A conceptual foundation of spatial strategy. A methodology for spatial transformation

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Abstract

Strategic spatial planning is an approach that addresses the shortcomings of established forms of planning. The objective of strategic spatial planning is to shift the focus of actors to a long-term orientation while providing short and medium-term implementation proposals that are geared to realizing long-term goals. However, strategic spatial planning is constrained by prevailing institutional structures that assign spatial planning a designated role to play, mainly in the domain of addressing physical space requirements. In this paper we argue that spatial strategy making is a methodology that can assist planners in breaking loose of the restrictions faced by spatial planning. This is so, because spatial strategy is developed based on two premises. First space is not merely physical space, but function and process space as well. Second, a strategy is about a sequence of impact oriented activities that aim to achieve an alternative future; hence, impact-orientation internalizes a pro-active orientation to change in the planning process.

In this paper, we first discuss shortcomings of current approaches in the light of current challenges. Second, we elaborate on the notion of the 'strategic' in different strategic spatial planning approaches. Third, we describe our notion of spatial strategies as both a methodology and a product. We provide the working definitions of both space and strategy. In the fourth section, we operationalise spatial strategy by elaborating how spatial strategy is developed and how it can be used as a tool. Furthermore, the role of stakeholders and visualisation in the making of spatial strategy is explained. Finally, we conclude that spatial strategy making is an effective methodology that can be utilized within current planning approaches to overcome the challenges that they are faced with.

1. Introduction

Established forms of planning, such as land-use plans, manage to ensure that "undesirable developments do not occur, but (…) they are not able to ensure that desirable developments actually take place where and when they are needed" (Albrechts, 2004, 754). This critique refers to formal planning; however, also other approaches to planning such as 'disjointed incrementalism' of the 1970s and 1980s (Kühn, 2008) can be equally criticised on similar grounds. Indeed, planning through

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projects failed to address complex structural challenges as projects were not integrated along long-term oriented approaches (Kühn, 2008).

Strategic spatial planning is an approach that addresses the shortcomings of established forms of planning. The objective of strategic spatial planning is to shift the focus of actors to a long-term orientation while providing short and medium-term implementation proposals that are geared to realizing long-term goals. However, strategic spatial planning is constrained by prevailing institutional structures that assign spatial planning a designated role to play, and a format of products to deliver, mainly in the domain of addressing physical space requirements. It is within this context of constraints that we have identified a need for our notion of a 'spatial strategy'. We define spatial strategy as a proposal of a sequence of impact oriented spatial interventions geared at transforming a designated area towards a positive and evidence-based alternative future that is set at a sufficient temporal distance. Spatial strategy is thus a new product format that can be distinguished from the classical product formats of spatial planning, such as master plans, structure plans and regional plans.

We argue that spatial strategy making is a methodology that can assist planners in breaking loose of the restrictions faced by spatial planning. This is so, because the making of spatial strategy is based on two premises. First space is considered beyond mere physical space, to include function and process space as well. Second, a strategy is about a sequence of impact oriented activities that aim to achieve an alternative future; hence, impact-orientation internalizes a pro-active orientation to change in the planning process.

In the following, we first discuss shortcomings of current approaches in light of current challenges. In the second section, we elaborate on the notion of the 'strategic' in different strategic spatial planning approaches. In the third section, we explain our notion of spatial strategy and provide the working definitions of both space and strategy. We distinguish between spatial strategy making as a methodology and spatial strategy as a product. In the fourth section, we operationalize spatial strategy by elaborating on how spatial strategy is developed and how, once developed, a strategy can be used as a tool that can aid the political process. Furthermore, the role of stakeholders and visualisation in the process of developing a spatial strategy is explained. Finally, we conclude that spatial strategy making is an effective methodology that can be utilized within current planning approaches to overcome the challenges that they are faced with. Crucial is to consider the three concepts of space to get the intended impact. Spatial strategy can also be used as a tool. Government officials, stakeholders, or engaged citizens can use this product as a tool to evaluate the effectiveness of alternative intervention proposals. Furthermore, we point to the role of various stakeholders in strategy making and the role of visualisation. It is crucial to reveal the complexity of the concepts of space on different spatial scales in the analysis and the proposal of interventions.

