of individuals the opportunity to participate in activities in different locations' (Geurs & van Wee, 2004, p. 128). Talen (2001; in Martens 2012, p. 1041) states that 'accessibility indicates ability, i.e. the ability to accomplish a broad range of actions, by linking to places and people that are set apart in space and time'. Accessibility is thus 'linked to freedom of choice' (Martens, 2012, p. 1041). Both definitions of functions include a focus on persons and space.

Martens (2012, p. 1042) mentions that 'the focus on person accessibility still leaves unaddressed the question how person accessibility should be measured' (Martens, 2012, p. 1042). In this thesis, the elaborative study conducted by Geurs & van Wee (2004) on accessibility measures is used. Even though this study did not focus on person accessibility as such, their clearly defined perspectives on accessibility measures and components summarize are summarizing previous research outcomes and thus form a clear frame for exploring person accessibility later on in this research.

Accessibility measures are used by Geurs & van Wee (2004, p. 128) as 'indicators of land-use and transport developments and policy plans on the functioning of the society in general of accessibility'. Geurs & van Wee (2004, p. 136) state that 'accessibility impacts of land-use and transport changes (…) are often evaluated using accessibility measures, which researchers and policy makers can easily operationalise and interpret'. These accessibility measures could be applied in practice, depending on situation and purpose. The more often these measures applied, the better accessibility can be guaranteed. The authors distinguish four components of accessibility which can be used in measuring accessibility: (1) the land-use component: amount and distribution of the supply off and demand for opportunities, (2) the transportation component: quality of transport services, (3) the temporal component: temporal constraints and (4) the individual component: taking into account individual needs, preferences and abilities (Geurs & van Wee, 2004, p. 136). The authors argue that ideally accessibility measures should take these components into account (Geurs & van Wee, 2004, p. 128).

Geurs & van Wee (2004, pp. 128-129) identify four types of measures: (1) infrastructure-based measures, (2) location-based measures, (3) person-based measures and (4) utility-based measures. Spatial planners have the possibility to improve accessibility by taking into account the following perspectives, derived from the components and measures mentioned before:

Perspectives on accessibility measures and components				
Measure	Component			
	Transport component	Land-use component	Temporal component	Individual component
Infrastructure-based measures	Travelling speed; vehicle-hours lost in congestion		Peak-hour period; 24-h period	Trip-based stratification, e.g. home-to-work, business
Location-based measures	Travel time and or costs between locations of activities	Amount and spatial distribution of the demand for and/or supply of opportunities	Travel time and costs may differ, e.g. between hours of the day, between days of the week, or season	Stratification of the population (e.g. by income, educational level)
Person-based measures	Travel time between locations of activities	Amount and spatial distribution of supplied opportunities	Temporal constraints for activities and time available for activities	Accessibility is analysed at individual level
Utility-based measures	Travel costs between locations of activities	Amount and spatial distribution of supplied opportunities	Travel time and costs may differ, e.g. between hours of the day, between days of the week, or seasons	Utility is derived at the individual or homogeneous population group level

Table 1: Perspectives on accessibility and components (Geurs & van Wee, 2004, p. 129)

| Accessibility | Function | To improve land-use and transport developments and policy plans on the functioning of the society in general |
| | Measures | Infrastructure-, location-, person- or utility-based. Components to influence the improvement of accessibility are transport, land-use, temporal and individual |

2.6 Spatial justice

2.6.1   Definition of spatial justice

In scientific debates, discussions regarding spatial justice can be found in all types of planning, often regarding 'the just city' (Fainstein, 2014) and the 'right to the city' (Lefebvre, 2003). Soja (2009; 2010) placed the discussion on the concept of uneven spatial development on the foreground in his research on spatial justice. In the authors' point of view the focus should be on the spatiality of justice and injustice, both in theory and practice, at all geographical scales (Soja, 2009, p. 1). Besides, Soja regards spatial justice as complimentary to spatial planning instead of as a substitute or alternative to other forms of justice (Soja, 2009, p. 2).

Soja (2009, p. 2) defines spatial (in)justice as:

> *'An intentional and focused emphasis on the spatial or geographical aspects of justice and injustice. As a starting point, this involves the fair and equitable distribution in space of socially valued resources and the opportunities to use them'.*

Soja (2009, p. 3) states that 'spatial (in)justice can be seen as both outcome and process, as geographies or distributional patterns that are in themselves just/unjust and as the processes that produce these outcomes'. Furthermore Soja (2009, p. 3) highlights the role of governmental institutions in the capitalist economy since this is based on financial inequalities. Governmental institutions have thus a spatial task in improving spatial justice, since 'locational discrimination, created through the biases imposed on certain populations because of their geographical location, is fundamental in the production of spatial injustice and the creation of lasting spatial structures of privilege and advantage' (Soja, 2009, p. 3). For future city regions spatial justice should be one of the guiding principles as stated by Ache (2000, p. 443): 'a city region which is still a successful place in any conceivable future, is a city region where democracy, justice, equity and sustainability are guiding principles'.

| Spatial justice | Definition | An intentional and focused emphasis on the spatial or geographical aspects of justice and injustice |

2.6.2   Function and measures of spatial justice

Functions of spatial justice are multiple; Soja defines the function spatial justice as 'for sustaining human dignity and fairness', to decrease 'intensification of economic inequalities and social polarization associated with neoliberal globalization and the new economy as well as the transdisciplinary diffusion of a critical spatial perspective' and to open up 'a range of new possibilities for social and political action, as well as for social theorization and empirical analysis' (Soja, 2009, p. 3-4).

In her article on 'The Just City' Fainstein (2014) argues that the following three measures are guiding in spatial justice in cities: democracy, diversity and equity. While emphasizing on democratic decision-making processes, in which the author believes that reform to spatial justice is possible, the author looks for policies improving spatial justice by looking at the three principles.

Fainstein's principles of democracy, diversity and equity serve in the authors' perception as measures in spatial decision-making processes to improve stakeholder participation and deliberation to 'produce more just outcomes' (Fainstein, 2014, p. 7). Just outcomes in spatial decision-making processes imply a more equal distribution of personal chances for people. While elaborating more on democracy, Fainstein (2014) argues that democracy should be seen in the light of the deliberative democracy theory. This theory makes the 'claim that people's views are informed by interaction with others' (Fainstein, 2014, p. 8). Therefore the term democracy 'assumes that through interaction participants will modify their ideas and reach a consensus' (Fainstein, 2014, p. 8). This implies that 'within a community each party should have its say'. Regarding the use of democracy in spatial policies Fainstein states:

> *'Policies supporting democracy include the use of advocates to represent groups that do not participate directly in decision-making, consultation of target populations in areas to be redeveloped, and broad consultation for areas that are not yet developed but are under development pressure'* (2014, p. 12).

In democratic decision-making processes diversity implies the involvement of all societal groups. This makes that 'discrimination against groups defined by their colour, cultural inheritance or sexual preferences cannot simply be collapsed into a manifestation of material inequality' (Fainstein, 2014, p. 9). This raises the issue of group differences, of which should be taken notice by spatial planners. Fainstein puts down the inclusion of diversity in spatial policy as:

> *In furtherance of diversity, they encompass ending discriminatory zoning, insuring that boundaries between districts remain porous, providing widely accessible and varied public space, and mixing land uses* (2014, p. 12).

Equity focusses on the assumptions that spatial planners, in order to create spatial justice in democratic decision-making processes, should aim for equity rather than growth as final result (Fainstein, 2009, p. 3). Equal opportunities for people therefore should be the aim in for example housing development, mobility and accessibility. Fainstein (2014) describes the issue of equity as:

> *To this end, its conclusion lists programs that enhance equity, stressing housing development for low-income households, preventing involuntary displacement, giving priority in economic development programmes to the interests of employees and small businesses, and lowering intra-urban transit fares (Fainstein, 2014., p. 12).*

Overall Fainstein argues that equal priority cannot be given to equity, diversity and democracy due to conflicting priorities. The author concludes by stating spatial planners should 'give equity priority among them' (2014, p. 12). Equity, diversity and democracy are used in this thesis in order to explore regional spatial planners' thoughts in the PZH and RVR on how these measures can improve spatial justice. Soja (2009, p. 3) states that 'spatial (in)justice can be seen as both outcome and process'.

| Spatial justice | Function | To improve fair and equitable distribution in space of socially valued resources and the opportunities to use them |
| | Measures | Including diversity, democracy and equity in spatial decision-making processes and outcomes |

2.7 Dutch and German spatial planning systems

As shown in the following paragraphs, between the development of Dutch and German spatial planning cultures similarities and differences can be found. Similarities include that both countries focus nowadays on regional and local spatial planning, whereby mobility gains momentum in favour of comprehensive planning. Furthermore in both the Netherlands and Germany spatial visions are important policy instruments and spatial justice is seen as a guiding principle. A short overview of the

different roles of and possible relations between the themes researched since the 1950s are therefore presented in this chapter.

Introducing the research themes in the context of the Dutch and German spatial planning systems serves for a broader view on the roles and (possible) relations between the research themes. Per paragraph, on the Dutch (§2.8) and German (§2.9) spatial planning systems, focused is on the developments of the systems in general, regional spatial planning, mobility and accessibility planning, spatial visions and spatial justice. Mobility and accessibility planning are combined in one paragraph since the development of these research themes are highly intertwined in the Dutch and German spatial planning systems. The following paragraphs serve for exploring the roles and possible relations of the research themes in practice later on in this thesis.

2.8 Evaluation of the Dutch spatial planning system

2.8.1   Introduction to the Dutch spatial planning system

In scientific literature the Dutch spatial planning system 'can rejoice in an almost mythical reputation' (Hajer & Zonneveld, 2000, p. 337), and is 'often described as a conceptual paradise' (Dühr, 2007; in Westerink-Petersen, Lagendijk, Dühr, Jagt, & Kempenaar, 2013, p. 782). This is because 'the Netherlands present a peculiar case in which a centralized and comprehensive planning ambition is matched by a, in procedural-legal terms, decentralized system of spatial governance' (Wolsink, 2003; in Westerink-Petersen et al., 2013, p. 781).

An important tool in this system is 'polderen', in which spatial planning is seen as a solution for economic development (Zonneveld & Evers, 2014). This system is derived from 'the need to restrict urban sprawl in a densely populated country by only permitting carefully planned urban extension sites and by protecting open space' (Dühr et al., 2010, p. 381). This is reflected by the use of substantive planning concepts including 'het Groene Hart' and 'de Randstad', already since the 1950s, and procedural planning concepts as 'spatial quality' and 'preservation through development'. These concepts also reflect the centralized planning ambition, since they made a top-down planning for the central state to the province, region and municipality possible (Westerink-Petersen et al., 2013, p. 781). This shows that the organizational structure was elaborate (Zonneveld & Evers, 2014, p. 61). The substantive planning concepts of 'het Groene Hart' and 'de Randstad' are also examples of metaphors, which are often used in Dutch planning 'as this ensures that they will be more easily remembered and recognised' (Dühr et al., 2010, p. 59). These metaphors are used to express basic principles of Dutch spatial planning: (1) concentration of urbanization, (2) spatial cohesion, (3) spatial diversity, (4) hierarchy and (5) spatial justice (Hajer & Zonneveld, 2000, p. 341).

Since the 1980s, a gradual shift took place in the Dutch planning system. 'It was considered too blunt, lacking in local engagement and adaptation, and hence in effectiveness. Spatial planning was seen as being too slow, too reactive and hence in need for a more pro-active approach to spatial development' (Wolsink, 2003; in Westerink-Petersen et al., 2013, p. 782). Simultaneously a more neo-liberal way of thinking became more and more popular (Waterhout, Othengrafen, & Sykes, 2013; Gerrits, Rauws, & de Roo, 2012). The once so scenting comprehensive centralized approach 'was gradually substituted by a kind of regional economic approach at the national level' (Zonneveld & Evers, 2014, p. 61), what resulted in an '(almost) completely abolishing spatial planning at the national level' (Waterhout et al., 2013, p. 146). This offered the opportunity for a more collaborative regional and local planning approach. This involved many governmental and non-governmental actors (Westerink-Petersen et al., 2013), to fulfil the 'pressing economic, ecological and social needs, as expressed by local stakeholders, without a resort to overarching conceptualizations' (Wolsink, 2003; in Westerink-Petersen et al., 2013, p. 783).

The previous Dutch spatial planning strategies, to know the 'National Spatial Strategy 2004-2020', strongly focus on economic development and improvement of the competition position of the

Netherlands, especially in the European Union (Alpkokin, 2012, p. 540); a similar observation can be found for the current 'Structuurvisie Infrastructuur en Ruimte'. Since this economic approach has become the main priority for Dutch spatial planning, spatial planning became a tool to facilitate growth; thereby replacing the issue of spatial quality which used to be one of the key objectives of national spatial planning (Zonneveld & Evers, 2014). Simultaneously a change in the urban-rural division could be noticed, whereby more was focused on 'urban networks', suburbanization and counter-urbanization (Westerink-Petersen et al., 2013, p. 748). Another change to Dutch spatial planning 'is the abolition of the evaluation of land-use plans by provinces and the national government' (Zonneveld & Evers, 2014, p. 73; Gerrits et al., 2012). These changes caused a widespread academic debate regarding its consequences to the approaches to, cooperation in, and institutionalization of spatial planning. This debate is mainly focused on two main changes that took place: the decoupling and recoupling of institutional linkages and rescaling and reform of the planning system (Zonneveld & Evers, 2014).

2.8.2 Regional spatial planning in the Netherlands

One of the most important reforms in the Dutch national spatial planning is in regard to regional planning. As a result of the current neo-liberal discourse, increasing focus is on regional players and their roles in spatial planning (Gerrits et al., 2012, p. 338), implying 'that the government had become too invasive and that its involvement should be cut back' (Gerrits et al., 2012, p. 338). The increased attention for regional actors is also a response on e.g. more 'bottom-up' and horizontal strategic planning ideas and initiatives which initiated a bigger role for e.g. city regions (Westerink-Petersen et al., 2013, p. 784). Another reason is that planning at the regional level is 'increasingly identified as the most appropriate level for coordination for spatial planning' (Gerrits et al., 2012, p. 338). In this process most national spatial policies are abandoned; and spatial policy and strategy tasks are delegated to regional authorities such as provinces, metropolitan areas and municipalities (Zonneveld & Evers, 2014, p. 72; Gerrits et al., 2012, p. 338; Roodbol-Mekkes et al., 2012, p. 387). This is reflected in the 2004 guiding principle: 'decentralize when possible, centralize when necessary' (Min van VROM-Volkshuisvesting, 2004).

The abandoning of the national planning system with its restrictions, for example on housing, does not mean that the guiding concepts are not used anymore. The opposite can be noticed: 'provinces collectively decided to maintain the previous restrictive policy' (Zonneveld & Evers, 2014, p. 72). Besides, the way of application of these new steering opportunities differ per province: 'some have seized the opportunity with both hands to get a legal grip on spatial developments; others are looking for alternative ways to secure the provincial interest in local land-use plans' (Roodbol-Mekkes et al., 2012, p. 388). Gerrits et al., 2012, p. 340 even state that it should be questioned if the provinces are willing to change their roles that much, since their research shows that 11 out of 12 provinces aim to maintain the old situation instead of implementing all new laws, showing the struggle in regard to 'the implementation of new procedures and a new way of thinking'. Nevertheless all these changes influence the position of regional spatial planning in the Dutch spatial planning culture. Gerrits, et al. (2012) point out that regions are working more closely together as a horizontal organized governmental institution, rather than the former vertical organization. In doing this, more freedom for spatial developments is given to the market and private initiatives within regional spatial frameworks (Gerrits et al., 2012, p. 337).

2.8.3 Spatial visions in the Netherlands

As shown in the previous paragraphs, a neo-liberal turn causes a shift to a more facilitating role for spatial planning towards economic goals. Besides, most spatial planning tasks are delegated by the national government to regional and local governments. These changes can also be noticed in regard to the communicative tools used by spatial planners, such as spatial vision documents.

From the 1960s to the end of the 1980s', national spatial visions were comprehensive (Gerrits et al., p. 339) and seen as predominantly coordinative documents 'to capture the imagination of others, both

within the sector departments at the national level (i.e. the 'horizontal axis' of coordination) as well as at other levels of government (i.e. the 'vertical axis')' (Zonneveld & Evers, 2014, p. 64). During the 1990s', 'comprehensive national visions were replaced by more fragmented, regional strategies' (Gerrits et al., 2012, p. 337). In 2006, the revised Law on Spatial Planning replaced the Planologische Kernbeslissing (PKB), 'through which the national government could enforce certain projects, with a so-called 'Structuurvisies'. In this law the national government designates which areas are available for development, and which areas are protected because of environmental concerns' (Gerrits et al., 2012, p. 338). The instrument 'Inpassingsplan' is used nowadays to counter the loss of national authority, which have to be developed *ex ante*, since it is no longer possible to test local plans *ex post* (Gerrits et al., 2012, p. 338) since spatial planning is often a regional or local responsibility nowadays. This shows that the development and implementation of regional and local plans is a responsibility of lower authorities, in which they are 'monitored by the central government to avoid any possible conflict and are encouraged to be in well coordination' (Nienkerk and Voogd, 1999; in Alpkokin, 2012, p. 537).

A change in spatial planning to transport planning is to be found in the national visions. The Dutch national 'Structuurvisie Infrastructuur en Ruimte' (SVIR) (Ministerie van Infrastructuur en Milieu, 2012) for example 'is structured around infrastructure' in which 'it is left up to regional authorities to further specify the given areas' (Ministerie van Infrastructuur en Milieu, 2012, p. 339). The development of spatial visions thus turns to become more and more the responsibility of regional or local governments, whereby a strong focus is on infrastructure development.

2.8.4 Mobility and accessibility planning in the Netherlands

Transport and infrastructure are arguably the most important policy domains of national spatial planning in the Netherlands (Zonneveld & Evers, 2014, p. 70). This has not always been the case, but nowadays 'infrastructure planning has gained prominence over spatial planning' (Wolsink, 2003; in Roodbol-Mekkes et al., 2012, p. 382). It can be stated that 'the current policies are almost exclusively aimed at transport infrastructure development with relatively little attention for the development of other aspects' (Gerrits et al., 2012, p. 340). This is clearly reflected in the reorganization of national ministries. Whereas this task was traditionally carried out by three ministries: (1) the Ministry of Housing, Spatial Planning and Environment, (2) the Ministry of Agriculture, Nature and Food Quality, and (3) the Ministry of Public Works and Infrastructure, since 2010 these are merged into two: (1) the Ministry of Infrastructure and Environment and (2) the Ministry of Economic Affairs, Agriculture and Innovation. Gerrits et al. (2012) describe this as:

> 'An ideological shift where 'spatial planning' as a main policy field has been abandoned in favour of a focus on infrastructure. The effort to integrate sectoral demands, which is key to planning, is now seen as a responsibility of regional governments' (p. 339).

This shift can also be found in Dutch transport planning policies, for example the 'Nota Mobiliteit'. In this document, improvement of mobility is regarded as a tool to improve economic development in urban and national planning (Alpkokin, 2012, p. 544). Economic development is one of the main targets of the current Dutch spatial policies and is in line with the 'Nota Ruimte'. In practice this is shown in for example the development of urban and rural areas, in which infrastructure plays an important role in various aspects such as the 'processes of suburbanization and counter-urbanization' (Westerink-Petersen et al., 2013, p. 784). Infrastructure plays this important role since this development is 'supported by increased mobility [...] that reduce the importance of geographical proximity to urban areas as long as accessibility is ensured' (Westerink-Petersen et al., 2013, p. 784). Only infrastructure projects of national interest are coordinated by the national government, whereas other projects are under regional or local responsibility. Effective integration of land use and transport requires, also on the regional level, still requires improvement in the Netherlands due to a current lack of integration of institutional and procedural discrepancies and substantive differences (Brömmelstroet, 2010, p. 25).

In Dutch transport policy documents, like the 'Eerste Structuurschema Verkeer en Vervoer' (1979), the 'Tweede Structuurschema Verkeer en Vervoer' (1990), the Nationale Verkeers- en Vervoerplan (2000), the Nota Mobiliteit (2004) and the Mobiliteitsaanpak (2008), both mobility and accessibility measures can be found (Hoogendoorn-Lanser, personal communication, 21-02-2014). In these documents, a change can be found in its aims from a more environmental friendly approach to a more economic approach (Hoogendoorn-Lanser, personal communication, 21-02-2014).

Despite of the strong focus on infrastructure in spatial planning, one could argue that spatial development in mobility planning is gaining more interest. This interest can for example be found in the founding of investments funds of the Ministry of Infrastructure and Environment. The former Multi-Annual Plan for Infrastructure and Transportation is named Multi-Annual Plan for Infrastructure, Space and Transportation nowadays: thus including space as an important component again (Zonneveld & Evers, 2014, p. 71). As shown in this paragraph, mobility is having its momentum, whereas accessibility touching ground too in the Netherlands; both serving for economic purposes.

2.8.5 Spatial justice in the Netherlands

Despite of the changes in the Dutch spatial planning system, Hajer & Zonneveld (2000, p. 341) still name spatial justice as one of the five basic principles of this system. Rocco elaborates on this by stating that:

> 'The Netherlands is probably one of the places in the world where the overarching objectives of spatial planning and design have been most fully attained: healthy, fairly sustainable and mostly prosperous cities with few signs of spatial segregation are trademarks of the polder model' (Rocco, 2014).

The importance of spatial justice is reflected in both regional and national policies. Spatial justice is included in the overarching goal of distribution of economic activities by the concepts of (1) independent regions, (2) urban nodes and (3) target areas (Hajer & Zonneveld, 2000, p. 342).

Mobility opportunities in national, regional and local policies are influencing spatial justice by giving the ability to access and connect to places. In this field of study, problems towards spatial justice can be found in the Netherlands as well, as shown by Martens, Holder, & Thijssen (2011, pp. 37-38), regarding transport poverty. The authors show that transport poverty and suburbanisation can cause social exclusion, thus showing the presence of a tension between economic, social and spatial components. Moreover, Beaumont and Nicholls even state that the Netherlands 'continue to contest unjust forms of urbanization characterized by neoliberal initiatives that undermine the socioeconomic status of low-income residents' (Beaumont & Nicholls, 2007, p. 2554). This neoliberal turn is further reflected in the prioritizing and ranking of locations, 'marketization', which 'will probably result in a neglect of non-monetized issues and interest [...] thus far represented by public spatial planning' (Waterhout et al., 2013, p. 155). The neoliberal turn will potentially result in setting aside 'the ambition of equally distributed economic development' (Gerrits et al., 2012, p. 339).

The neoliberal turn makes it even more important to keep spatial justice in mind as being one of the basic principles in the Dutch spatial planning system. In this light it is interesting that Rocco states that Dutch urbanists in academia avoid justice issues since it is seen as common sense (Rocco, 2014). Furthermore Huang (2013) states that in cooperative planning processes, 'governments should keep social and spatial justice in mind and seek to achieve a fairer distribution of side effects of the development and safeguard the public/civic interests at the same time' (Huang, 2013, p. 224).

It can be concluded that the Dutch spatial planning culture is subject to change, especially in the last decades. Not only on governmental task reorientation towards more spatial visioning but also in mobility and accessibility planning. Creating of spatial justice remains an important task of spatial planning, although it is not always treated this way. This paragraph serves later on in this thesis for

comparing the Dutch and German spatial planning cultures (see §2.10), development of the hypothesis (§2.12) and comparison with the empirical data (see chapter 5). The comparison of the Dutch and German spatial planning cultures in §2.10 is also based on the following paragraph, issuing the German spatial planning culture and its development since the 1930s.

2.9 Evaluation of the German spatial planning system

2.9.1 Introduction to the German spatial planning system

'In international comparisons of national planning systems, Germany is often regarded as the motherland of comprehensive spatial planning' (Blotevogel et al., 2014, p. 83). This comprehensive approach is still one of the main characteristics of the German spatial planning system nowadays. Traditionally, the German system is primarily focused on 'balancing economic development – rather than on supporting further concentrated accumulation – in order to ensure equivalent living conditions throughout the country' (Blotevogel & Schmitt, 2005, p. 14; Blotevogel et al., 2014). To ensure this the system consists of 'supra-sectoral spatial planning and spatially relevant sectoral planning' that are 'organized as a decentralized, multi-level system' (Blotevogel et al., 2014, p. 84; Waterhout et al., 2013, pp. 148-149). Nowadays, as stated in the 2008 Federal Spatial Planning Law (*Raumordnungsgesetz*, hereafter ROG), the overarching goal for German spatial planning is 'sustainable spatial development which brings the social and economic demands made on an area into line with its ecological functions and, on a large scale, results in a stable order with equivalent living conditions in the subspaces' (BGBL, 2008, §1 Para. 2; in Blotevogel, Danielzyk, & Münter, 2014, p. 84).

To understand how this planning system was shaped it is required to understand the changes and flows, which can be explored starting in the 1930s. Since the 1930s 'a hierarchical system of spatial planning came into begin that aspired to range from the national level to the cities and municipalities' (Blotevogel and Schelhaas, 2011; in Blotevogel et al., 2014, p. 83), thus being a nationalized system (Harrison & Growe, 2014, p. 28). Later, after the Second World War, Germany was split into two countries having each their own governmental system: West-Germany (capitalism) and East-Germany (communism). In West-Germany, on which will be focused in this thesis due to the location of the RVR, during this period spatial planning responsibilities became to be delegated to the Länder level. From the late 1950s spatial planning became of interest for the national government (Harrison & Growe, 2014, p. 28). This resulted in the development of the 1965 ROG, which aimed to ensure balanced economic growth, territorial equilibrium and equal living conditions (Harrison & Growe, 2014, p. 28; Blotevogel & Schmitt, 2005, p. 14). By describing these aims, the 1965 ROG became one of the leading principles in German spatial planning. To achieve balanced economic growth, territorial equilibrium and equal living conditions, the idea was that 'further accumulation of resources in Germany's major cities should be avoided, with the spatial targets being the 'lagging regions' of the 'rural and border zones'' (Harrison & Growe, 2014, p. 28).

In West-Germany, it took until the 1960s and 1970s before a multi-level national spatial planning system was developed. The slow development of a multi-level national spatial planning system resulted in a weak position of the federal state and a strong position of Länder and municipalities that aimed for comprehensive spatial planning tasks (Harrison & Growe, 2014, p. 28; Blotevogel et al., 2014, pp. 83, 100). However, this system was never able to fulfil its expectations, due to reasons including the presence of strong sectoral policies (e.g. regional and transport policies) refusing to submit to spatial planning coordination (Blotevogel & Schelhaas, 2011, p. 160 in Blotevogel et al., 2014, p. 83). In the 1980s, with the near absence of spatial planning at the national level, neo-liberal thinking entered politics and 'the regional level gained importance as an arena for a new wave of policy experimentation and institutional reform' (Blotevogel & Schmitt, 2005, p. 15). However, other policy objectives such as achieving equivalent living conditions were still more important than a neo-liberal discourse and a strict division of authority between the federal government and the Länder restrained this importance (Waterhout et al., 2013, pp. 148-149). After the reunification of West- and

East-Germany the West-German planning system was also introduced in East-Germany (Blotevogel et al., 2014, p. 83).

From the 1990s on, due to a new focus on spatial planning problems and tasks, traditional spatial planning instruments became unsuitable or were viewed as such (Blotevogel, 2011). From the 1990s on a period of restructuring of the spatial planning system is taking place. It is widely recognized that this restructuring is due to that 'the goal of federal policy is no longer to promote balanced economic growth within a nation-state centred planning system, the task of positioning major cities and regions within European and global circuits of capital accumulation requires a renewed focus on spatial planning' (Harrison & Growe, 2014, p. 29; Blotevogel & Schmitt, 2005, p. 23). However, discussion exists about the role of the federal government. Harrison & Growe (2014, p. 29) see 'a somewhat remarkable resurgence (…) explained by the challenges posed by reunification, European integration and the intensification of globalization' whilst Blotevogel et al., (2014) note that 'spatial planning (…) moved further from the centre stage of political attention'.

In the 1992 'Guidelines for Spatial Planning' (*Raumordnungspolitischer Orientierungsrahmen*), 'the strategic importance of eleven urban agglomerations in an international context was set out for the very first time' (MKRO, 1992; in Blotevogel & Schmitt, 2005, p. 16). These were substantiated in the 1995 'Federal Action Plan' (*Raumordnungspolitischer Handlungsrahmen*) by the designation of 11 'European Metropolitan Regions' (BMBau, 1995). This does not imply an 'one-sided downwards scale shifting in the practice of German spatial planning' yet rather a 'regional governance' form of spatial planning 'towards processes of coordinating the action of the actors involved' (Blotevogel et al., 2014, p. 103). These policy documents were succeeded by the 2006 'Concepts and Strategies for Spatial Development in Germany' (BMVBS, 2006) This document included a spatial map 'amounting to a trans-region and relationally networked embryonic national spatial plan based on interacting, but hierarchically differentiated, metropolitan regions' (Harrison & Growe, 2014, pp. 23-24).

The development of the 2006 'Concepts and Strategies for Spatial Development in Germany' can be seen as a further reorganization of spatial planning authority in the German spatial planning culture, causing a widespread debate (Danielzyk, 2012, p. 27). This document is seen as a 'necessary adaptation of the spatial planning policies to changing conditions (…) of globalization and competitiveness, demographical changes and Europe' (BMVBS, 2006; in Hesse & Leick, 2013, p. 344). The focus of this document is therefore on growth and innovation, in which Metropolitan Regions are thought of as growth machines (Knapp & Schmitt, 2003, p. 5) that are dependent on both locational competitive assets and regional governance (Knapp 2005; in Blotevogel & Schmitt, 2005, p. 15). Stiens (2000, p. 527; in Hesse & Leick, 2013, p. 347) describes this as a sign of neo-liberal politics in spatial planning whereby a change in focus from 'lagging regions' to 'growth areas' is occurring. Despite this, it can be questioned if all 11 Metropolitan Regions are growth motors nowadays (Harrison & Growe, 2014; Hesse & Leick, 2013, p. 344) and the 2006 'Concepts and Strategies for Spatial Development in Germany' (BMVBS, 2006) is that effective in the end.

Nowadays German spatial planning is in general more strategic, communicative and networked (see ARL, 2011b; in Blotevogel et al., 2014, p. 105); Danielzyk, 2012, p. 27). The principle became: 'soft forms of communication and consensus building as much as possible, hard forms of binding goals and hierarchical control as much as necessary' (Blotevogel et al., 2014). This is defined by three principles:

1. The principle of subsidiarity, upon which the federal structure of the country is based: each political decision should be made on the lowest political level on which this is possible.
2. The principle of closely linked local or municipal planning autonomy as being part of the constitutionally guaranteed municipal self-government: this gives the municipalities the right to independently structure their local development in the framework of land-use planning.
3. The mutual feedback principle: the various planning levels have to take into account the requirements and conditions of the other levels. (Scholl et al., 2007, p. 18 in Blotevogel et al., 2014, p. 84).

This led to some remarkable structural transformations of the planning system including the rise of informal planning processes and scale shifting within the practice of spatial planning. Three main changes are defined by Blotevogel et al. (2014, p. 103):

1. The federation lost its legislative authority to set frameworks for spatial planning, thereby strengthening the position of the Länder (through the Spatial Planning Act 2008). This makes it possible for the Länder to deviate from the federal framework;
2. 'In several Länder a trend to transfer authority from the Länder planning level to the regional planning level can be observed' (Blotevogel et al., 2014, p. 103);
3. 'A general trend towards the municipalisation of regional planning can be noted'.

The German spatial planning system clearly changed over time. A more regional approach serves nowadays for growth and innovation and to deal with competiveness, demographical changes in Europe. In the following paragraph is focused in-depth on the ongoing regionalisation of the German spatial planning system.

2.9.2 Regional spatial planning in Germany

Neoliberal changes in the German planning system indicate that a clear regionalisation of spatial planning took place in Germany since the 1960s, whereas since the late 1980s this level is seen 'as an arena for a new wave of policy experimentation and institutional reform' (Knapp & Schmitt, 2003, p. 5). This was accelerated by the adoption of the 1995 'Federal Action Plan' (BMBau (ed.), 1995) and the 2006 'Concepts and Strategies for Spatial Development in Germany' (BMVBS (ed.), 2006). The latter contains three 'Guidelines', focusing on for example the strengthening of the European Metropolitan Regions (Leitbild 1), the securing of spatial interest (Leitbild 2) and the preservation of resources and cultural landscapes (Leitbild 3).

The change towards regionalisation of spatial planning mainly focused on metropolitan governance in 11 'European Metropolitan Regions' (hereafter EMR), of which the goal is 'the establishment and consolidation of what might be termed a metropolitan growth machine through which to channel both public and private recourses into coordinated regional development strategies' (Knapp & Schmitt, 2003, p. 5). Main focus in regional spatial planning is on economic development and competitiveness (Blotevogel et al., 2014, p. 93) and is defined in the BMBau (BMBau, 1995, p. 27) as:

> 'Spatial and functional locations whose eminent functions, by international standards, extend well beyond national borders. They are engines of social, economic and cultural development and as such are designed to help maintain Germany's and Europe's efficiency and competitive strengths and contribute towards stepping up the process of European integration' (Blotevogel & Schmitt, 2005, p. 16).

Some authors consider regionalisation as being part of a gradual paradigm change in German spatial planning and policies (Blotevogel & Schmitt, 2005, p. 23). The authors name two arguments in favour of German regionalisation: (1) 'the growing recognition of the outstanding strategic role of Metropolitan Regions for their economic growth and global competitiveness'; and (2) 'the traditional main objective of supporting weak areas increasingly seems to be becoming of secondary importance, even though it is naturally not totally obsolete' (Blotevogel & Schmitt, 2005, p. 23). Blotevogel & Schmitt (2005) regard this not only as a sequence of the current neo-liberal discourse, since 'sustainable development' remains a mandatory principle of German spatial planning (Blotevogel & Schmitt, 2005, p. 24).

The goals of economic growth and global competitiveness are in line with changes in European regional policy, which changed from a main focus on the convergence goal (inter-regional equalization objective) to the goal of regional competitiveness and employment (growth objective) (Blotevogel et al., 2014, p. 101). Harrison & Growe (2014, pp. 23-24) argue that this 'served to reinforce the already strikingly uneven spatial development of Germany, and ran counter to the longstanding principled

commitment of the federal state to promote balanced economic growth and territorial equilibrium in all economic and social policy'. This is confirmed in data research on GDP by the European Commission: this institution even named Germany as being 'one of the countries with the highest spatial imbalance in terms of GDP per head at the regional level (European Commission, 2004; in Blotevogel & Schmitt, 2005, p. 14) (…) due to 'persisting economic stagnation with high unemployment' (Blotevogel & Schmitt, 2005, p. 14). This spatial imbalance is further confirmed by the thesis of Rusche & Oberst (2010). Rusche & Oberst (2010) relate these to the fact that not all German EMR's joining this 'new elite' are economically performing as they are expected to. The authors show that 'there is a widely spread difference in the economic performance' (Rusche & Oberst, 2010, p. 243) and that they 'do not justify their role as economic growth poles in their current political-normative definition' (Rusche & Oberst, p. 253). This is not caused by weak growth but through the 'not interdependence based spatial delimitation of metropolitan regions' (Rusche & Oberst, p. 253). This lack of equal spatial impacts of spatial and economic policies results in a spatial differentiation with respect to economically growing agglomerations, giving rise to competitive disadvantages with rural areas and areas outside these 11 ERM's (Rusche & Oberst, p. 253). Rusche & Oberst therefore advocate for new instruments for the interstices (Rusche & Oberst, p. 253).

The current political-normative definition, in which the EMR's are not political-administrative bodies, raises the problem that possibilities for governmental actions and steering is relatively limited (Blotevogel & Schmitt, 2005, p. 17). The EMR's are seen as: 'spatial and functional locations with outstanding functions on an international scale that impact beyond the national borders [...] as motors of societal, economic, social, and cultural development it is hoped that they will maintain the performance and competitiveness of Germany and Europe and contribute towards accelerating the process of European integration' (BMBau, 1995, p. 27; in Blotevogel et al., 2014, p. 91). Therefore 'their function is rather one of framing and mind-mapping a new discourse concerning a selected number of urban agglomerations, whose metropolitan functions should be maintained and developed' (Blotevogel et al., 2014, p. 91). This is one of the reasons for their weak position in the spatial planning system.

Another form of regional planning, through inter-municipal cooperation, can also be observed. Blotevogel et al. (2014, p. 103) notice that while several Länder transfer (to different extents) authority to the regional level, simultaneously 'a general trend towards the municipalisation of regional planning can be noted'. This does not mean that spatial planning is left to municipalities. Since many cases require inter-municipal cooperation several tasks are dealt with at a regional level of inter-municipal cooperation, a certain 'regionalisation of municipal planning'. This municipal regionalisation results 'in a vast array of inter-municipal cooperation and new forms of governance on a small regional scale' (Blotevogel et al., p. 104). The municipal regions are often 'aligned with the labour market and Chamber of Industry and Commerce districts' (Blotevogel et al., p. 87). Therefore in the 1995 'Federal Action Plan' (BMBau, 1995), functional city-regions were introduced. In the 2006 'Concepts and Strategies for Spatial Development in Germany' (BMVBS, 2006) the concept of supra-regional partnerships (*Großräumige Verantwortungsgemeinschaften*) was introduced 'connecting rural areas with urban cores to pursue a balanced (intra-regional) spatial structure' (Waterhout et al., 2013, p. 149).

A shift towards regional planning is taking place in the German spatial planning system. Spatial planning tasks are awarded to 11 European Metropolitan Regions who's task is to assure economic, societal, economic, social, and cultural development and to be competitive with other European regions. The tasks awarded imply growing regional importance of different spatial planning issues.

2.9.3 Spatial visions in Germany

In the German spatial planning culture, 'the most important planning instruments are 'plans' showing the desired future state of the spatial structure [...] both cartographically and textually' (Blotevogel et al., 2014, p. 84). A leading spatial guideline in this is the principle of 'decentralized concentration': 'the

stipulation of 'central places' in particular is intended to result in the concentration of population, employment and infrastructures in cities of varying sizes that are more or less evenly distributed throughout the entire Federal Republic of Germany' (Scholl et al., 2007, p. 14; in Blotevogel et al., 2014, p. 84). In this perspective, the ERM's can be seen as 'central places'.

In their article on the neo-liberalism shift in spatial planning Waterhout et al. (2013, p. 151) show that, although they are not obliged to do this, spatial visions are developed by communities and regions, thereby focusing on (economic) growth and competitiveness. These are a new type of spatial visions: 'they are documents with programmatic statements aiming at the provision of conditions required for economic growth and competitiveness' (Waterhout et al., (2013, p. 151). In relation to mobility this type of spatial visions have also been developed: the Regional Mobility Concept (Blotevogel et al., 2014, p. 88). The development of separate mobility concepts show a declining relevance of other policy fields in spatial planning.

The strengthening of certain policy 'pillars' for economic growth and competitiveness shows a weakening of the German spatial planning system (Blotevogel et al., 2014, p. 102). This makes the use of informal planning processes on the regional level more attractive since these can be used more quickly, are often more flexible and sometimes more effective (Gualini, 2004; in Blotevogel et al., 2014, p. 102). In general, this weakening can cause 'a temporary bypassing of formal planning structures' (Blotevogel et al., 2014, p. 102).

2.9.4 Mobility and accessibility planning in Germany

The neo-liberal focus on (regional) growth can also be observed in Germany's focal policies, including transport planning, over the years. In all governmental levels, 'comprehensive spatial policies' and 'sectoral policies' influence spatial planning (Blotevogel et al., 2014, p. 87). Contrarily, strategic stipulations are mainly established on federal and Länder level (Blotevogel et al., 2014, p. 88). The sector policies 'are often able to mobilize powerful support groups for their strategies, measures and projects' (Blotevogel et al., 2014, p. 87).