2. Strategic spatial planning and the 'strategic'

Strategic approaches developed in the late 1980s and 1990s (Albrechts, 2006) in response to the shortcomings of contemporary planning and new challenges. Strategic spatial planning delivers strategic frameworks and visions for territorial development (Albrechts et al., 2003). However, there is no consistent and generally accepted definition of strategic spatial planning (Kühn, 2008).

2.1 Shortcomings of contemporary planning and new challenges

Contemporary spatial planning provides no coherent spatial vision, which shows a alternative future. Spatial plans, like the German regional plans, say more about what should not happen than that what shall happen. To a certain extent, established forms of planning, such as land-use plans, manage to ensure that 'that undesirable developments do not occur, but … they are not able to ensure that desirable developments actually take place where and when they are needed' (Albrechts, 2004, 754).

Additionally the planned results are only rarely fully visualized. 'The interactions and concepts of regional planning often lead to complex, confusing representations that are only understood in part, if at all, by those who are involved' (Akademie für Raumforschung und Landesplanung, 2011, 1). The decision-making processes are often non- transparent, owing to lack of communication. Established planning approaches often fail to take a sound analysis and the dominant driving forces that shape space.

Albrechts draws attention to the historically insignificant political relevance of spatial planning in contrast to other areas of planning and policy (Albrechts, 2004). Looking at regional planning ARL may explain why: regional planning is normally not responsible for implementation. 'It is those implementing rather than those developing concepts that are usually seen as the problem solvers'(Akademie für Raumforschung und Landesplanung, 2011, 1). Thus sectoral planning has a stronger position than regional planning. However, due to their disciplinary optimisation and limited coordination with other needs, sectoral planning is often unable to cope satisfactorily with complex challenges (Akademie für Raumforschung und Landesplanung, 2011).
Existing planning approaches neither acknowledge nor face the current challenges. Ovink claims that spatial planning is "too strongly assignment-orientated and too little challenge orientated" (Ovink cited in Blank et al. 2009, 332). Sartorio criticises the concentration on single projects with a strong local emphasis (Sartorio, 2005). A long-term perspective on spatial development is lacking and this regularly results in the costly duplication of investment and labour, stifling potential synergies.

According to Albrechts, one of the most important of the current challenges is the creation of a strategic approach that coordinates spatial goals at different levels of scale (Albrechts 2004). Besides a poor vertical coordination, poor horizontal

coordination is also blamed. Weak working relationships that span departmental, agency boundaries and policy areas like urban transportation and urban design planning make planning less effective and hinder the intended spatial impact.

Furthermore a '(technical) dysfunction of political and administrative boundaries with respect to the growth in the size of cities' (Sartorio, 2005, 36) is also an additional challenge to existing institutional structures in charge of planning. The area, which can be influenced by the planning administration, is smaller than it should be. Spatial development goes beyond the administrative boundaries of the cities. Additionally new functional regions are developing – e.g. airport regions (Droß & Thierstein, 2007 – and mega-city regions evolve (Thierstein & Lüthi, 2012).

Vigar sees "a shift away from planning as a land-use-focused, regulatory activity towards a more holistic 'spatial planning' that integrates a number of policy concerns" (Vigar, 2009, 1572). However, how is this demand for 'holistic spatial planning' to be realized in consideration of the above mentioned shortcomings and challenges?

In order to face the challenges spatial planning should focus on implementation of its goals. In addition the planning process should be transparent; a long-term perspective on spatial development should be taken rather than focussing on single projects. Vertical and horizontal coordination of different levels of space and politics and the challenges of functional regions rather than administratively bordered regions are to be considered. Lack of public money opens the perspective for spatial planning to be selective in character and focus on specific intended impacts instead of dealing with a comprehensive array of possible goals.

Spatial strategy making can be an effective methodology that can be used within current planning approaches. Before working out what we mean with spatial strategy we look at strategic spatial planning, which is a richly discussed approach since about 25 years. Later we will compare spatial strategy and strategic spatial planning and evaluate the added value of spatial strategy.

2.2 The 'strategic' in spatial planning

The master plans of the 1960s and 1970s were replaced by an incremental way of planning. With projects, which were more or less linked together, planners tried to achieve sustainability goals. But with this 'muddling through-planning' (Helbrecht, 1991) it was difficult to activate sustainable spatial development. A kind of approach was needed, which at the same time is implementation oriented and offers guidance for the actors. Orientation encompasses visions, guiding principles and goals and projects and actions refer to implementation (Kühn, 2008). The objective of strategic spatial planning is to deliver both orientation and implementation proposals.