Due to the earlier described flows in the German spatial planning culture (see §2.9.1) the coordination of mobility and accessibility planning shifted between the different governmental levels. After the Second World War, 'the primary aim of regional planning was reconstruction and focused principally, though not exclusively, on housing and transportation' (Harrison & Growe, 2014, p. 28). This changed in the late 1950s when the central state reinvented spatial planning (Harrison & Growe, 2014, p. 28). Nowadays, all governmental levels have responsibilities for regional (transport) policy, whereby policy implementation on the regional and the communal level consist concrete projects and measures (Blotevogel et al., 2014, p. 87).

Mobility and accessibility planning currently encounters the problem of comprising a complex relationship between spatial planning and spatially relevant sectoral policies. Sectoral planning becomes more 'pillarized' and often overrules supra-sectoral comprehensive spatial planning. Only in cities, increasingly there is 'the notion of strategically oriented spatial planning' (Blotevogel et al., 2014, p. 102).

Despite of this 'pillarization' of mobility and accessibility planning and the focus on growth and innovation, the classic guiding principles in German spatial planning are still included in mobility and accessibility planning. For example the second Guideline ('Serving the public interest – Daseinsvorsorge') in the Concepts and Strategies for Spatial Development in Germany' (*Leibilder und Handlungsstrategien für die Raumentwicklung in Deutschland*) (BMVBS, 2006) states that 'given the challenges of demographic change, infrastructure should serve to secure the public interest' (IzR 2006, p. 713ff; in Danielzyk, 2012, p. 29). Federal plans, like the 2003 Federal Transport Infrastructure Plan mainly benefit rural and structural weak (…) regions (BAW & IW, 2009, p. 84; in Blotevogel et al., 2014, p. 89) as well. Furthermore as put forward by the study of the Future Council of the Bavarian

State Government (2010) 'the principle of equal living conditions is not generally challenged but rather it is re-interpreted in terms of 'approximate' equal living conditions', meaning that from every place in the city region the urban core should be accessible within 60 minutes by car or public transport (Waterhout et al., 2013, p. 150), which clearly indicates a mobility as well as accessibility measure.

Mobility and accessibility planning thus shifted from national to more regional planning approaches and often overrules comprehensive spatial planning. An inclusion of the German spatial planning guiding principles is still guaranteed.

2.9.5 Spatial justice in Germany

After the reunion of West- and East Germany, one of the basic themes of the German spatial planning system became the provision of equal living conditions (Zimmerman, 2011; in Blotevogel et al., 2014, p. 87). Equal living conditions were and still are mainly achieved by financial equalization: investments are focused on strengthening weak Länder and regions. Besides the fiscal equalization policy, also transport and regional policy 'have a clearly corrective effect, benefitting rural and structurally weak Länder and regions' (Blotevogel et al., 2014, p. 89).

Next to the focus on equalization policies, nowadays 'the German government is discussing how to interpret and to guarantee spatial justice at the regional scale' (Waterhout et al., 2013, p. 155). This is because 'the guiding principles of territorial planning and development, through the introduction of metropolitan growth regions (BMVBS (ed.), 2006), recently seem to have shifted away from 'providing equal living conditions' in all parts of the country' (Waterhout et al., 2013, p. 149).

> *'This policy approach recognizes the unevenness of the German territory and the need for social solidarity and spatial justice, by developing new types of urban-rural partnerships, fostering a new assertiveness of rural areas, and by considering rural areas as economically and socially vital places. However, not all municipalities and regions within a metropolitan region will benefit from the economic growth of the region's core. Furthermore, the 11 metropolitan regions do not cover the whole territory, meaning that Germany could be divided into metropolitan regions and other structures* (Waterhout et al., 2013, p. 149-150).

Waterhout et al. (2013, p. 155-156) consider this 'abolishing of spatial planning for balanced development' as an effect of neo-liberalisation. This neo-liberalisation causes 'increasingly socio-spatial segregation, even in dynamic and successful metropolitan regions' (Danielzyk, 2012, p. 27), leading to 'uneven spatial development of Germany' (Harrison & Growe, 2014, p. 23). It can thus be questioned to what extend spatial justice, as defined as the provision of equal living conditions or one another way, is still one of the basic principles in the German spatial planning system.

2.10 Comparing the Dutch and German spatial planning systems

Both the spatial planning systems in the Netherlands and Germany have been indicated as being among the most comprehensive in the world (Wolsink, 2003; in Westerink-Petersen et al., 2013, p. 781; Blotevogel et al., 2014, p. 83). Nevertheless, in the Netherlands as well as in Germany major changes have been taking place in the spatial planning cultures since the 1950s, slowly changing from comprehensive to more economic development focused and regionalized spatial planning systems (Zonneveld & Evers, 2014; Stiens, 2000, p. 527; in Hesse & Leick, 2013, p. 347). In answering to further neo-liberalisation of governmental tasks, both in the Netherlands as well as in Germany more collaborative planning approaches between governmental and non-governmental actors became to be used (Westerink-Petersen et al., 2013; Blotevogel et al., 2014). One major difference to be mentioned is that in the Netherlands spatial planning is seen as a tool for facilitating economic growth replaced the issue of spatial quality in national spatial planning (Zonneveld & Evers, 2014) nowadays; whereas in the German national spatial planning policy clearly is stated that *inter alia* by fulfilling social and economic demands, 'equivalent living conditions in the subspaces' should be the result of spatial planning (BGBL, 2008, §1 Para. 2; in Blotevogel, Danielzyk & Münter, 2014, p.84).

Besides ongoing regionalisation and neo-liberal processes in both the Dutch and German spatial planning systems, the role of the research themes also changed (see §2.8.2-2.5.8 and §2.9.2-2.9.8). The following subparagraphs present a comparison of changes in the research themes in the Dutch and German spatial planning systems which are summarized in table 2 below.

Research theme	The Netherlands	Germany
The region	Shift from national to regional planning, horizontal cooperation, creating freedom for market and private initiatives	Shift from national to regional planning, focus on economic development and competitiveness
Mobility and accessibility	Infrastructure planning gaining momentum over integrated spatial planning, tool for economic development, clear distinction national and regional tasks, policies include mobility and accessibility measures	Infrastructure and mobility planning of importance since 1950s, tool for providing approximate equal living conditions, clear distinction national and regional tasks, policies include mobility and accessibility measures
Spatial vision	From national to regional governmental level, from comprehensive to fragmented spatial visions, regions and communities obliged to develop spatial visions, tool for economic development	National organised, comprehensive, regions and communities not obliged to develop spatial visions, tool for providing equal living conditions
Spatial justice	Basic principle, both in national and regional policies reflected, neo-liberalisation could cause spatial injustice	Basic principle, both in national and regional policies reflected, neo-liberalisation could cause spatial injustice

Table 2: Comparison research themes in the Dutch and German spatial planning systems (Wildschut, 2016)

2.10.1 The region

Both in the Dutch and German spatial planning systems a shift from national to regional planning can be observed. In the Netherlands a shift from restricted national policies to more regional spatial planning by provinces, metropolitan areas and municipalities can be noticed whereby the restricted national spatial planning system is abandoned since the 2000's (Zonneveld & Evers, 2014, p. 72; Gerrits et al., 2012, p. 338; Roodbol-Mekkes et al., 2012, p.387). Whereas spatial planning on the regional level was organised vertically in the past, regions tend to work more and more as horizontal organised while cooperating more with the market and private initiatives in the Netherlands (Gerrits et al., 2012, p. 337). In Germany, since the 1960's regionalisation is taking place, whereby first Länder and since the 2006's European Metropolitan Regions gained increasing powers in regional spatial planning for becoming growth machines (Knapp & Schmitt, 2003, p. 5) by focussing on economic development and competitiveness (Blotevogel et al., 2014, p. 93).

2.10.2 Spatial vision

The development of spatial visions, and the topics of interest in those, differs in the Dutch and German spatial planning systems. Whereas in the Netherlands 'comprehensive national visions were replaced by more fragmented, regional strategies' since the 1990s (Gerrits et al., 2012, p. 337); in Germany still show comprehensive national spatial visions aiming for the principle of decentralized concentration, whereby concentrations of population, employment and infrastructure in cities are more or less evenly distributed through Germany (Scholl et al., 2007, p. 15; in Blotevogel et al., 2014, p. 84). In the Netherlands influence from the national government is now *ex ante* influence instead of *ex post* (Gerrits et al., 2012, p. 338). Focus in national spatial vision is on infrastructure development in which regional authorities further specify regional needs (Ministerie van Infrastructuur en Milieu, 2012, p. 339). In the Netherlands planning tasks and tools like spatial visions are more delegated to the regional and communal level nowadays; whereas in Germany regions and communities are not

obliged to develop spatial visions focussing on (economic) growth and competitiveness (Waterhout et al., 2013, p. 151).

2.10.3 Mobility and accessibility

In regard to mobility and accessibility similarities and differences can be found in the Dutch and German spatial planning systems. In the Netherlands 'infrastructure planning has gained prominence over spatial planning' (Wolsink, 2003; in Roodbol-Mekkes et al., 2012, p. 382). On the national level infrastructure and mobility planning is seen as more important than integrated spatial planning (Gerrits et al., 2012) as tool for economic development (Alpkokin, 2012, p. 544). Whereas the German spatial planning system shows a strong governmental focus on infrastructure planning, already since the 1950s (Harrison & Growe, 2014, p. 28). Both in the Dutch and German spatial planning systems infrastructure tasks of national importance are coordinated on the national level, whereas other infrastructure tasks are regarded to be dealt with on the regional level (Gerrits et al., 2012, p. 339; Blotevogel et al., 2014, p. 87). Another similarity in the Dutch and German spatial planning systems is that in both countries national policies present mobility and accessibility measures (Hoogendoorn-Lanser, personal communication, 21-02-2014; Waterhout et al., 2013, p. 150) but differ in their purpose. Whereas in the Netherlands economic development is goal of infrastructure planning (Westerink-Petersen et al., 2013, p. 784), in Germany a focus on the principle of ''approximate' equal living conditions' can be found (Waterhout et al., 2013, p. 150).

2.10.4 Spatial justice

In both the Netherlands and Germany spatial justice is considered as basic principle of the spatial planning systems, be it in Germany as 'provision of equal living conditions' (Hajer & Zonneveld, 2000, p. 341; Zimmerman, 2011; in Blotevogel et al., 2014, p. 87). Both on the national and regional level in spatial and transport policies spatial justice is reflected (Hajer & Zonneveld, 2000, p. 342); aiming for strengthening weak Länder and regions in Germany (Blotevogel et al., 2014, p. 89). In the Netherlands, transport causes spatial injustice nevertheless in certain areas (Martens, Holder & Thijssen, 2011, p. 37-38). Fairs exists in both the Netherlands as well as Germany that neo-liberal developments will result in abolishing aiming for equally distributed economic development on the regional level (Gerrits et al., 2012, p. 339; Rocco, 2014; Huang, 2013, p. 224; Waterhout et al., p. 149-150), causing spatial injustice (Harrison & Growe, 2014, p. 23).

2.11 Conceptual model

In this chapter is sought for a conceptual framework for exploring the relation between the research themes spatial justice and the region, spatial visions, potential mobility and person accessibility. Therefore for every research themes definitions, functions and measures are discussed, in order to explore these in practice later on in this research (see chapter 4).

Based on the exploration of the research themes in scientific literature as presented in the conceptual framework (§2.2-2.6), in this paragraph a conceptual model is presented which will serve as basis for the empirical research. As stated in paragraph 2.4 and 2.5, in the remainder of this thesis the following terminology for mobility and accessibility will be used, which is at first to be found back in the conceptual model: potential mobility and person accessibility. This conceptual model is thus not based on the analysis of the roles of the research themes in the Dutch and German spatial planning systems (§2.7-2.10). A clear distinction in this is required, in order to compare the research themes later on in the research as independent of their case study. Besides, the conceptual model presented below (see figure 3) places the research themes in a theoretical perspective, shows possible relations between those and to forms a framework for exploring the research themes in practice. Hereby spatial justice is placed central, around which the region, spatial vision, potential mobility and person accessibility are positioned. For this set-up is chosen since those are expected to influence spatial justice in practice.
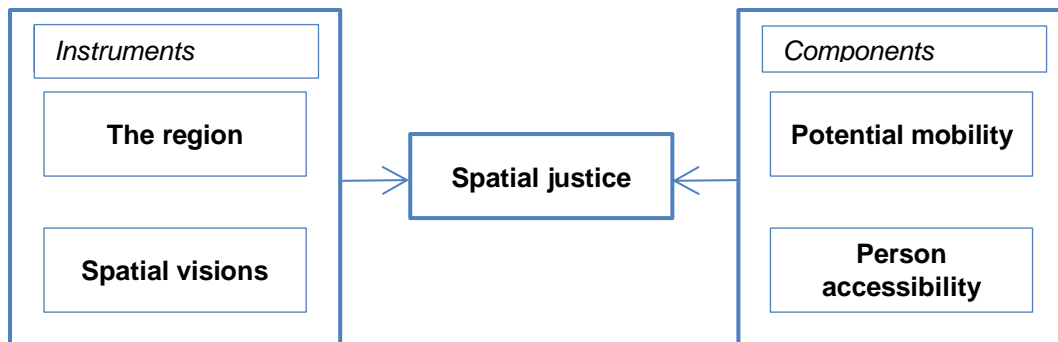
Figure 3: The conceptual model

2.11.1 Explanation of the conceptual model

Central in the conceptual model of this research is spatial justice. Spatial justice is defined as an intentional and focused emphasis on the spatial or geographical aspects of justice and injustice. This research focusses on regional spatial visions and its developments, in which spatial justice could play a major role. The implementation of spatial justice is in this research defined as being depending on two instruments, the region and spatial visions, and two components, potential mobility and person accessibility. In the end, the improvement of spatial justice is influenced by choices made in relation to the research themes in spatial vision development processes. The following in this subparagraph shows the relation between the research themes as identified in the theoretical exploration of these in the conceptual framework (§2.2-2.6). The relations presented below will be explored later on in this research (chapter 4, 5).

Spatial justice

Spatial justice is defined as an intentional and focused emphasis on the spatial or geographical aspects of justice and injustice. Its function as defined in this research is to improve fair and equitable distribution in space of socially valued resources and the opportunities to use them. Measures in regard to this are including diversity, democracy and equity in spatial decision-making processes and outcomes.

The instruments region and spatial visions

The instrument the region is seen in this research as the regional spatial planning institution, which can influence the implementation of spatial justice in the area it covers. Regions are identified as regional communities, geopolitical territories, geographical networks and regional societies. Functions of region are the following: to take the lead in identifying the compelling social need; to promote those local effects of efficiency; and productivity and competeveness.

Spatial visions are seen as instruments to be developed and implemented by regions in order to implement spatial justice. The definition used in this research of a spatial vision is the following: Models of the future referring to specific territorial contexts (normally a territorial jurisdiction), developed by public and private groups and presented to their wider communities. The function of spatial visions is to gain a greater sharing of long-term spatial goals.

The components mobility and accessibility

The components potential mobility and person accessibility are seen in the conceptual model as useful tools for improving spatial justice in the spatial vision developed by the region. The instruments and components together serve together for improvement of spatial justice. Mobility is defined as the ease with which a person can move through space. Since in this research is focused on spatial justice, which influences, from now on focus in this research will be potential mobility, which focusses on people. The function of mobility is related to this: to improve the ease to move through space for a

person and to increase a person's capacity to overcome distance in space. Potential mobility can be improved by taking the following measures: Price, time, speed and personal life-style measures like motorisation, deregulation of labour in relation with economic globalization and decline of fixed time-regimes.

Similar to the use of potential mobility in this thesis, also in accessibility will be focused on the influence on people. Therefore from now on will be focused on person accessibility; which is defined as an attribute of a person: a person has accessibility (or not) to a certain set of locations. Its function is to improve land-use and transport developments and policy plans on the functioning of the society in general. Measures to improve person accessibility are infrastructure-, location-, person- or utility-based.

2.12 Hypothesis

In the previous paragraphs the different research themes are explored which are central to this research, based and framed by analysis of scientific literature. By placing spatial justice central, the research themes of the region, spatial visions, mobility and accessibility have been framed conceptually, resulting in the conceptual framework. The research themes can be seen as variables being connected to spatial justice one way or another. If spatial planners see connections between the research themes in practice is central to this research. This is reflected in the research question:

> *Which thoughts do spatial planners in the Provincie Zuid-Holland and the Regionalverband Ruhr have on improvement of regional spatial justice through improvement of mobility and accessibility in the development of spatial visions by the Provincie Zuid-Holland and the Regionalverband Ruhr?*

The following hypotheses provide theoretical answers, and show relations between the research themes mentioned in the research question. Since the research question already mentions the PZH (the Netherlands) and the RVR (Germany), the hypotheses are based on the role of the research themes in the Dutch and German spatial planning systems (§2,7-2.10).

> *1. Regional spatial planners in the Provincie Zuid-Holland and the Regionalverband Ruhr think that regional spatial planning institutions can be the right governmental level to improve spatial justice in spatial visions.*

As shown in §2.7-2.10 both in the Netherlands and Germany regional governments gain momentum for spatial planning tasks. One of the instruments used for conducting these spatial planning tasks are spatial visions, which regional governments in the Netherlands are obliged to develop and regions in Germany often do voluntary. Since in both countries spatial justice is seen as one of the main spatial planning objectives, it could be expected that spatial justice is also reflected in spatial visions, also since this topic is reflected on in both national and spatial policies in the Netherlands and Germany.

> *2. Regional spatial planners in the Provincie Zuid-Holland and the Regionalverband Ruhr think that measures on potential mobility and person accessibility can improve spatial justice.*

The thesis of Martens, Holder & Thijssen (2011) showed that transport policies can influence spatial justice (see §2.6). Both in the Netherlands and Germany mobility and accessibility measures can be found in national spatial policies and is infrastructure planning an important topic in spatial planning. It must nevertheless be mentioned that a strong focus on neo-liberalisation measures can conflict with spatial justice goals.

3. Methods and operationalisation

In order to conduct scientific research, several research methods can be used. Combining these research methods with an operationalisation of the theory gives the opportunity to apply the research methods to the theoretical findings in practice (see chapter 5 & 6). Therefore firstly, after discussing the different research methods, an argued choice on the use of a research method will be given (§3.1). Secondly, the theoretical findings as presented in chapter 2 will be operationalized (§3.2). Thirdly, the research strategy will be explained (§3.3). The reasons behind the choice of focusing on the PZH and RVR will be explained in §3.4. In the last paragraph, §3.5, will be explained what types of research materials will be used in order to explore the regional spatial planners´ thoughts in practice.

3.1 Research approach

Before exploring the research methods in-depth it is important to make a decision on the research approach to be used in this thesis. Practical criteria for using a certain research approach are restrictions 'to a particular time, research setting, group or population or problem (Creswell, 2002; in Saunders et al., 2009, p. 40). This thesis is focused on exploring 'what is happening; to seek new insights; to ask questions and to assess phenomena in a new light' (Robson, 2002, p. 59; in Saunders et al., 2009, p. 41).

Two types of research approaches are distinguished by Saunders et al. (2009): the deductive and inductive research approach. When using the deductive research approach, a hypothesis will be used for testing an existing theory or model in practice (Saunders et al., 2009, p. 124-125). It can therefore be seen as a cyclical process (see figure 3). The research strategy used therefore serves for testing this hypothesis. When using the inductive research method, data is gathered for developing a theory (Saunders et al., 2009, p. 125-126). Although Saunders et al. (2009) mention the option of combining both the inductive and the deductive research approaches in one research (Saunders et al., p. 127), in this thesis only the deductive research approach will be used. Considering the criteria mentioned by Creswell; in Saunders et al., 2009), the research themes opt for this approach since there is enough scientific literature available for developing a hypothesis. Furthermore in the research field of spatial decision-making processes the deductive research approach is mainly used. Applying the same research method in this thesis will make it easier for the reader to get familiar with the research
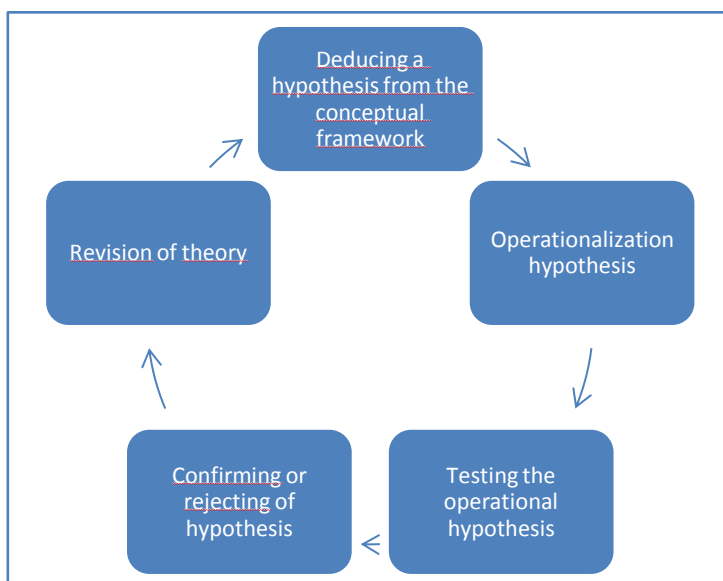
outcomes.

Figure 4: Deductive research approach (Wildschut based on Robson; in Saunders et al., p. 124-125)

As described by Robson (2002; in Saunders et al., p. 124-125), five stages can be distinguished in deductive studies (see figure 4). First a hypothesis is deduced from the theory, in this thesis the conceptual framework (see §2.12). Second this hypothesis is operationalized (see §3.2). Third the operationalized hypothesis is tested in practice (see chapter 4). Fourth the outcomes of the research performed are analysed in order to confirm or reject the hypothesis and thus theory (see chapter 5). Fourth, confirmation or rejection of the hypothesis leads to modifying the theory in the light of the findings and suggestions for further theoretical research (see chapter 5).

3.2 Operationalisation

The five research themes, which comprise the region, spatial visions, potential mobility, person accessibility and spatial justice, are included in the hypothesis (see §3.8). In the conceptual model is shown that these can be explored in-depth through analysis and subsequent comparison of scientific literature and spatial planners' ideas (see §3.7). One step between the development of the conceptual model and testing it in practice is the operationalisation of the research themes as mentioned in the conceptual model. In order to test them in practice, indicators have to be assigned to the research themes. This implies a further elaboration on the types, functions and possible measures as could be used by spatial planners in practice, as derived from the conceptual framework. By doing this the following subjects will be analysed:

- Spatial planners' thoughts on the role of the region
- Spatial planners' thoughts on the role of spatial visions
- Spatial planners' thoughts on the role of potential mobility in spatial visions
- Spatial planners' thoughts on the role of person accessibility in spatial visions
- Spatial planners' thoughts on the role of spatial justice in spatial visions
- Spatial planners' thoughts on the integrated role of potential mobility and person accessibility in order to improve spatial justice in spatial visions

In order to operationalize the research themes, indicators are attributed to them. This renders the theoretical explanation of the research themes measurable in practice. In order to explore the spatial planners' ideas and confirm or reject the research hypotheses, values are added to the different indicators. These values are derived from the conceptual framework (see §2.11). Since in this thesis qualitative answers are aimed for, both the indicators and values are qualitative themselves as well. These indicators and values serve for setting up the interview questions and are measured by asking the interviewees. In the table below (table 2), the research themes, indicators and values are summarized. The named research themes, indicators and values will be explained in detail in the following paragraphs.

Research theme	Indicator	Value
The region	Definition	Regional communities, geopolitical territories, geographical networks or regional societies
	Function	To take the lead in identifying the compelling social need and to promote those local effects of efficiency, productivity and competiveness
Spatial visions	Definition	Models of the future referring to specific territorial contexts (normally a territorial jurisdiction), developed by public and private groups and presented to their wider communities
	Function	Gaining a greater sharing of long-term spatial goals.
Potential mobility	Definition	The ease with which a person can move through space
	Function	To improve the ease to move through space for a person and to increase a person's capacity to overcome distance in space
	Measures	Price, time, speed and personal life-style measures like motorization, deregulation of labour in relation with economic globalization and decline of fixed time-regimes

Person accessibility	Definition	Person accessibility is an attribute of a person: a person has accessibility (or not) to a certain set of locations
	Function	To improve land-use and transport developments and policy plans on the functioning of the society in general
	Measures	Infrastructure-, location-, person- or utility-based. Components to influence the improvement of accessibility are transport, land-use, temporal and individual
Spatial justice	Definition	An intentional and focused emphasis on the spatial or geographical aspects of justice and injustice
	Function	To improve fair and equitable distribution in space of socially valued resources and the opportunities to use them
	Measures	Including diversity, democracy and equity in spatial decision-making processes and outcomes

Table 3: Operationalisation of research themes (Wildschut based on §2.2-2.6)

3.3 Research strategy: Case study

The development of spatial visions and the inclusion of measures in these to improve the spatial use of the region for which the spatial vision is developed, is a task for all governmental levels involved in the planning debate in the specific region. The decision-making process is initiated by regional governmental institutions and these institutions are expected to include measures in the spatial vision document regarding mobility and accessibility in order to improve spatial justice.

Elaborating on the conceptual model and hypothesis as postulated previously a research strategy will be defined, in order to explore the hypothesis in practice. This thesis strategy should enable the researcher 'to answer … particular research question(s) and meet … objectives' (Saunders et al., 2009, p. 141). Verschuren & Doorewaard (2007, p. 159) therefore state that this is the most decisive decision for developing a technical design for performing research. The authors define a research strategy as the set of interrelated decisions about the execution of a research. This mainly involves gathering empirical data as well as processing them to valid answers to the research questions.

Seven research strategies are distinguished by Saunders et al. (2009, p. 141): experiment, survey, case study, action, grounded theory, archival research and ethnography. All these strategies can be employed for gathering information in order to answer the research question in exploratory, descriptive or explanatory research (Yin, 2003; in Saunders, Lewis, & Thornhill, 2009, p. 141). None of the research strategies are superior to one another and can be combined in one research (Saunders, Lewis, & Thornhill, 2009, p. 141). Two research strategies fit the deductive research approach best: the survey and case study strategies. A broad insight in regional decision-making processes can be generated by using the survey strategy. A large number of respondents of different cases and all related parties involved in regional decision-making processes improve the generalizability of the results. In this thesis the survey strategy will however not be used since the number of cases is limited. Regional spatial plans are not developed yearly, and often these are either too old or planned to be newly developed in the future in which case the current spatial plan is updated now and then. This complicates finding actual cases and spatial planners that are or have been involved in these processes currently or recently. Therefore the focus in this thesis will be rather in-depth than broad (Verschuren & Doorewaard, 2007, p. 160).

A qualitative strategy fits well to this thesis because spatial planners' thoughts can be properly analysed in this way. The strategy used in this thesis is the case study: 'a study in which the researcher tries to gain an in-depth and integral insight on one or multiple space-time bounded objects or processes' (Verschuren & Doorewaard, 2007, p. 183). The case study is 'a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence' (Robson, 2002, p. 178; in Saunders et al., 2009, pp. 145-146). This strategy 'will be of particular interest to you if you wish to gain a rich understanding of the context of the research and the processes being enacted (Morris & Wood, 1991; in Saunders et al., 2009, p. 146); and can be used for generating answers to 'what' questions (Saunders et al., 2009,

p. 146). This qualitative research strategy therefore fits this thesis, in which the ideas of spatial planners' on the research themes will be explored.

3.4 Case selection

As mentioned before, the thoughts of spatial planners on spatial decision-making processes on spatial visions will be explored using case studies in which it is hypothesized that:

Regional spatial planners in the Provincie Zuid-Holland and the Regionalverband Ruhr think that regional spatial planning institutions can be the right governmental level to improve spatial justice through taking equity measures on mobility and accessibility in spatial visions.

In order to be able to either confirm or reject this hypothesis two cases will be explored: the development of the VRM by the PZH in the Netherlands and the development of the RR (hereafter: RR) by the RVR in Germany. Therefore this thesis can be named a multiple case study research (Saunders et al., 2009, p. 146). The exploration of two cases makes it possible to explore if the findings from the first case occur similarly in the second or whether they differ (Saunders et al., 2009, p. 146-147).

Selected region	Selected cases
Provincie Zuid-Holland	Visie Ruimte en Mobiliteit (2014)
Regionalverband Ruhr	Regionalplan Ruhr (expected in 2017)

Table 4: Selected regions and cases

Both the VRM and the RR meet up to a certain set of criteria, which makes them useful for this thesis. These two cases will therefore be used to confront the hypothesis with and to explore the research themes and their indicators and values in-depth in practice. The selection criteria are:

Criteria	Provincie Zuid-Holland: Visie Ruimte en Mobiliteit	Regionalverband Ruhr: Regionalplan Ruhr
1: Developed by a regional spatial planning institution	The Provincie Zuid-Holland	The Regionalverband Ruhr
2: The regional spatial planning institution should be developing the spatial vision at the moment of conducting the interviews	Till June 2014, matched criterion at the time of selection	Till beginning 2017
3: The spatial visions should be developed in collaboration with different governmental institutions, knowledge institutions and private partners	Matches the criterion	Matches the criterion
4: Both regions should be densely populated, have to deal with demographic changes such as the resurrection of cities and population decline in rural areas and face economic changes including unemployment	Matches the criterion	Matches the criterion
5: spatial justice is a guiding principle in the national planning system	Matches the criterion	Matches the criterion

Table 5: Selection criteria explained per case

The first criterion is that the spatial visions should be developed by a regional spatial planning institution. Thereby both the PZH and the RVR have competences for spatial vision-making, as awarded by other governments responsible for spatial planning in the region. Both the PZH and the

RVR provide spatial planning objectives for municipalities and specialized authorities for future developments.

Second, the regional spatial planning institution should be developing the spatial vision at the moment of conducting the interviews. By focussing on these cases an advice will be given about recent thoughts towards mobility, accessibility of transport systems and spatial justice in spatial visions since both regions were still working on their spatial visions during the gathering of empirical data for this thesis. Spatial planning cultures can influence the way of thinking about spatial visions and their content. The regional 'VRM' (Provincie Zuid-Holland, 2014), was finished at the end of June 2014. The RR is currently under construction until beginning 2017 (since 2014). In order to define guiding principles for the RR, the RVR already developed the 'Perspektiven für die räumliche Entwicklung der Metropole Ruhr' (Metropole Ruhr, 2013) in 2013.

Third, the spatial visions should be developed in collaboration with different governmental institutions, knowledge institutions, public representatives and private partners. This ensures that governments, the market and society are all involved in the decision-making processes, creating the opportunity to gather data from all these different actors. Both for the development of the VRM and the RR such a collaborative decision-making processes (have) take(n) place.

Fourth, both regions should be densely populated, have to deal with demographic changes such as the resurrection of cities and population decline in rural areas and face economic changes including unemployment. The latter being caused by for example globalization and further integration of the European economic market (Blotevogel, Danielzyk, & Münter, 2014; Zonneveld & Evers, 2014). These changes require a spatial redistribution of goods and a transition towards potential mobility and person accessibility in order to improve the spatial justice. Both the PZH as well as the RVR complies with this criterion.

And at last, spatial justice should be a guiding principle in the national spatial planning systems. Both in the Netherlands as well as Germany spatial justice is regarded as one of the guiding principles in spatial planning. This renders the exploration of this theme and the relation to the other research themes easier in practice compared to countries where this does not apply.

Both the PZH as well the RVR comply with the described selection criteria. Therefore the spatial visions developed by these regional spatial planning institutions, the VRM and the RR, will be used as cases in this thesis.

3.5 Research material and data analysis

Using the multiple case study strategy implies the use of qualitative research methods. The data collection techniques and data analysis will produce non-numerical data. Non-numerical, better known as qualitative data, is based on meanings expressed through words. The multiple case study strategy yields non-standardised data, requires classification into categories and requires that analysis is conducted through the use of conceptualisation of the data (Saunders et al., 2009, p. 482).

Defining the research material and methods for data analysis is based on the deductive research approach and the multiple case-study research method. Therefore different steps for gathering research materials will be applied at both cases independently. First secondary data will be explored in order to gain an overview on the content of the research subjects. This concerns data in the form of written documents, in which will be focused on theoretical insights on changing roles of the research themes and background information about the research cases. Therefore policy documents, spatial visions, interview transcripts, scientific journals, books and magazines articles will be analysed. This serves for getting background information to define the research goals as well as for framing a picture of the implementation of the different scientific outcomes as presented in the conceptual model and operationalisation. These include:

- Academic literature: in order to develop the conceptual framework and gather in-depth knowledge about the research themes, already existing academic literature will be reviewed. Therefore databases like Picarta, Scopus and Google Scholar will be searched.
- German and Dutch policy documents: to explore the legal basis of the region and the role of spatial visions and transport planning in the spatial planning systems federal, state and regional policy documents will be used. This data will be gathered on the internet.
- Spatial visions: in order to explore the research themes and questions in practice two spatial vision documents will be explored. These are the 'VRM', developed by the PZH and the current vision document developed by the RVR: 'Perspektiven für die räumliche Entwicklung der Metropole Ruhr'.

Besides the secondary data, primary data will be gathered through the conduction of interviews. These will be semi-structured face-to-face expert interviews, also known as qualitative research interviews. Because these themes are derived from the theory, interviewees will be asked for their personal view. Asking for personal views creates the opportunity to compare the spatial planners' thoughts with the theoretical findings. Most likely the individual spatial planners' thoughts will differ from one to another. For gaining different views, interviews will be held in English, German and Dutch, as preferred by the interviewee. These interviews are conducted on location. During every interview a similar list of themes and questions will be used (see Annex B & C), based on the dimensions of the operationalized research themes (see Table 3). The sequence of the questions may change according to the progress in the interviews.

For both cases regional spatial planners are interviewed; all being involved or influenced by the VRM respectively RR (see table 6 and Appendix A). Selection of the interviewees took place by (1) looking at their involvement in the decision-making processes on the VRM respectively RR; and (2) their work related background. During the development of the visions multiple stakeholders with different backgrounds were/are involved; therefore both employees of governmental, university and private organisations are interviewed per case.

Regional spatial planning institution: Provincie Zuid-Holland	Regional spatial planning organization: Regionalverband Ruhr
Provincie Zuid-Holland	Landesregierung Nordrhein-Westfalen
Provincie Zuid-Holland	Private company Dortmund
Stadsgewest Haaglanden	Universität Duisburg-Essen
Ministerie Infrastructuur en Milieu	Gemeinde Dortmund
	Technische Universität Dortmund

Table 6: Organisations interviewees

The interviewees remain anonymous to facilitate expression of critical views. In order to analyse the interviews, during the interviews notes will be made and they are recorded. These records are transcribed afterwards. From these transcribed interviews, relevant information for the cases is selected by looking at information comparable to as presented in chapter 2. Based on these records a qualitative exploration is performed investigating whether the theoretical findings and spatial planners' thoughts match or differ. This results in an overview in which the similarities and differences will be highlighted. In the end, the primary (conceptual framework) and secondary data (interviews) is triangulated in order to get comprehensive findings to confirm or reject the hypothesis and research questions.

4. Research results

4.1 Introduction

This explorative research focusses on regional spatial planners' thoughts on the research themes the region, spatial visions, potential mobility, person accessibility and spatial justice. Previous chapters presented the research goals, methods and introduced the research themes in the Dutch and German spatial planning systems. The qualitative research method of conducting face-to-face interviews results in this chapter in a presentation of regional spatial planners' thoughts on the research themes. In the following paragraphs the results of the face-to-face interviews (see Annex D) are divided per case study, to know the PZH and the RVR. Per case the different thoughts on the research themes are discussed in-depth. The interview questions have been based on the operationalisation of the theoretical framework (see §3.2). The results described below show similarities with the theoretical operationalisation but also differ on various aspects due to the use of open questions in face-to-face interviews (see §3.5). The interviews serve as empirical data, to compare the operationalized theory and empirical data later on in this research (see chapter 5) and answer the research question (see chapter 6).

Respectively for the PZH and RVR the research results presented serve for answering the following research sub-questions:

1. *What are spatial planners' thoughts in the Provincie Zuid-Holland and Regionalverband Ruhr on:*

   a. *The definition and function of the Provincie Zuid-Holland and the Regionalverband Ruhr?*

   b. *The definition and function of spatial visions in the Provincie Zuid-Holland and the Regionalverband Ruhr?*

   c. *The definition, function and measures concerning the improvement of mobility in the spatial vision documents of the Provincie Zuid-Holland and the Regionalverband Ruhr?*

   d. *The definition, function and measures concerning the improvement of accessibility in the spatial vision documents of the Provincie Zuid-Holland and the Regionalverband Ruhr?*

   e. *The definition, function and measures concerning the improvement of spatial justice in the spatial vision documents of the Provincie Zuid-Holland and the Regionalverband Ruhr?*

2. *What are spatial planners' thoughts in the Provincie Zuid-Holland and the Regionalverband Ruhr on improvement of regional spatial justice through improvement of mobility and accessibility in spatial visions by the Provincie Zuid-Holland and Regionalverband Ruhr?*

Contradictory to the formulation of the research sub-questions presented above, the empirical data presented in this chapter is separated in two parts: on the PZH (§4.2); and on the RVR (§4.3). This division is made in order to be able to analyse the empirical data separately and to enable comparative analysis later on in this research (see chapter 5 and 6). In §4.2.2 to §4.2.6 thoughts on the research themes of regional spatial planners working in the PZH are described. The paragraphs 4.2.7 and 4.3.7 present relations between the research themes, as being thought of by the regional spatial planners interviewed. The paragraphs in which the empirical data is presented are formulated as follows by research theme: (1) presentation of the definition; (2) presentation of the function; and (3) presentation of measures. Every subparagraph starts with a table summarizing the thoughts of regional spatial planners on the definition, function and if applicable measures to improve the research theme; and an elaboration per empirical finding.

4.2 Provincie Zuid-Holland

4.2.1 Introduction

Used as one of the case studies in this thesis, the PZH is a regional spatial planning institution responsible for achieving spatial and economical goals. The PZH aims to remain attractive for living,

working and recreation. Industries such as the Port of Rotterdam and greenhouses make the PZH an economically powerful region. For further development of this position, increasing the agglomeration effect, improving spatial quality and promoting of water and energy-efficient society (Provincie Zuid-Holland, 2014, juli 9), the 2014' Visie Ruimte en Mobiliteit (Regional Vision on Space and Mobility) (hereafter: VRM) is developed. The VRM is a spatial vision containing the outlines of the spatial policies in the PZH; containing four elements: (1) the 'Programma ruimte' (Spatial Program); (2) the 'Programma mobiliteit' (Mobility Program); (3) the 'Verordening ruimte' (Spatial Statute); and (4) the 'Agenda ruimte' (Spatial Development Agenda). The VRM:

> *'Offers no definite spatial final image, but a perspective for the desired development of South Holland. The vision gives certainty on a mobility network that is in order and offers freedom of choice and provides sufficient flexibility to respond in spatial development on social initiatives to the passenger and carrier' (http://www.zuid-holland.nl/onderwerpen/ruimte/visie-ruimte/).*

Regional spatial planners' thoughts on the research themes are presented in the following paragraphs. The VRM serves thereby as a case since this is a spatial vision which includes measures to improve the use of space in the region PZH.

4.2.2   The region: Provincie Zuid-Holland

Definition

- Qualified entity, democratic legitimised
- Network

Table 7: Thoughts of regional spatial planners in the PZH on the definitions of the PZH

Four definitions of a region, by looking at the PZH, are named by the interviewees (see table xx). The PZH is seen as a qualified network for regional spatial planning tasks since it is democratic legitimated to do so. In this, one of the interviewees mentions that there is a difference with the former regions, which were not democratically chosen and a therefore not a direct representation of cooperating communities.

The PZH is also referred to by spatial planners as a network of different governmental layers; being the connection between national, local governments and city-areas. Regional spatial planners mention that they expect this to be a time-bound definition, suitable to modern times. Nevertheless it is also mentioned that the PZH is not always acting this way and could develop their network-function more by involving stakeholders more closely in planning processes.

Function

- Connection between national and local level
- Being a player in spatial planning
- Represent their network and societal function
- Defining frames of spatial planning
- Regional spatial planning institution
    - Proactive stimulation of spatial developments
    - Not to initiate developments and innovations

Table 8: Thoughts of regional spatial planners in the PZH on the functions of the PZH

Six functions are granted to the PZH by the regional planners interviewed. These are both positively and negatively formulated, in a sense of what the PZH's function is/should be and what the function is not/should not be. Firstly, the function of the PZH is to be the connection between the national and local level on spatial planning issues.

Spatial planners state that since the entry into force of the national Structuurvisie Infrastructuur en Ruimte (SVIR), the PZH is seen as an important player in regional spatial planning. Due to the location of two powerful city-regions within the PZH, it is hard for the PZH to fulfil this role. The PZH is not seen as the most powerful spatial planning institute in comparison to the two city-regions.

In the position of overarching regional planning institution, interviewees show different views on the role of the PZH and its network and societal function. By the majority of interviewees, the PZH is awarded a network and societal function in regional spatial planning processes. This network and societal role makes that the PZH should look more at joint developments together with other governmental institutions like the Dutch national government and local communities. Some of the planners relate this directly to the role of the PZH in defining a spatial development framework in PZH. Remarkably enough others also appoint this role to the PZH but use this as an argument to declare the PZH to use this more top-down and not in a network sphere.

Different opinions were found on the pro-activeness of the PZH in regional spatial planning. Some of the interviewees argue that PZH should take a more proactive role in initiating developments and innovations; while others advocate the exact opposite. This relates to the position of the interviewee in regional spatial planning in the PZH. Where interviewees working for the PZH and the national government see a more proactive role for PZH in order to achieve national spatial planning goals, spatial planners representing communities in PZH would like spatial planning to be taken care of at their governmental level.

4.2.3 Spatial vision: Visie Ruimte en Mobiliteit

Definition

- An image for future developments
- Masterplan

Table 9: Thoughts of regional spatial planners in the PZH on the definitions of the VRM

Two definitions to the spatial vision are given by the interviewees. First, that a the VRM is an image defining an agreed way forward. This vision should be renewed every now and then to evaluate if this is still the way to go forward.

The second definition awarded to VRM is that it should not be a blue print including an incremental path to a defined end, as that would make VRM to become a utopia. However, the VRM should also not just be a master plan. The interviewees state that the VRM should therefore have some elements of both, although more emphasis on the masterplan is advised. The spatial vision is seen as the idea of the PZH in which other stakeholders' input is processed.

Function

- Communicative
- Framing
- Adaptive
- Flexible
- Concrete

Table 10: Thoughts of regional spatial planners in the PZH on the functions of the VRM

Functions awarded to the VRM are multiple (see table xx). Firstly the VRM is seen as a communicative policy instrument. That makes it a different type of regional vision compared to the previous ones which were characterised as being more of a framework. By making the VRM such a communicative instrument it is more able to achieve spatial quality. This is based on the idea that current spatial situations are seen as a starting point and the goal of it is to respond to spatial developments initiated outside governmental institutions. Used are therefore goals based on societal needs to align these with governmental goals.

Some interviewees mention that VRM is a framing instrument in order to support spatial developments. What is noted is that nevertheless a strict framework is not included in the spatial vision. That makes it easier for other governmental institutions, market and society to initiate spatial developments. For example spatial areas for developing housing or business parks are not part of the VRM; they become a task for local governments which are more able to serve the markets' and societal needs. Frames are not totally abandoned from the VRM, by stating for example where

windmills could be built. If the VRM would totally abandon frames, goals would be set on a much more abstract level.

By all interviewees, the VRM is seen as having to be an adaptive spatial instrument; adaptive to future needs of changes. In being adaptive the VRM is seen as presenting and framing future perspectives. The VRM is seen as a framework within different future perspectives can be formed. Opinions about the framework function of the VRM nevertheless differ, since not all interviewees believe in the framing of future needs of changes. As stated by two of the interviewees, in order to be adaptive, all spatial depictions should be out of it; making it more demand oriented. Not all interviewees agree on the Vision Ruimte en Mobiliteit as such an adaptive instrument.

Creating space for unknown future spatial developments in the VRM requires certain flexibility. Interviewees note that flexibility should be looked for within the frame set in the VRM. Therefore spatial goals should not be depicted on maps but better be described, said the interviewees.

In being adaptive and flexible, one interviewee states that for involvement in regional spatial planning with other stakeholders than the usual suspects, the VRM should be more concrete. This is contradictory to the aims of the VRM. The interviewee mentions that stakeholders with less knowledge of or time for spatial planning issues are difficult to involve in spatial planning developments since this is too abstract for them. This interviewee therefore states that the VRM should be more concrete to enable collaborative planning without the usual suspects.

4.2.4   Potential mobility

Definition

- Moving from A to B.
o As easy as possible
o As fast as possible
- Giving people the opportunity to get to their activities

Table 11: Thoughts of regional spatial planners in the PZH on the definitions of potential mobility

On the definition of mobility not many different views have been found among the interviewees. The interviewees see mobility as moving from A to B; giving people the opportunity to get to their elsewhere located activities. Thereby could be added that this should be as easy as possible or as fast as possible.

Function

- Serving for people to get from A to B
- Social function
- Serving spatial development
- Making mobility more time-efficient

Table 12: Thoughts of regional spatial planners in the PZH on the functions of potential mobility

Four functions for potential mobility are given by the interviewees: (1) serving for people to get from A to B; (2) a social function; (3) as serving for spatial development; and (4) for making mobility more time-efficient. Highlighting that mobility serves for people getting from A to B is seen as important by one of the interviewees. The interviewee states that even though it sometimes seems to be the other way around, mobility always has a serving function for people.

The social function of mobility is also a spatial one. One interviewee states that by differentiating the modes of mobility a social function can be served. This interviewee states that depending on the location, the mode should differ. In cities should be focused on improvement of bike use and public transport, in rural areas on car usage. Mobility should be demand-driven to improve sustainable and effective movement from A to B.

By one of the interviewees mobility is also being seen as serving or a requirement for spatial or economic development, e.g. in a spatial vision. The interviewee states that it is often seen as a tool for

spatial and economic developments. Although in the interviewees' opinion also it should be thought of the other way around. Thus in order to limit or regulate mobility, future spatial and economic developments should be defined beforehand.

Another function of potential mobility is to make mobility more time-efficient. A person's mobility is seen as being more efficient because they require less time to arrive at their preferred location.

Measures

- Approach modes of mobility as a mobility system
- Being location-based
- Improvement of institutional cooperation
- Working from home
- Persons' time management
- Making mobility more time-efficient and sustainable

Table 13: Thoughts of regional spatial planners in the PZH on measures to improve potential mobility

Multiple measures for improvement of potential mobility are given by the interviewees. All interviewees agree on the fact that mobility should be improved by looking at the mobility system, not just one mode of mobility. In both its usage as well as in cooperation between different stakeholders improvement should be sought for. Differentiation in mobility systems gives regional spatial planners the possibility to compare them and choose for the best location-based solution. Mobility systems in cities or rural areas should differ, the availability of mobility modes should therefore differ too. Being it in cities more focused on pedestrians, cycling and public transport-oriented, in rural areas the use focusses more on cars. The use of these transport modes is seen as a personal choice: people living in rural areas know that the use of cars is required and deal with this. The mobility system should therefore be approached from a persons' time management perspective, in order to give them the possibility to choose for the mode serving them best. Networking and connecting mobility modes and systems should be applied in order to approach mobility more demand-driven.

Another measure to improve potential mobility mentioned by interviewees is to make mobility more time-efficient and sustainable by improving the first and last mile. They argued that especially in cities people are looking for easy ways to get to for example train stations. In order to realise easier connections between different mobility providers another measure needs to be taken: improvement of institutional cooperation. The interviewees regard institutional cooperation as a critical factor in improvement of the first mile. Another way to improve the first mile as stated in the interviews is to improve to reduce mobility by for example improving working from home. This is both a location-based as well as a person-based measure influencing potential mobility. By creating differentiation in timing, fewer peaks will be created by excessive use of mobility modes.

4.2.5 Person accessibility

Definition

- A persons' ability to reach a certain location
- To get someone to its destination
- The possibility to use services
- An accessible process
- Accessible public transport
- An accessible story
- Affordability of transport

Table 14: Thoughts of regional spatial planners in the PZH on definitions of person accessibility

Several definitions of person accessibility are given by the interviewees. These focus on locations, modalities and processes and are not only looking at price and speed of the transport system. Looking at locations and modalities, person accessibility is seen as a persons' ability to reach a certain location and to get someone to its destination. This requires a connection between spatial developments and transport. An example of the connection between spatial developments and transport is the

development of offices next to train stations, improving the accessibility of these locations by public transport. Looking sec at the transport side of this, accessibility of the transport system is seen by the interviewees as the accessibility, ease of use and affordability of it.

Also accessibility to spatial decision-making processes is seen as a definition of person accessibility. One of the interviewees states that everyone should have the same accessibility to these processes; not related to ones having the right knowledge, skills or network to be involved in spatial decision-making processes.

Function

- Improving the accessibility of a location to improve economic attractiveness
- Improving accessibility of the transport network by land use and individual components
- Improved use of sustainable modes of transport

Table 15: Thoughts of regional spatial planners in the PZH on functions of person accessibility

The interviewees distinguish four functions of person accessibility. One function mentioned by the interviewees is to improve the accessibility of a location in order to improve economic attractiveness. At the moment for example the Zuidvleugel Randstad is scoring badly when looking at its function as an innovative economy. Also for keeping knowledge within the Randstad, accessibility should be inclusive to spatial planning tasks. The interviewees state that better connections between cities within the Randstad metropole will improve knowledge exchange and aid an innovative economy.

Another function suggested by interviewees is improving accessibility of the transport network. By making the transport network available for all inhabitants of the RVR, also disabled, speed and proximity can be influenced positively. One interviewee also mentions another individual component: the availability of making personal choices. Person accessibility should serve for inhabitants of the RVR to be able to make personal choices in mode of transport to be used, say one of the interviewees.

Improved use of sustainable modes of transport is also seen as a function of person accessibility. The interviewees make explicit that by the application of accessibility the use of sustainable modes of transport will be used.

Measures

- Individual measures: improving ease of use of public transport modes by pricing and understanding of using the system
- Location-based and economically driven measures: combine planning of locations and nodes to improve speed and proximity

Table 16: Thoughts of regional spatial planners in the PZH on measures to improve person accessibility

A first measure to improve person accessibility named by interviewees is improving the ease of use of public transport modes. Often out-pricing is seen as a hurdle for using public transport modes, especially when compared to car mobility. Another measure for improving the ease of using the public transport system could be by improving the information provision. The interviewees state that often people do not manage to understand how to use public transport, especially when different modes are required for reaching a destination. Provision of sufficient travel information and ICT-solutions are seen as keen individual measures for improving the ease of use of public transport modes.

Second, several location-based measures where suggested by interviewees to be taken to improve accessibility, whereby the interviewees mainly focused on the connection between locations and nodes. The continuation of location planning of knowledge-based institutions is for instance mentioned. This spatial planning task is seen as essential for maintaining and improving the strong economic and social position of Dutch cities, as seen in a European context. Accessibility is seen as a measure to continue this strong position. Point of attention in this is that the outcomes of this spatial planning method are not explored that well in the PZH; whereby often only is looked at the economic benefits while forgetting personal needs of the users. Accessibility is thus seen a measure to

improve location-based planning of connecting locations and nodes in order to improve economic prosperity and social welfare.

4.2.6   Spatial justice

Definition

- Being honest about spatial differences
- Being honest about the whereabouts of spatial developments
- Efficiency

Table 17: Thoughts of regional spatial planners in the PZH on the definitions of spatial justice

The regional spatial planners interviewed struggled with providing a clear definition, function or measures on spatial justice. Most of them explained never to have heard of spatial justice as such. Three definitions can nevertheless be distinguished. The first definition is focused on being honest about spatial differences. One of the interviewees states that spatial justice cannot be seen as in the seventies when it was regarded to provide equality to all inhabitants. Nowadays spatial planners admit that there are differences in the society and try to figure out spatial solutions to minimize the impact of this and to prevent further inequality in the future. This honesty about spatial differences focusses on mobility, accessibility and spatial spreading of developments, say the interviewee.

Being honest about the whereabouts of spatial developments to stakeholders is mentioned by interviewees, being it towards business or citizens. Spatial justice is seen as being humble and show knowledge gaps on spatial and future developments. This is to involve stakeholders in spatial planning processes and collaborate more closely to succeed in spatial planning processes.

Efficiency as definition of spatial justice is mentioned in relation to mobility and accessibility. By the interviewee, efficiency is defined as optimizing the spatial range of transport, and to make clear and transparent choices in this.

Function

- Backlogs of spatial differences
- Look for solutions to mobility, accessibility while admitting differences

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Table 18: Thoughts of regional spatial planners in the PZH on the functions of spatial justice

Two functions have been awarded to spatial justice by interviewees, to know backlogging of spatial differences and looking for solutions to mobility and accessibility while admitting differences. Backlogging of spatial differences is seen as being contradictory to the VRM since this spatial vision as being seen as making stronger what is strong already. The VRM is seen as an economical driven vision in which choices are made that do not directly backlog spatial differences. Moreover, the VRM is seen as pointing to following societal and market needs, while admitting spatial differences. Admitting that these spatial differences exist is not being seen as directly focussing on minimizing these.

The function of spatial justice in also seen as providing mobility and accessibility in the right form in the right place. Looking for solutions to mobility and accessibility is in line with thinking in spatial differences.

Measures

- Interactive platforms and public participation
- Stakeholder mapping
- Diversity
- Equal treatment of people
- Provision of mobility and accessibility adjusted to spatial differences

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Table 19: Thoughts of regional spatial planners in the PZH on measures to improve spatial justice

Measures for improving spatial justice named by interviewees range from public participation to improvement of the spatial functioning of transport systems. Interviewees mention interactive platforms and public participation as one of the practices applied in spatial planning processes. All interviewees acknowledge the need for broad public participation; nevertheless also critiques are found to this measure.

Critiques on public participation focus on the issue of unequal representation of stakeholder groups. Overrepresented are people with knowledge and time for participating; groups without these assets are thus less heard. Stakeholder mapping is therefore seen as an important measure to have an equal representation of society involved in spatial development processes.

Diversity is seen as an important measure for improving spatial justice, both in stakeholder participation as well as in spatial developments. By the interviewees, this is linked to equal treatment of people and provision of mobility and accessibility adjusted to spatial differences. Anticipating on local circumstances is being seen as key for successful spatial planning.

4.2.7   Relations between research themes

In this subparagraph spatial planners' thoughts on relations between the research themes PZH, the VRM, potential mobility, person accessibility and spatial justice are presented, based on the interviews conducted (see Annex A and D).

By several spatial planners, the PZH is seen as one of the key players in the development of spatial visions including potential mobility, person accessibility and spatial justice. In this role, the PZH should focus on the region itself, based on their legal duties. Also, spatial planners mention that the PZH should keep connecting stakeholders at all governmental levels, within businesses and the society, since the PZH has the ability to connect these stakeholders and secure integrality in spatial developments. It is mentioned that this is not only a duty, but also a requirement for the PZH to be a useful spatial planning institution.

The VRM is seen as a useful tool for potential mobility and person accessibility planning on the long term since these issues cannot be solved over one night. One point of critique given is that the VRM is very sectoral focused, integration of spatial themes should be given priority. Another point of critique is that the VRM is still a very much top-down driven document; a more important role of the so called 'participation society' should be included in order to be able to implement the measures proposed in the spatial vision.

All spatial planners acknowledge that spatial justice is not one of the key priorities of the PZH and the VRM; since both are very much focussing on economic prosperity. By looking at spatial justice, spatial planners indicate that it is difficult for them to connect this topic with mobility and accessibility planning since measures regarding these two topics are often focussing on speed and costs and less on the ease of use. Focused should be in this regard on spatial accessibility, to get places to the people and people to the places more easily.

4.3 Regionalverband Ruhr

4.3.1   Introduction

Since its establishment the RVR is responsible for spatial planning tasks concerning cultural affairs, tourism, regional marketing, mobility planning and securing open spaces like the Emscher Landschaftpark. The success of the RVR is questioned by Blotevogel & Schmitt in its attempt to create 'a kind of institutional cohesion in the Ruhr area' (2005, p. 14). Hesse & Leick name the secession of the Region Düsseldorf-Köln-Bonn as a discussion point to the establishment of a single Ruhr-region (2013, p. 257).

The institution RVR is seen as a concrete example of bottom-up inputs to the German spatial planning system as a result of doubts in relation to effectiveness of conventional planning tools and new procedures (Hohn & Reimer, 2010; in Blotevogel, Danielzyk & Münter, 2014, p. 101). As planning tool, the RVR is developing a spatial vision. Blotevogel, Danielzyk & Münter state the following on the development of the spatial vision:

'An initially informal cooperation network of large cities led to the wish to introduce a new formal instrument: a regional land-use plan for the six cities located at the core of the Ruhr area. Here, informal processes of inter-municipal cooperation have revealed system incongruence through the lack of fit of existing development tools. Conventional development instruments from the various sectoral departments are often no longer able to deal with the new spatial challenges and require adaptation, which in these cases was initiated from 'below', thus finding a route into valid planning law' (p. 101-102).

In the paragraphs 1.3.2 to 1.3.7 regional spatial planners' thoughts on the research subjects the region, in this case the RVR; the spatial vision, in this case the RR; personal mobility, person accessibility and spatial justice are given.

4.3.2   The region: Regionalverband Ruhr

Definition

- Territory
- Network
- Regional institution for spatial planning
- Society

Table 20: Thoughts of regional spatial planners in the RVR on the definitions of the RVR

An agreed definition on the RVR could not be found among the interviewees. As shown in table 20, four different definitions are mentioned during the interviews. Several spatial planners declared that the RVR could be seen as a territory because (1) the RVR operates in a bounded area and (2) the RVR is seen as an idea to define a certain area.

Other interviewees defined the RVR as a network. Working together with other governmental organizations and actors is mentioned as being keen for successful regional spatial planning. In this network, the RVR is seen as a 'director', in order to bring together the different regional stakeholders and their interest.

One of the interviewees sees the RVR as an institution that tries to steer and develop the RVR into a certain direction. The interviewee mentions that this is very hard to do, because the RVR lacks the right instruments and power to do so. It is stated that this is mainly due to the German spatial planning system, in which cities have power to decide on spatial developments. Cooperation between cities is therefore hard to reach because they do not consider themselves being part of a region, and do not want to transfer power on spatial planning to the RVR.

The definition of society is acknowledged by just one of the interviewees. This interviewee states that the RVR as an institution is aware of the fact that their position is not the strongest in the region. And that the RVR thus must be seen as a society of stakeholders, in which the RVR does not have that much power.

Function

- To develop spatial plans
- To implement regional spatial targets
- Bringing together regional spatial interests
- Improving the regional infrastructure network
- Positioning of the RVR internationally
- Positioning in regional spatial responsibilities

Table 21: Thoughts of regional spatial planners in the RVR on the functions of the RVR

The interviewees name six different functions of the RVR. One function acknowledged to the RVR by several interviewees is to develop spatial plans is. The spatial plan should than be a kind of storybook which can be transformed into concrete measures and guidelines.

Besides development of a spatial plan, the RVR is also seen as the governmental level to implement regional spatial targets. Tasks awarded by the German national, Länder and communal governments should be conducted in corporation with the governmental organisations involved. Thereby all cities and districts in the RVR's network should be included in order to succeed in the implementation of regional spatial targets.

Bringing together regional spatial interests is also seen as one of the tasks of the RVR by several interviewees; even though the interviewees emphasise the strong role of cities in the region. The interviewees expect regional spatial planning to be a difficult task because cities in the Ruhr area prefer operating independently from other cities and from the RVR.

One of the interviewees mentions that the RVR has the function to improve the regional infrastructure network. The RVR should do this more, since infrastructure improvement is organised per city in the Ruhr area. Closer cooperation would help the Ruhr area, said the interviewee.

Also, the RVR should be responsible for positioning the RVR internationally, according to one interviewee. The interviewee expects this to make the region to become better known, also abroad.

The last function awarded to the RVR is positioning in regional spatial responsibilities. Interviewees mention that this should be both to the stakeholders in the region as well as outside of the region. In taking a firm stand on the spatial tasks to be conducted by the RVR, regional spatial planning is expected to be more successful. Interviewees mention that this could also mean that tasks from the local level are awarded to the regional level in the future. By taking responsibility for more regional spatial planning tasks the RVR could gain more power and thus solve regional spatial issues more effectively.

4.3.3 Spatial vision: Regionalplan Ruhr

Definition

- Instrument to give direction for local planning - Masterplan

Table 22: Thoughts of regional spatial planners in the RVR on the definitions of the RR

Two definitions are awarded by the interviewees to the RR. The RR is seen as an instrument to give direction for local planning by most of the interviewees. Since cooperation between cities in the RVR could improve, the spatial vision could give a clear frame for local authorities on how to develop their spatial plans. In framing regional spatial tasks, the RR is being seen as a storybook to define regional guidelines. One interviewee states that the RR could also be seen as being a mission statement: a spatial vision that must fundamentally document and guide future spatial developments. By means of giving direction to future spatial developments the RR could be used for communication on spatial ideas and developments towards stakeholders.

By one of the interviewees, the RR is also seen as a masterplan because it represents future developments and describes concrete measures. These measures create a platform for future spatial developments for the communities in the RVR.

Function

- Communicative policy instrument - Present regional guidelines on landscape, mobility and traffic - Being a commitment between cities in the RVR - Strategic policy document - Metaphor, regional branding

Table 23: Thoughts of regional spatial planners in the RVR on the functions of the RR

Five functions are awarded to the RR. Firstly, interviewees argued it should be a communicative policy instrument in a communicative process of spatial planning in the RVR. This could make the RR a

spatial vision that gives a clear frame for local authorities on how to develop their plans. The communicative aspect should be focused on governmental stakeholders and inhabitants of the RVR.

A second function awarded to the RR by multiple interviewees is that the RR should provide regional guidelines on future development of landscape, mobility and traffic. In this, focus in the RR should be on qualifying and depicting both open spaces and build-up areas, contrary to current regional spatial plans which focus mainly on build-up areas.

Thirdly, interviewees found that the RR should be a commitment between politics and administrators in the RVR on further activities and measures for future developments.

The fourth function acknowledged to the RR is that of a strategic policy document. The interviewees states that the regional plan should include concrete measures and inform people in the region and is important for administration.

The final function awarded to the RR is that of being a metaphor for future spatial plans, as acknowledged by one interviewee. Presenting a metaphor in the vision serves for regional branding, both in the region as well as outside of the region.

4.3.4 Potential mobility

Definition

- To get from A to B
- Freedom of people to decide which mode of transport helps them best to reach their spatial targets
- The possibility of changing locations and reach a destination

Table 24: Thoughts of regional spatial planners in the RVR on the definitions of potential mobility

Three different definitions of potential mobility are given by the interviewees. Several interviewees define potential mobility as to get from A to B, or from a certain location to another.

By one interviewee, potential mobility is defined as the freedom of people to decide which mode of transport helps them best to reach their spatial targets.

Another definition of mobility is the possibility of changing locations and reach a destination, according to one of the interviewees.

Function

- Get from one point to the other in a short time in the region
- Network

Table 25: Thoughts of regional spatial planners in the RVR on the functions of potential mobility

Two functions of potential mobility are distinguished by the interviewees. Getting from one point to the other is mentioned by most of the interviewees. Interviewees relate getting from one point to the other to both improved use of mobility modes as well as to a spatial component.

The network function is mentioned by several interviewees. The interviewees see the RVR as different cities with a strong east-west corridor but with lacking north-south connections. Transport connections are seen as organised centric to cities. The mobility system is expected to be well connected in order to give people the ability to get to for example to their jobs. The interviewees notice the importance of a connected region not only for its inhabitants but also from an economic perspective. Thus without regional potential mobility connections the interviewees expect the region to function less, both socially as economically.

Measures

- Better use of sustainable transport modes
- Improving the transport network
- Limiting travel costs
- Limiting travel time
- Improving information provision

Table 26: Thoughts of regional spatial planners in the RVR on measures to improve of potential mobility

Multiple measures for improving potential mobility are defined by the interviewees. Sustainable transport modes like bike and public transport are often mentioned, especially in relation to the spatial aspects of these transport modes.

Often referred to by the interviewees are the measures of system improvement and the creation of transport nodes. In relation to public transport systems interviewees mention that different modes need improved connections in the different cities and between the cities. The creation of network corridors is mentioned as a measure for improving potential mobility.

Potential mobility is also considered to be improved by limiting travel time and costs. Hereby interviewees mention that spatial differences in the region ask for different transport systems for improving potential mobility. For example rural regions ask for other transport systems than cities. Thereby spatial planners should consider to what extent transport systems have to be adapted to spatial circumstances since transport systems cannot always serve potential mobility as it would preferably be. Public and sustainable transport systems are not available throughout the region, therefore in those cases still should be focused on the car. According to the interviewees the best suitable transport system must be sought for by weighing travel time and costs per location in the region.

Mobility hubs are also put forward to be a measure to improve potential mobility by interviewees. Creating functioning multimodal traffic systems and stations are considered to be a very good way to show people what the connection of different traffic modes can mean.

Improving information provision is also regarded as being of importance to improve potential mobility by some of the interviewees. Expected is that by improving the ease of using information provision the use of mobility systems becomes easier and thus potential mobility increases.

4.3.5 Person accessibility

Definition

- The need of making the reach of different functions in a territory possible
- Having opportunities to use possibilities in a region
- Accessibility of places
- Accessibility of jobs

Table 27: Thoughts of regional spatial planners in the RVR on the definitions of person accessibility

The definition of person accessibility differed widely among the interviewees. The first definition given is the need of making the reach of different functions in a territory possible. Functions are not only considered as being spatial, but also material by focussing on for example education.

The second definition is to have opportunities to use possibilities in a region. Possibilities are in this definition related to for example education and recreation.

A third definition given by interviewees is the accessibility of places. This is related to the costs of getting to certain place, while looking at spatial imbalances in the region. As example is given the difference in cost of getting from a rural area to a certain place compared to the more urban areas.

Accessibility of jobs is also put forward as a fourth definition for person accessibility. Several interviewees state that people should be mobile enough to get access to jobs.

Function

- Creating the possibility to reach different locations of the region
- Improve the quality of life
- Making jobs reachable
- Making places and transport systems accessible for disabled people

Table 28: Thoughts of regional spatial planners in the RVR on the functions of person accessibility

Four functions of person accessibility are classified by the interviewees. Creating the possibility to reach different locations in the region is mentioned by several interviewees. Reasoning behind this function are that the region should be able to adapt to demographical and economic changes and the integration of different groups of people into society.

Improving the quality of life is also mentioned as a function by some of the interviewees. The quality of life is related to for example daily life and pleasure activities. Some of the interviewees relate the quality of life with provision of equal chances in life, which is considered as an important task for spatial and transport planners in Germany.

Making jobs reachable is considered as another function of person accessibility. Spatial planners cannot afford jobs to be inaccessible, say the interviewees.

The making of places and transport systems accessible for disabled persons is thought to be an important function of person accessibility by one of the interviewees. The interviewee points out that for accessibility of places also transport systems have to be accessible.

Measures

- Improved use of transport modes, depending on the location in the region
- Infrastructure development
- Person-based measures
- Location-based measures
- Utility-based measures
- Travel costs
- Travel time
- Speed
- Bring together mobility and accessibility

Table 29: Thoughts of regional spatial planners in the RVR on measures to improve person accessibility

Ten measures have come forward out of the interviews to be considered to improve person accessibility. Interviewees see most of these measures as part of a spatial management system. A crucial measure, as mentioned by most interviewees, is the improved use of transport modes and spatial differentiation within the region of different transport modes. By means of offering different transport modes, people can choose how to move through the region. Infrastructure development, focussing on creating connections and nodes in the region are seen as essential for improving person accessibility in the region. Especially connections between cities and north-south connections should be improved, according to the interviewees.

Other measures mentioned include person-based measures to the accessibility of transport modes, for example for disabled persons. Also location-based measures and utility-based measures are mentioned by one interviewee without further explanation of the type of measures. Limiting travel costs and time are mentioned by two interviewees who state that the choice of using transport modes is influenced by these indicators. By one interviewee, bringing mobility and accessibility together is also mentioned as a measure to improve person accessibility. This interviewee foresees the need for integral planning which requires integral spatial planning of mobility, accessibility and other spatial functions.

4.3.6   Spatial justice

Definition

- Quality of life in every area of the territory
- Focus on different quarters and networks and how to combine these
- Quality of life of the people
- Creating the possibility of using mobility and accessibility
- The accessibility to resources that a city is offering, or that a city should offer
- The question to equal chances and the respect thereof in a spatial framework
- The same living space
- Equal provision of services

Table 30: Thoughts of regional spatial planners in the RVR on definitions of spatial justice

Seven definitions are considered to be applicable to spatial justice, by the interviewees. These are to be categorised as (1) the quality of, equality and equal chances in life, (2) quality and equality in the territory, (3) equal access to use of transport modes, and (4) equal access to places. The quality of, equality and equal chances in life in every area of the territory is mentioned by almost all interviewees. Quality of life is seen as access to education and housing in every area of the RVR, say some of the interviewees. They mention that this one of the guiding principles in the German spatial planning system. The quality and equality in the territory has a spatial component in its definition. The interviewees mention that in the RVR spatial inequality can be found both in cities and between cities and rural areas. Equal access to transport modes is also related to the spatial function of transport, say the interviewees. Focus should be on different quarters and transport networks and how to combine these. Therefore the possibility of using mobility and accessibility should be created by the RVR; and should be differentiated throughout the region, depending on what is requested. Equal access to places relates to the accessibility to resources that a city is offering, or that a city should offer. In offering accessibility to resources, regional spatial differences can be applied, say the interviewee. Not every city requires a concert hall for example.

Function

- Improve participation in spatial planning processes
- Address specific groups
- Looking at perspectives for future generations
- Improve everybody's quality of life
- Improve the position of the weakest persons and areas
- Create equal chances
- Focus on different quarters and networks and how to combine those
- Creating the possibility of using mobility and accessibility; Create equal transportation use

Table 31: Thoughts of regional spatial planners in the RVR on functions of spatial justice

Interviewees mentioned that the functions of spatial justice could roughly be categorised as follows: (1) during spatial planning processes and (2) in spatial planning in the RVR. One function of spatial justice during spatial planning processes is to improve participation in spatial planning processes. Some of the interviewees notice that often the same people tend to be involved in spatial planning processes. Therefore there is a need to address specific groups who in general are seldom involved in spatial planning processes. Vulnerable people as women, the poor and migrants, who are lacking the goods, time and knowledge to participate in spatial planning processes should be targeted specifically, say the interviewees. One interviewee adds to this that also should be looked at perspectives for future generations, young people thus should be involved.

Functions awarded to spatial justice to spatial planning in the RVR are multiple. Improving the quality of life in every area of the territory is mentioned by all interviewees and is related to the quality of

person's lives and spatial functioning of the region. The quality of life is related to availability of education and attractive housing to live in. The position of the weakest persons and areas in the region should thereby be improved, say the interviewees. Acceptable conditions should be created for all in the region by looking at advantages and disadvantages of people and areas in the region. Some of the interviewees nevertheless mention that reaching of total acceptable conditions and thus a perfect quality of life for all persons and locations is impossible in the RVR.

The function of spatial justice to create equal chances goes across the previously mentioned categorization of functions, and is mentioned by all interviewees. Be it in participation of spatial planning processes, the possibility of using mobility, transport modes or accessibility of transport systems and places, the creation of equal living spaces, all interviewees agree that spatial justice serves for creating equal chances in the RVR. One critical note, as given by one of the interviewees, is that equal spatial chances can differ throughout the region, depending on what is required or being asked for. Spatial differentiation of spatial functions is keen to creating equal chances spatially and in life, states this interviewee.

Measures

- Composition of working groups and specific administrations in spatial planning processes
- Combine local and regional level
- Make public transport accessible for all groups
- Democracy
- Diversity
- Equity

Table 32: Thoughts of regional spatial planners in the RVR on measures to improve spatial justice

Measures to spatial justice are multiple. Composition of working groups and specific administrations is considered as a measure to improve equal input in spatial planning processes. These working groups and specific administrations can include representatives of vulnerable groups but also of different governmental employees to improve collaboration on different governmental levels. The interviewees mention that by taking this measure, democracy in spatial planning processes will improve and diversity in these will be assured better.

Making transport modes accessible for all groups in society and to provide transport services are also considered as functions of spatial justice to improve equity in the RVR. Equity is seen as an objective in spatial planning processes and spatial planning outcomes by some of the interviewees. Measures mentioned by the interviewees to improve equity by the accessibility of transport modes are lowering the costs and making public transport accessible for all groups, e.g. also disabled people.

4.3.7 Relations between research themes

Spatial planning is depending on various spatial functions, which can come together in a spatial vision such as the RR. Whereas in the previous subparagraphs thoughts of regional spatial planners in the RVR on definitions, functions and measures of the research themes are discussed, thoughts on relations between the research themes are presented in this subparagraph. This regards the research themes RVR, the RR, potential mobility, person accessibility and spatial justice.

Agreement on the role of the RVR in spatial planning tasks on the development of the RR and inclusion of potential mobility, person accessibility and spatial justice could not be found among the interviewees. On the one hand there are interviewees who do not see the RVR to be or become a major player in regional spatial planning. Due to a strong, legalized position of cities comprehensive, integral regional spatial planning is hard to achieve. These interviewees mention that cities are not willing to hand over spatial planning tasks from the communal to the regional level. Currently, the RVR

is only responsible for spatial development of recreation (bike highways, nature development, and culture).

Nevertheless, in the development of the RR other spatial functions are also included. These are developed by working groups, in which the RVR is the independent moderator. Also in mobility management, the RVR is seen as an independent moderator without real spatial planning tasks. Other governmental institutions such as the VRR (Verkehrsverbund Rhein-Ruhr) are legally obliged to conduct mobility management. The interviewees do not expect the VRR and other organisations to hand over their tasks to the RVR in order to arrange mobility and accessibility on a regional scale in the RVR. Also, some of the interviewees mention the lack of interest of inhabitants of the RVR in spatial planning processes on the regional level since this is not in their back yard. The RVR in its function of independent mediator is nevertheless seen as being most important by almost all interviewees. Since cities and other governmental institutions are operating in just one sector, most interviewees would like to award more tasks on potential mobility and person accessibility planning to the RVR. These interviewees, who represent the other side of the coin, believe that more integral planning could be achieved when more spatial planning tasks are conducted by the RVR. These interviewees would preferably see the handover of spatial planning tasks to the RVR in the future. The role of the RVR is thus disputed on the basis of powers and tasks awarded to local governments, governmental institutions and the RVR.

The role of the RR in respect to potential mobility, person accessibility and spatial justice is also issue of debate since agreement cannot be found on this among the interviewees. The RR in its function to potential mobility, person accessibility and spatial justice planning as spatial instrument, is considered too light by some of the interviewees, and as the right instrument by other interviewees. Being considered too light by some of the interviewees, it is seen as one of the instruments for spatial planning, alongside other more powerful ones. Being considered the right instrument for regional spatial planning by other interviewees, a more important role is preferred for the RR. In relation to potential mobility and person accessibility this is the case since interviewees assume more integral planning to take place on a regional level, especially in relation to the development of mobility and personal networks, development of ideas on mobility and transportation. The functions of potential mobility, person accessibility and spatial justice should in this more elaborated RR be treated equally to the development of spatial structures and landscapes, say some of the interviewees. This, because potential mobility and person accessibility are seen as required for improving spatial justice in the RVR. The role of spatial justice in the RR is seen as to be focussing on improving democracy, diversity and equity. In this, democracy should be seen as participation processes in spatial planning processes, diversity as a precondition and outcome of planning processes and equity as an objective that should be followed in the development of the RR, say one of the interviewees. The role of the RR in relation to the spatial planning tasks of potential mobility, person accessibility and spatial justice is not a straightforward one in the RVR due to different perspectives and task descriptions.

Spatial justice in the RVR and the RR through improving potential mobility and person accessibility is seen as a connecting theme in regional spatial planning tasks to spaces and cities in the RVR. By means of development of spatial and person networks, transport corridors, assuring accessibility of places and transport modes, spatial justice can be improved in the RVR and its RR, say some of the interviewees. This requires another way of spatial planning than taking place currently, states one of the interviewees. Whereas currently spatial planning is sectoral and focussing on mobility or accessibility planning and spatial justice is an accidental outcome, spatial justice should be leading in mobility and accessibility planning, say one of the interviewees. One other interviewee is nevertheless keen in pointing out that improving spatial justice is not one of the tasks of the RVR and the RR at the moment. And thus should not be considered to a task of the RVR in the future. On the role of spatial justice in the RVR and the RR to potential mobility and personal accessibility, agreement thus cannot be found among the interviewees, due to the task description of the RVR currently.

4.4 Comparing the Dutch and German spatial planning systems

The following paragraph provides an insight in similarities and differences in regard to the research themes, as pointed out by the interviewees. Per research theme the focus will be on the definition, function and, if awarded, measures to improve the research theme. The similarities and differences are derived from the empirical data as presented in §4.2-4.3; a table containing all definitions, functions and measures can be found in Annex D.

4.4.1   The region

Value	Provincie Zuid-Holland	Regionalverband Ruhr
Definition of the region	- Qualified entity, democratic legitimised - Network	- Territory - Network - Regional institution for spatial planning - Society

Function of the region	- Connection between national and local level
	- Being a player in spatial planning
	- Represent their network and societal function
	- Defining frames of spatial planning
	- Regional spatial planning institution
	  o Proactive stimulation of spatial developments
	  o Not to initiate developments and innovations
		- To develop spatial plans
		- To implement regional spatial targets
		- Bringing together regional spatial interests
		- Improving the regional infrastructure network
		- Positioning of the RVR internationally
		- Positioning in regional spatial responsibilities

Table 33: Comparison of thoughts of regional spatial planners in the PZH respectively RVR on the definitions and functions of the PZH respectively RVR

The definition of the region given by the interviewees are multiple (see Annex D). Both the PZH and RVR are seen as qualified entities for spatial planning tasks by the interviewees. Be it in the Netherlands since this is democratic legitimized and in the RVR because there are certain spatial planning tasks that require a regional spatial planning institute. Interviewees in both the PZH as well as the RVR mention that the institutions are seen as a network. Differences can nevertheless be found in the substantiation of this definition: the PZH is seen a network of governmental organisations, market and society; the RVR seen as between cities. The RVR is also defined as a territory, whereby interviewees point out the spatial depiction of the RVR. Also the RVR is seen as a society of people working together closely along each other on regional spatial planning tasks.

Similar to the definition of the region, functions awarded to the region are multiple too in both the PZH and RVR. Often mentioned by the interviewees in both the PZH and RVR is the function of being the connection between different stakeholders and the representation of their interests in regional spatial planning processes. A formal role of the PZH and RVR is expected in the conduction of regional spatial planning tasks like defining frames for spatial planning and implementation of those. Especially mentioned by interviewees in the PZH is the function of the PZH in proactive stimulation of spatial development without initiating those themselves. This should be done by regional stakeholders, say the interviewees. Mentioned by interviewees in the RVR only are the functions to improve the regional infrastructure network and positioning the RVR internationally.

4.4.2   Spatial vision

Value	Provincie Zuid-Holland	Regionalverband Ruhr
Definition of the spatial vision	- An image for future developments - Masterplan	- Instrument to give direction for local planning - Masterplan
Function of the spatial vision	- Communicative - Framing - Adaptive	- Communicative policy instrument - Present regional guidelines on landscape, mobility and traffic

	- Flexible - Concrete	- Being a commitment between cities in the RVR - Strategic policy document - Metaphor, regional branding

Table 34: Comparison of thoughts of regional spatial planners in the PZH respectively RVR on the definitions and functions of the spatial vision in the PZH respectively RVR

Three definitions of the spatial vision, in regard to the VRM and the RR are given by the interviewees. Both in the PZH and RVR, the regional spatial visions are regarded as being masterplans. In the masterplan, future developments and concrete measures should be presented towards regional spatial planning, say the interviewees. Also in both regions the spatial vision is regarded as an image for future developments. In this, ideas from all stakeholders should be processed.

Functions awarded to the spatial vision document are multiple. In both the PZH and RVR interviewees award the function of being a communicative policy instrument to the VRM and RR. The reasoning behind this nevertheless differs in the PZH and RVR. Motivation for this definition in the PZH is that the spatial vision should provide a platform for spatial initiatives outside the PZH institution; in the RVR the RR should be communicative in presenting spatial plans to governmental stakeholders and inhabitants of the RVR. Another function awarded is to present regional guidelines on spatial planning, in the PZH on all spatial themes, in the RVR on landscape, mobility and traffic planning. Commitment among regional stakeholders should be presented in the spatial vision, say the interviewees in both the PZH and RVR. Interviewees in the RVR highlight the commitment of cities in the RVR in this, since these are often not willing to cooperate on regional spatial planning tasks.

4.4.3   Potential mobility

Value	Provincie Zuid-Holland	Regionalverband Ruhr
Definition of potential mobility	- Moving from A to B - As easy as possible - As fast as possible - Giving people the opportunity to get to their activities	- To get from A to B - Freedom of people to decide which mode of transport helps them best to reach their spatial targets - The possibility of changing locations and reach a destination
Function of potential mobility	- Serving for people to get from A to B - Social function - Serving spatial development	- Get from one point to the other in a short time in the region - Network
Measures of potential mobility	- Approach modes of mobility as a mobility system - Being location-based - Pre-transport - Improvement of institutional cooperation - Working from home - Persons' time management - Making mobility more time-efficient and sustainable	- Better use of sustainable transport modes - Improving the transport network - Limiting travel costs - Limiting travel time - Improving information provision

Table 35: Comparison of thoughts of regional spatial planners in the PZH respectively RVR on the definitions, functions and measures of potential mobility in the PZH respectively RVR

On the definition of potential mobility broad consensus can be found among the interviewees in both the PZH and RVR. Almost all interviewees mention that potential mobility is to get from one location to another. In the PZH on interviewee relates the potential mobility to a person's activity by stating that potential mobility is to create opportunities to get to activities. In the RVR one interviewee relates mobility to a person's freedom to choose what mode of transport to use.

As well as on the definition, also on the functions of potential mobility broad consensus can be found in the PRZ and RVR among the interviewees. The function is often regarded as serving people to get from one location to another. Also in both regions potential mobility is regarded as having a social function and should be demand driven to serve its users. Stated by both interviewees in the PZH and

RVR too is that potential mobility serves spatial and economic developments. It can thus be stated that interviewees in both regions agree on potential mobility having a serving function in social, spatial an economic development.

Mobility measures mentioned in both the PZH as well as the RVR focus on spatial, financial and personal measures and integrative transport solutions. The use of more integrated transport solutions is believed to ensure improved use of sustainable transport modes by the interviewees. Also transport modes should be easier, cheaper and faster in use and create better networks in the regions. In the PZH, also one measure is mentioned in regard to people's working place; by pointing out increasing use of working at home as this does not require any personal mobility at all.

4.4.4 Person accessibility

Value	Provincie Zuid-Holland	Regionalverband Ruhr
Definition of person accessibility	- A persons' ability to reach a certain location - To get someone to its destination - The possibility to use services - An accessible process - Accessible public transport - An accessible story - Affordability of transport	- The need of making possible the reach of different functions in a territory - Having opportunities to use possibilities in a region - Accessibility of places - Accessibility of jobs
Function of person accessibility	- Improving the accessibility of a location to improve economic attractiveness - Improving accessibility of the transport network by land use and individual components - Improved use of sustainable modes of transport	- Creating the possibility to reach different locations of the region - Improve the quality of life - Making jobs reachable - Making places and transport systems accessible for disabled people
Measures of person accessibility	- Individual measures: improving ease of use of public transport modes by pricing and understanding of using the system - Location-based measures: combine planning of locations and nodes to improve speed and proximity - Economic driven measures	- Spatial management - Improved use of transport modes, depending on the location in the region - Infrastructure development - Person-based measures - Temporary density - Travel costs - Travel time - Speed - Location-based measures - Utility-based measures - Bring together mobility and accessibility

Table 36: Comparison of thoughts of regional spatial planners in the PZH respectively RVR on the definitions, functions and measures of person accessibility in the PZH respectively RVR

As pointed out by the interviewees, the definitions of person accessibility are related to locations, transport systems, spatial planning systems and personal possibilities. In both the PZH as well as the RVR these definitions are comparable. The interviewees mention that accessibility should be focused on a person's spatial needs, being them in being able to access services, public transport, places or jobs. In the PZH, the definition of person accessibility is also seen as the accessibility to spatial planning processes, which is not transport related.

In the function of person accessibility, in the PZH and the RVR similarities and differences can be found. In both regions the function of person accessibility is to improve locations and transport networks, say the interviewees. This function is both driven by economic as well as social motivations. Differences in the function of person accessibility are that in the PZH sustainable transport modes should be more accessible as a system, as pointed out by an interviewee. While in the RVR is focused on improved access by persons, by mentioning of accessibility of jobs, improving quality of life and making places and transport systems accessible for disabled people.

Measures to improve person accessibility, as mentioned by the interviewees in both PZH and RVR, are person-, location- and infrastructure-based and also on the ease of use of transport modes. In both regions spatial planners mention that accessibility of places and transport should be person-based by improving the ease of access of those. As stated by some of the interviewees, this requires spatial management of places and transport modes together. Improvement of networks, better suited locations for services and ease of use of transport systems are mentioned to improve person accessibility to places.

4.4.5 Spatial justice

Value	Provincie Zuid-Holland	Regionalverband Ruhr
Definition of spatial justice	- Being honest about spatial differences - Being honest about the whereabouts of spatial developments - Efficiency	- Quality of life in every area of the territory - Focus on different quarters and networks and how to combine these - Quality of life of the people - Creating the possibility of using mobility and accessibility - The accessibility to resources that a city is offering, or that a city should offer' - The question to equal chances and the respect thereof in a spatial framework - The same living space - Provision of services
Function of spatial justice	- Backlogs of spatial differences - Look for solutions to mobility, accessibility while admitting differences	- Address specific groups - Improve spatial conditions - Looking at perspectives of the next generation - Improve everybody's quality of life - Improve the position of the weakest persons and areas in the society - Create equal transportation use - Improve participation in spatial planning processes - Create equal chances
Measures of spatial justice	- Interactive platforms and public participation - Stakeholder mapping - Diversity - Equal treatment of people - Provision of mobility and accessibility adjusted to spatial differences	- Working groups and specific administrations in spatial planning processes - Combine local and regional level - Lowering the cost of public transport - Make public transport accessible for all groups - Think about equal spatial opportunities within spatial planning processes - Democracy - Diversity - Equity

Table 37: Comparison of thoughts of regional spatial planners in the PZH respectively RVR on the definitions, functions and measures of spatial justice in the PZH respectively RVR

Worth mentioning is the struggle the interviewees in both the PZH and RVR had with the definition of spatial justice. Whereas interviewees in the PZH see it mainly as being honest about spatial planning processes, it is often referred to in the RVR to the quality of life. Both these definitions are related to a personal approach in spatial planning processes and tasks. In the PZH, interviewees focus mainly on horizontal, communicative planning with regional stakeholders. In the RVR, spatial justice is often defined in relation to the quality of life in different areas and cities in the RVR and equal chances for people living and working in the RVR.

In the PZH and RVR the function of spatial justice can be categorised in functions during spatial planning processes and in spatial planning tasks in the regions. Functions during spatial planning

processes in the PZH focused mainly on economic spatial differences whereas in the RVR these are person-based and related to quality of life and equal chances. In this, interviewees in both regions mention the function of mobility and accessibility in improving spatial justice.

Also measures mentioned by the interviewees in both the PZH and RVR to improve spatial justice can be categorised in (1) during spatial planning processes and (2) in spatial planning tasks in the regions. Measures to improve spatial justice in spatial planning processes focus on involvement of specific groups, by giving them equal chances to be involved. This would improve the democratic value of spatial planning processes, say interviewees in both regions. Improvement of spatial justice in spatial planning tasks is mainly focused on mobility modes and accessibility. Interviewees in both regions state that by improving those, more equal chances are provided for people living and working in the regions.

4.4.6 Relations between the research themes

The views of the interviewees in the PZH and RVR on the role of the regions in the development of spatial visions including potential mobility and person accessibility measures to improve spatial justice, differs. In the PZH, interviewees agree that the PZH is a key player in picking up this as a regional task because they are suited for bringing together different regional stakeholders. Contradictory, in the RVR interviewees do not always see the RVR as the key player for picking up this task. Some interviewees point out that it is not the duty of the region, but that of the cities, do conduct this spatial task. Others think that the RVR could pick up this task in the future, but is not suited for this task yet due to the lack of support.

The VRM and the RR certainly fulfil a role in the regional spatial planning task to improve spatial justice by potential mobility and person accessibility in the spatial vision, say the interviewees. Nevertheless whereas the VRM is seen as the right instrument to do so in the PZH, in the RVR different opinions can be found among the interviewees. Some of the interviewees in the RVR do not always see the RR as the right instrument, since it is considered to be too light for doing conducting this spatial task. Other interviewees see the RR as the right policy instrument because regional spatial planning tasks, also regarding improving of regional potential mobility and accessibility, e.g. by creation of networks and nodes, can only be done on the regional level, say these interviewees.

Improvement of spatial justice through potential mobility and person accessibility measures is looked at differently by the interviewees in the PZH and RVR. Whereas in the PZH interviewees mention that they think conducting this task is hard, since measures in the VRM are focussing on speed and costs and less on measures regarding accessibility; in the RVR this is seen as a solution for improving regional equality and improving quality of life in the region. Even though the interviewees endorse the need for improvement of spatial justice by potential mobility and person accessibility measures, in both regions spatial planners think that this subject is not part of the spatial planning debate as such by now.

5. Analysis and findings

5.1 Introduction

Based on the indicators acknowledged to the research themes the Provincie Zuid-Holland / Regionalverband Ruhr, spatial vision, potential mobility, person accessibility and spatial justice, the thoughts of spatial planners on these research themes are presented in the previous chapter. By comparison of the empirical data on two cases PZH and RVR, and the definitions, functions and measures granted to the research themes in the operationalisation of the conceptual framework differences and similarities can be derived. The first part of this chapter will be focusing on comparing the cases and the conceptual framework by looking at differences and similarities. This is based on the tables of research themes per case in the previous chapter. When the differences and similarities are described, the relation between the research themes will be analysed. This creates the opportunity to test the hypothesis as being formed at the end of the theoretical framework. Whereas the first hypothesis focusses on the expected role of regional spatial planners in the PZH and RVR in regard to improving spatial justice in spatial visions, the second hypothesis focusses on the expected role of the PZH and RVR in improving spatial justice by improvement op potential mobility and person accessibility. Analysing the cases and conceptual framework and testing the hypotheses serves in the following chapter for answering the research question.

5.2 Comparing the conceptual framework and cases

In this paragraph the definitions, functions and if applicable measures of the research themes, and their role in the Dutch and German spatial planning systems are compared. This comparison is done on the basis of the operationalisation of the conceptual framework (§3.2) and the empirical data (§4.2-4.4). In Annex D an oversight of the research themes and the definitions, functions and measures awarded in the conceptual framework and by the interviewees can be found.

5.2.1 The region

When referring to the definition of the region, many similarities can be found between the ones presented in the operationalisation and as mentioned by the interviewees. Definitions of the region are related to both institutions and spaces. In comparison with the operationalisation similarities can be found in that the PZH and RVR are seen as geographical networks, in which stakeholders cooperate on regional spatial tasks. Different from the operationalisation is that the PZH and RVR are pointed out as being spatial planning institutions. In relation to spaces, similar to the operationalisation the RVR is also regarded as a territory, having clear boundaries within the RVR is located and can operate. Also similar is that the RVR is seen as a society of actors living in the RVR.

The functions of the region as defined by the interviewees and in the operationalisation are similar, in that sense that the definition as given in the operationalisation covers roughly all functions mentioned by the interviewees. The function of the region is seen as to represent regional spatial stakeholders and their needs in order to improve the PZH and RVR spatially; be it by development of spatial plans, defining and implementing spatial targets or promote the region. A different approach for doing this is advocated for in the PZH and RVR, which cannot be derived from the operationalisation. In the PZH especially should be focussed on spatial initiatives from the market and society, whereas the RVR should cooperate mainly with cities in order to get them aligned in regional spatial tasks.

5.2.2 Spatial vision

On the definition of the spatial vision minor differences can be found as presented in the operationalisation and mentioned by the interviewees. In line with the definition in the operationalisation, that spatial visions are models of the future, interviewees in both the PZH and RVR

define spatial visions as images for the future. The difference which can be outlined is that in the RVR the spatial vision is also defined as an instrument for giving direction for local planning, in this it is not only defined as a model but as to provide spatial guidelines.

The function of the spatial visions in the operationalisation and in the PZH, in the VRM, and the RVR, in the RR, are comparable. The function of the spatial vision is to be a communicative policy instrument for presenting future developments based on commitment of the actors involved. It should be flexible, adaptive and frame future spatial planning tasks. A difference can be found in the themes that should be included in the spatial vision document. In both the operationalisation and the PZH is indicated that all spatial functions should be included, whereas in the RVR only focussed should be on the landscape, mobility and traffic management.

5.2.3 Potential mobility

The definition of potential mobility is identified in the operationalisation as well as by the interviewees in the PZH and RVR as to be focussed on getting as a person from one place to another. This should be as easy and fast as possible. In the RVR one interviewee mentions a definition which is even more person-based, namely the freedom of people to decide which transport mode to use to get to their destination. Agreement among the interviewees thus can be found on the definition of potential mobility.

The function of potential mobility is as mentioned in the operationalisation and both the PZH and RVR to serve for getting people from one point to another. The interviewees in outline that potential mobility has a social function as such. Besides the social function, also a spatial function is identified by one of the interviewees: to serve spatial development. Spatial developments could function better if potential mobility is adapted to serve local spatial needs.

Measures of potential mobility in both the operationalisation and as distinguished by the interviewees in the PZH and RVR could partly be regarded as classic mobility measures: influencing price, time and speed. Nevertheless as identified in the operationalisation, potential mobility also are focussed on personal life-style. This is also identified by the interviewees in the PZH and RVR, by looking at travel-job relations, personal time management and information provision on the use of mobility systems. Different to the operationalisation is that both in the PZH and RVR, interviewees mention potential mobility measures having to be location-based and to improve transport networks. Measures like improving the transport network between cities in the region and being adapted to local needs should serve potential mobility of persons too.

5.2.4 Person accessibility

In the interviews broader definitions of person accessibility are mentioned than the one used in the operationalisation. As defined in the operationalisation and by the interviewees in both the PZH and RVR, person accessibility is to makes places accessible for persons. Different from the definition in the operationalisation is that the interviewees in the PZH and RVR also define the access of transport systems and to get persons to locations, which both show a transport component in its definition. Worth mentioning is that in the PZH person accessibility is also defined as accessibility of spatial planning processes. The definition of person accessibility thus refers to personal abilities to access places, transport systems and spatial planning processes.

The function of person accessibility as given in the operationalisation covers the functions as defined by the interviewees in general. All focus on improved land-use and transport to let persons and places function better in the region. Reasoning behind these functions differs in the PZH and RVR. Be it in the PZH mainly for improvement of economic attractiveness of the region, is it in the RVR also focussing on improving the quality of life.

Measures to improve person accessibility mentioned by the interviewees are similar to the one given in the operationalisation. Measures relate to improving accessibility by persons of infrastructure, locations or utilities. Interviewees mention in both the PZH and RVR that these should be adapted to local needs, and that these should be both economic-driven and improve the quality of life of the inhabitants of the regions. Ranging from mobility measures like travel costs, time and speed to the combined planning of locations, nodes and transport modes, interviewees in both regions admit that accessibility should be improved to keep the regions liveable and economically attractive.

5.2.5   Spatial justice

Whereas spatial justice is identified as one of the guiding principles in both the Dutch and German spatial planning systems in scientific literature, in both the PZH and RVR interviewees struggled with providing a definition for spatial justice. Is it defined in the operationalisation as 'an intentional and focussed emphasis on the spatial or geographical aspects of justice and injustice' (Soja, 2009, p. 2); in the PZH it defined by several interviewees as being honest about spatial differences and developments, and in the RVR as the quality of life of people and in the region. Also is referred by interviewees in the RVR to definitions on access to transport systems and resources offered by cities.

The function of spatial justice as defined in the operationalisation is to improve fair and equitable of socially valued resources and opportunities to use them in space. This is admitted by some of the interviewees in the PZH and RVR. Also the function of spatial justice is defined as to look for improving quality of life by improving access to spatial planning processes, transport and creating equal chances. These functions thus go beyond the function as defined in the operationalisation in that they not only look at the spatial depiction of resources, but also on how to get to the spatial depiction, and if spaces are defined, how to get there by persons. The function of spatial justice is thus to improve quality of life by improved involvement in spatial planning processes, use of space, mobility and being honest about spatial differences in the region.

Measures to improve spatial justice focus on improving spatial decision-making processes and its outcomes, by including measures to improve diversity, democracy and equity. The measures mentioned do not differ in that perspective as the one given in the operationalisation. Nevertheless interviewees mention that not only should be looked at processes and its outcomes, but also at the current spatial situation in the regions. Hands-on locations in the region to improve equal treatment of people and locations, and making transport equally accessible should be performed, say the interviewees; marking a difference compared to the definition given in the operationalisation.

5.3 Testing the research hypotheses

The first research hypothesis is as follows:

1. *Regional spatial planners in the PZH and the RVR think that regional spatial planning institutions can be the right governmental level to improve spatial justice in spatial visions.*

As shown in §2.7-2.10 both in the Netherlands and Germany regional governments gain momentum for spatial planning tasks. One of the instruments used for conducting these spatial planning tasks are spatial visions, which regional governments in the Netherlands are obliged to develop and regions in Germany often do voluntary. Since in both countries spatial justice is seen as one of the main spatial planning objectives, it could be expected that spatial justice is also reflected in spatial visions, also since this topic is reflected on in both national and spatial policies in the Netherlands and Germany.

Nevertheless both similarities and differences between the PZH and RVR can be found in the empirical data. In the PZH interviewees admit that the PZH plays an important role in improving spatial justice in the VRM. As institution responsible for regional spatial tasks, interviewees mention that the PZH is obliged to improve people's living in the region; also since it represents them in spatial planning processes with different stakeholders. Interviewees mention that the PZH should take a proactive

stand in stimulating the market and society to start spatial developments. The VRM is regarded as a useful tool in doing so by setting frames for spatial developments.

In the PZH, interviewees admit the importance of regional spatial justice in spatial planning processes. Nevertheless agreement among the interviewees cannot be found on if the RVR is suited for doing this and if the spatial vision is the right instrument for doing so. As mentioned by the interviewees, the role of the RVR is limited since cities still have a lot of tasks to conduct and are not keen on transferring tasks to the RVR. This directly relates to the role of the RR in improving spatial justice, some of the interviewees see the RR as the right document, due to its regional focus, whereas others highlight the lack of covering of all spatial themes in the RR and the lack of power of the RVR.

This research hypothesis can thus not be uniformly be confirmed neither rejected due to the different views of spatial planners interviewed in the PZH and RVR.

> 2. *Regional spatial planners in the PZH and the RVR think that measures on potential mobility and person accessibility can improve spatial justice.*

The thesis of Martens, Holder & Thijssen (2011) showed that transport policies can influence spatial justice (see §2.6). Both in the Netherlands and Germany mobility and accessibility measures can be found in national spatial policies and is infrastructure planning an important topic in spatial planning. It must nevertheless be mentioned that a strong focus on neo-liberalisation measures can conflict with spatial justice goals. The relation between both potential mobility, person accessibility and spatial justice is not explored earlier in scientific researches.

As shown in both cases, interviewees admit that there is a clear role for potential mobility and person accessibility in regard to improving spatial justice. Interviewees mention that by being honest about regional spatial differences, improvement of transport systems, accessibility to transport systems, places, resources and spatial planning processes to improve those, spatial justice can be improved. Spatial justice is often defined by the interviewees as quality of life, equal chances and honesty about spatial planning issues. Potential mobility and person accessibility measures as improving ease of use of transport networks increase the accessibility of places, which is believed to improve quality of life and spaces in the regions.

This research hypothesis can thus be confirmed. Spatial planners in the PZH and the RVR think that measures on potential mobility and person accessibility can improve spatial justice.

6. Conclusion and recommendations

6.1 Introduction

In this chapter conclusions are presented by answering the research sub questions and research question. Subsequently the theoretical contribution of this research will be presented, based on the conclusions presented beforehand. Then a reflection on the conduct of the investigation and the results will take place, after which recommendations for further research will be provided.

6.2 Conclusion

Where in the previous chapters the research sub questions are answered, in this chapter the research question will be answered. Therefore the research question is once more presented:

What similarities and differences can be found in scientific literature and regional spatial planners' thoughts on the definition, function and measures for improving spatial justice in spatial visions through improvement of mobility and accessibility in the Provincie Zuid-Holland and Regionalverband Ruhr by the Provincie Zuid-Holland and the Regionalverband Ruhr?

6.3 Theoretical contribution

In this research is chosen for the exploration of the research themes the region, spatial visions, potential mobility, person accessibility and spatial justice. As shown in §5.2, many of the views of the interviewees show similarities to the exploration of these in chapter 2. This is partly to be explained by the way of conducting the interviews, by provision of information on the research themes beforehand. What could nevertheless be seen as theoretical contributions are the following: (1) the different views on the research theme of spatial justice in the Dutch and German spatial planning systems; and (2) the exploration of relations between the five research themes.

First of all, spatial justice turned out to be a quite unknown subject in the Provincie Zuid-Holland and Regionalverband Ruhr. Most of the interviewees had not ever heard about it, even though it is considered in scientific literature to be one of the guiding principles of spatial planning in both the Netherlands as well as Germany (see §2.8.5, 2.9.5 and 2.10.4). On the definition and function of spatial justice differences can be found between the knowledge presented in the conceptual framework and the empirical data. Including measures in both spatial planning processes and outcomes are both presented in the conceptual framework and the empirical data. Nevertheless, spatial justice is regarded in the Dutch spatial planning system as being honest about choices and provision of information during spatial planning processes. This relates back to the horizontal approach of spatial planning advocated for by the interviewees in the Provincie Zuid-Holland. On the contrary, in the German spatial planning system, spatial justice is regarded as providing equal chances and quality of life for the inhabitants of the Regionalverband Ruhr. Use of horizontal planning approaches is also advocated for by the interviewees in the Regionalverband Ruhr, but more focus is put on the outcomes of the spatial planning processes. The latter definitions and functions in the Provincie Zuid-Holland and Regionalverband Ruhr differ from the scientific literature presented in the conceptual framework.

The exploration of relations between the research themes region, spatial vision, potential mobility, person accessibility and spatial justice has not been done before. Therefore the outcomes of the comparison of the relations between the research themes could be used for further improvement of spatial justice in spatial planning processes.

Theoretical gaps can also be found in this research. Due to the multiplicity of the research themes and time limitations for conducting this research, not all research themes have been analysed and discussed by analysing all scientific literature available. Chosen is for the use of certain concepts of the research themes, which could cause theoretical gaps in exploring these research themes in practice.

6.4 Critical reflection

In this paragraph a critical reflection is given on the choices made in this research and the influence of these choices on the personal motivation for exploring the research topics, conceptual framework, research methods and process. My personal motivation in spatial planning is to provide spatial planning solutions for making societies liveable places for everyone, by focussing on the weakest. Another personal motivation is on international cooperation and knowledge exchange. Therefore this research is conducted both in the Netherlands as well as Germany. This personal motivation nevertheless made that not less than five research themes are explored in this research. What followed is that in the conceptual framework it was hard to discuss all points of views on all research topics, also because in this research is focused on the role of the research themes. By focussing on the role of the research themes too, this research is rather high level. If would had been chosen for less research themes and not to focus on the role of the research themes too, a more in-depth approach to the research themes could had been applied.

The conceptual framework shows both a presentation of the research themes and their roles in the Dutch and German spatial planning systems, which made it hard to analyse all research topics in-depth. Therefore for certain research themes, e.g. mobility and accessibility, is chosen for the presentation of a limited number of theoretical insights in order to be able to explore all themes in practice more easily. Nevertheless, by focussing on both the research themes and their roles, it turned out that this was very helpful in testing the research hypotheses because this provided extra background information which was useful in conducting the research.

On one hand, choosing for the case study method in this research provided the opportunity to explore and compare the research themes in two different regions. Another advantage of this choice is that the results of this research provide insights for the development of the Regionalplan Ruhr. On the other hand the empirical data shows that on the role of the regions different views exist in the PZH and RVR, what makes the results less generalizable. The empirical data shows that the outcomes are highly location-related, what could make that other cases would show different results. A survey-strategy could thus also have been used, by looking at other cases in order to increase the generalisability of the research results.

Answering of the research hypotheses and research questions proved to be difficult, since the research results showed a broad variety of outcomes. This could be caused by the interview method used. By choosing for face-to-face interviews space is given to the interviewees for elaborated answers. An interview by mail could have led to more structured answers since interviewees would answer more straight to the point. Also conducting interviews in three different languages (Dutch, German and English) caused confusion, due to language difficulties by translation of specific definitions.

6.5 Recommendations for further research

After answering the research questions, in which some recommendations for the Regionalverband Ruhr on the development of the regional spatial vision are given, reflections have been presented on the research process. In this paragraph, recommendations for further research are presented, based on what is presented before in this research.

1. *Explore less research themes to secure in-depth outcomes*

In this research, in-depth research to the different research themes in the cases proved difficult due to the multiplicity of these. This caused that this research turns out to be rather high-level. Since in this research also is looked to the role of the research themes this proved useful for placing the empirical data in a certain frame, nevertheless research themes were not discussed as critical as they could; starting with the conceptual framework. The multiplicity of the research themes made critical reflection on all of these very time-consuming; therefore is chosen to pick concepts of these and explore them in practice based on these concepts. Also during the conduction of the interviews the multiplicity of the research themes proved difficult and time-consuming; which is something not all interviewees had. That made that not all research themes are discussed as in-depth as possible during the interviews, and that the results of the interviews thus not are as good as they could be. The first recommendation is thus to explore less research themes to secure in-depth outcomes in further research.

2. *Exploration of other cases*

The exploration of two different cases, in two different countries with different spatial planning systems, made the outcomes of the empirical data hard to generalise in this research. On the one hand, for securing in-depth comparison of the research themes, different case studies in the same country could improve the generalisability of the outcomes. By choosing for one country to do research in, only one spatial planning system needs to be explored. This could save time which could be used for further in-depth exploration and analysation of research themes.

On the other hand, case studies in other countries could also provide valuable data to compare with this research. This, since this provides a greater insight in differences in spatial planning systems and the roles of the research themes in those.

3. *Considering other research methods*

Considering other research methods is also a recommendation for further research. To improve the generalisability of the research outcomes, recommended is to conduct a survey in further research. Also the use of face-to-face interviews could be changed, in order to create more straightforward results in the research and also to ease up the analysation of the empirical data. For example an online interview by using Google Forms could make the analysation of the interviews much easier. This gives the researcher the possibility to spend less time on gathering the data and to spend more time on analysing of the data.

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Appendix A: Interviewees

Interviewee 1: Official of the state chancellery of the state of Nordrhine-Westfalia, team Regional Development, Regional Council and Spatial Observation and Democratic Change. Düsseldorf, 17.06.2014. English spoken.

Transcription: Final Transcription of interview 1 NRW.docx

Recordings			
Recording-20140617-103117	Recording-20140617-104551	Recording-20140617-105554	Recording-20140617-110556
Recording-20140617-111600	Recording-20140617-112602	Recording-20140617-113604	Recording-20140617-114607

Interviewee 4: Employee of a private firm in the RVR (Planersocietät). Interviewee 4 is an expert in city and transport planning. Dortmund, 26.06.2014. German spoken.

Transcription: Final Transcription of interview 4 Planersocietat.docx

Recordings			
Recording-20140626-132829.mp3	Recording-20140626-134114.mp3	Recording-20140626-135338.mp3	Recording-20140626-140342.mp3
Recording-20140626-141344.mp3	Recording-20140626-142346.mp3	Recording-20140626-143413.mp3	Recording-20140626-144544.mp3
Recording-20140626-145557.mp3			

Interviewee 5: Researcher at the University of Duisburg-Essen, faculty Construction Sciences (bauwissenschaften), section Institute for Urban Planning and Urban Design. Essen, 26.06.2014 & 10.07.2014. English spoken.

Transcription: Final Transcription of interview 5 Uni Duisburg-Essen

Recordings			
Recording-20140626-160648.mp3	Recording-20140626-161744.mp3	Recording-20140626-162823.mp3	Recording-20140626-163839.mp3
Recording-20140626-164845.mp3	Recording-20150710-130100.mp3	Recording-20150710-131159.mp3	Recording-20150710-132259.mp3
Recording-20150710-133311.mp3	Recording-20150710-134350.mp3		

Interviewee 6: Official at the municipality of Dortmund, team Urban Development & Local Heritage Authority. Dortmund, 07.07.2014. English spoken.

Transcription: Final Transcription of interview 6 Dortmund municipality

Recordings			
Recording-20140707-150253.mp3	Recording-20140707-151355.mp3	Recording-20140707-153415.mp3	Recording-20140707-154420.mp3
Recording-20140707-155423.mp3	Recording-20140707-160426.mp3	Recording-20140707-161428.mp3	Recording-20140707-162432.mp3
Recording-20140707-	20140707_Interviewee		

163435.mp3	6_Part.mp3		

Interviewee 9: Researcher at the Technical University Dortmund, faculty Spatial Planning, section Urban Planning, Urban Design and Land Use Planning. Dortmund, 17.07.2014. English spoken.

Transcription: Final Transcription of interview 9 TU Dortmund

Recordings			
E.mp3	Recording-20140717-090421.mp3	Recording-20140717-091424.mp3	Recording-20140717-092430.mp3
Recording-20140717-093432.mp3	Recording-20140717-094439.mp3	20140717_Interviewee 9_Part.mp3	

Interview group 2: PZH

Interviewee 2: Official at the PZH, Interviewee 2 was project leader on the development of the Visie Ruimte and Mobiliteit. Den Haag, 23.06.2014. (Interviewee 2 & 3 were interviewed together). Dutch spoken.

Transcription: Final Transcription of interview 2&3 PZH

Recordings			
Recording-20140623-141217.mp3	Recording-20140623-142322.mp3	Recording-20140623-143447.mp3	Recording-20140623-144450.mp3
Recording-20140623-145507.mp3			

Interviewee 3: Official at the PZH, team Traffic and Transport. Den Haag, 23.06.2014. (Interviewee 2 & 3 were interviewed together). Dutch spoken.

Transcription: Final Transcription of interview 2&3 PZH

Recordings			
Recording-20140623-141217.mp3	Recording-20140623-142322.mp3	Recording-20140623-143447.mp3	Recording-20140623-144450.mp3
Recording-20140623-145507.mp3			

Interviewee 7: Official at Stadsgewest Haaglanden, team Traffic and Transport. Den Haag, 11.07.2014

Transcription: Final Transcription of interview 7 Haaglanden

Recordings			
Recording-20140711-090529.mp3	Recording-20150711-091535.mp3	Recording-20140711-092539.mp3	Recording-20140711-093540.mp3
Recording-20140711-094542.mp3	Recording-20140711-095544.mp3	Recording-20140711-100819.mp3	Recording-20140711-101823.mp3
Recording-20140711-102825.mp3	Recording-20140711-103911.mp3		

Interviewee 8: Official at Ministerie voor Infrastructuur en Milieu, DG Accessibility, team Strategy. Den Haag, 14.07.2014

Transcription: Final Transcription of interview 8 Min I&M

Recordings			
Recording-20140714-	Recording-20140714-	Recording-20140714-	Recording-20140714-

120911.mp3	121916.mp3	122918.mp3	123920.mp3
Recording-20140714-124922.mp3			

Appendix B: Questionnaire for the RVR

Regional planning in the <u>RVR</u>

1. How do you see the RVR as regional planning authority; and what should be its functions?
2. What is in your opinion the role of the region?

The spatial vision

1. What should be the role of the spatial vision?
2. What should be included in the spatial vision?
3. Why is a spatial vision the right policy document to fulfill the role mentioned before?
4. Is a spatial vision a proper policy instrument to improve accessibility and mobility?
5. What should be the function of the spatial vision in regard to spatial justice?

Accessibility in the spatial vision

1. What is in your opinion accessibility?
2. Why should there be a focus on accessibility?
3. What should be the role of accessibility?
4. What type of accessibility measures should be focused on?
5. Is the RVR an important player to improve accessibility?

Mobility in the spatial vision

1. What is in your opinion mobility?
2. What should be the role of mobility in the spatial vision?
3. What type of transport mode should be focused on and why?
4. What type of measures should be taken?
5. Is the RVR an important player to improve mobility?

Spatial justice

1. What is in your opinion spatial justice?
2. How should be given awareness to spatial justice?
3. How can equity be improved?
4. How can be taken care of 'democracy' in the spatial vision?
5. How can diversity be improved in the spatial vision?
6. To what topic, equity, democracy or diversity, should be given priority?
7. Why and how should accessibility be used to improve spatial justice?
8. Why and how should mobility be used to improve spatial justice?

1. Are spatial visions a useful policy instrument to establish spatial justice by improvement of accessibility and mobility?

Appendix C: Questionnaire for the PZH

Regional planning in the <u>PZH</u>

1. How do you see the PZH as regional planning authority; and what should be its functions?
2. What is in your opinion the role of the region?

Spatial vision in the PZH

1. What should be the role of the spatial vision?
2. What should be included in the spatial vision?
3. Why is a spatial vision the right policy document to fulfill the role mentioned before?
4. Is a spatial vision a proper policy instrument to improve accessibility and mobility?
5. What should be the function of the spatial vision in regard to spatial justice?

Accessibility in the spatial vision

1. What is in your opinion accessibility?
2. Why should there be a focus on accessibility?
3. What should be the role of accessibility?
4. What type of accessibility measures should be focused on?
5. Is the PZH an important player to improve accessibility?

Mobility in the spatial vision

1. What is in your opinion mobility?
2. What should be the role of mobility in the spatial vision?
3. What type of transport mode should be focused on and why?
4. What type of measures should be taken?
5. Is the PZH an important player to improve mobility?

Spatial justice

1. What is in your opinion spatial justice?
2. How should be given awareness to spatial justice?
3. How can equity be improved?
4. How can be taken care of 'democracy' in the spatial vision?
5. How can diversity be improved in the spatial vision?
6. To what topic, equity, democracy or diversity, should be given priority?
7. Why and how should accessibility be used to improve spatial justice?
8. Why and how should mobility be used to improve spatial justice?

1. Are spatial visions a useful policy instrument to establish spatial justice by improvement of accessibility and mobility?

Appendix D: Overview table operationalisation of conceptual framework, and empirical data

Value	Operationalisation	Provincie Zuid-Holland	Regionalverband Ruhr
Definition of the region	- Regional communities - Geopolitical territories - Geographical networks - Regional societies	- Qualified entity, democratic legitimised - Network	- Territory - Network - Regional institution for spatial planning - Society

Function of the region	- To take the lead in identifying the compelling social need
	- To promote those local effects of efficiency, productivity and competiveness
		- Connection between national and local level
		- Being a player in spatial planning
		- Represent their network and societal function
		- Defining frames of spatial planning
		- Regional spatial planning institution
		  o Proactive stimulation of spatial developments
		  o Not to initiate developments and innovations
			- To develop spatial plans
			- To implement regional spatial targets
			- Bringing together regional spatial interests
			- Improving the regional infrastructure network
			- Positioning of the Ruhr region internationally
			- Positioning in regional spatial responsibilities

Definition of the spatial vision	- Models of the future referring to specific territorial contexts (normally a territorial jurisdiction), developed by public and private groups and presented to their wider communities	- An image for future developments - Masterplan	- Instrument to give direction for local planning - Masterplan
Function of the spatial vision	- Gaining a greater sharing of long-term spatial goals.	- Communicative - Framing - Adaptive - Flexible - Concrete	- Communicative policy instrument - Present regional guidelines on landscape, mobility and traffic - Being a commitment between cities in the Ruhr region - Strategic policy document - Metaphor, regional branding
Definition of potential mobility	- The ease with which a person can move through space	- Moving from A to B. - As easy as possible - As fast as possible - Giving people the opportunity to get to their activities	- To get from A to B - Freedom of people to decide which mode of transport helps them best to reach their spatial targets - The possibility of changing locations and reach a destination
Function of potential mobility	- To improve the ease to move through space for a person and to increase a person's capacity to overcome distance in space	- Serving for people to get from A to B - Social function - Serving spatial development	- Get from one point to the other in a short time in the region - Network

Measures of potential mobility	- Price, time, speed and personal life-style measures like motorization, deregulation of labour in relation with economic globalization and decline of fixed time-regimes	- Approach modes of mobility as a mobility system - Being location-based - Pretransport - Improvement of institutional cooperation - Working from home - Persons' time management - Making mobility more time-efficient and sustainable	- Better use of sustainable transport modes - Improving the transport network - Limiting travel costs - Limiting travel time - Improving information provision
Definition of person accessibility	- Person accessibility is an attribute of a person: a person has accessibility (or not) to a certain set of locations	- A persons' ability to reach a certain location - To get someone to its destination - The possibility to use services - An accessible process - Accessible public transport - An accessible story - Affordability of transport	- The need of making possible the reach of different functions in a territory - Having opportunities to use possibilities in a region - Accessibility of places - Accessibility of jobs
Function of person accessibility	- To improve land-use and transport developments and policy plans on the functioning of the society in general	- Improving the accessibility of a location to improve economic attractiveness - Improving accessibility of the transport network by land use and individual components - Improved use of sustainable modes of transport	- Creating the possibility to reach different locations of the region - Improve the quality of life - Making jobs reachable - Making places and transport systems accessible for disabled people
Measures of person accessibility	- Infrastrucure-, location-, person- or utility-based. Components to influence the improvement of accessibility are transport, land-use, temporal and individual	- Individual measures: improving ease of use of public transport modes by pricing and understanding of using the system - Location-based measures: combine planning of locations and nodes to improve speed and proximity - Economic driven measures	- Spatial management - Improved use of transport modes, depending on the location in the region - Infrastructure development - Person-based measures - Temporary density - Travel costs - Travel time - Speed - Location-based measures - Utility-based measures - Bring together mobility and accessibility
Definition of spatial justice	- An intentional and focused emphasis on the spatial or geographical aspects of justice and injustice	- Being honoust about spatial differences - Being honoust about the whereabouts of spatial developments	- Quality of life in every area of the territory - Focus on different quarters and networks and how to combine these

		- Efficiency	- Quality of life of the people - Creating the possibility of using mobility and accessibility - The accessibility to resources that a city is offering, or that a city should offer' - The question to equal chances and the respect thereof in a spatial framework - The same living space - Provision of services
Function of spatial justice	- To improve fair and equitable distribution in space of socially valued resources and the opportunities to use them	- Backlogs of spatial differences - Look for solutions to mobility, accessibility while admitting differences	- Address specific groups - Improve spatial conditions - Looking at perspectives of the next generation - Improve everybody's quality of life - Improve the position of the weakest persons and areas in the society - Create equal transportation use - Improve participation in spatial planning processes - Create equal chances
Measures of spatial justice	- Including diversity, democracy and equity in spatial decision-making processes and outcomes	- Interactive platforms and public participation - Stakeholder mapping - Diversity - Equal treatment of people - Provision of mobility and accessibility adjusted to spatial differences	- Working groups and specific administrations in spatial planning processes - Combine local and regional level - Lowering the cost of public transport - Make public transport accessible for all groups - Think about equal spatial opportunities within spatial planning processes - Democracy - Diversity - Equity