Setting agendas and frameworks rather than detailed goals is the task of strategic spatial planning (Kühn, 2008). Strategic planning turned away from imperative

planning to orientation through visions and guiding principles discussed and developed by stakeholders. Fabbro describes a strategic plan, which relates specific goals to specific territorial interventions. These interventions can be translated into zoning plans and other suitable regulations (Comunità Montana Torre Collio Natisone et al., 2007). Strategic spatial planning does not need to replace formal planning (Hutter, 2006), but can be implemented by formal planning.

However, is it possible with a strategic spatial planning approach to deliver change? In the last few decades one of the main challenges for spatial planning was how to influence spatial development, how to influence it in the desired way. That is why many authors think of the 'strategic' way of planning. What is the strategic issue and how does strategic planning work? To answer that first some general criteria are linked with the 'strategic' are given, afterwards two approaches which go more into detail are discussed.

We identified in the literature the following key elements of strategic spatial planning. Firstly, strategic spatial planning is selective: key tasks are worked through and goals are developed for key areas. In contrast traditional planning – like the German Regional Planning – aims to work through all tasks. Strategic spatial planning does not cover the whole planning area, but the most important areas (Comunità Montana Torre Collio Natisone et al., 2007, Hutter, 2006, Kühn, 2008). Secondly, an important part of strategic spatial planning is a goal or several goals that are linked to certain actions (Hutter, 2006). Thirdly, strategic spatial planning refers to the external conditions of cities and regions, e.g. economic change, and tries to develop solutions for the emerging challenges (Hutter, 2006). Hence, the key elements of strategic spatial planning are selectivity, mutual linked goals and actions, and the integration of the external development drivers of a city or region.

Hutter identifies three different approaches of strategic spatial planning. In the first approach strategic spatial planning is more or less like 'perspectively incremental' planning. In Germany this approach, called 'perspektivischer Inkrementalismus', is famous for being the conception of the 'Internationale Bauausstellung Emscher Park'. However, Hutter states that 'perspectively incremental' planning is not a new approach, so he thinks it is not useful to call it strategic planning (Hutter, 2006).

The second strategic spatial planning approach represents a narrow understanding of strategic planning: Hutter terms this approach, the corporate oriented option. Planning is strategic if from key topics concrete goals and actions are developed. Implementation is monitored. Accompanying and subsequent monitoring forces 'strategic learning'. Strategic planning is a rational management- and learning process. Nevertheless, Hutter questions whether this type of strategic planning is possible at the local level. He states, that in contrast to large companies the setting at the local level is more fragmented and therefore not possible to adopt strategic planning as management process (Hutter, 2006).The third strategic spatial planning approach is a flexible one. Strategic spatial planning is seen as generic term for very different concepts and tools. The effectiveness of those concepts and tools differs at

different local and regional frameworks. The strategic in this sense is to decide occasionally if certain topics are either to be planned in a more open way – incrementalistic as explained in the first approach – or in a more narrow way as explained in the second approach (Hutter, 2006).

In addition Wiechmann and Hutter differentiate between the linear and adaptive approaches within strategic spatial planning (Wiechmann & Hutter, 2008). The linear approach is about an intentional and deliberate process which starts with analyses, then formulates a strategy and then implements the strategy. The premises are that the strategy is built upon an all-embracing analysis, responsible for the process is a person high up in the hierarchy and the developed strategies have to be formulated explicitly and completely. In contrast adaptive strategic approaches consider the interdependencies in complex systems with looking for planned strategies and also unplanned strategies. The last ones can develop through consistent behaviour, which is developing gradually, 'ermergente Strategien' as it is called in German. The premise of the adaptive approach is that formulating a strategy is not distinguishable from implementing a strategy. Furthermore the process of designing a strategy results from collective learning and adaptation. The process is not goal-instrument, but instrument-goal. Only those goals are chosen which are considered to be realizable.

Wiechmann and Hutter criticise both approaches. Because of the limited cognitive abilities of the actors it would be impossible to gather and analyse all needed data and the linear approach cannot work. Furthermore the authors see a basic scepticism against intentional steering experiments. Again the adaptive approach might end in muddling through without any direction and any strategic thinking. Wiechmann and Hutter conclude firstly that for spatial planning it can be useful to adopt the basic ideas of both approaches and to mix them (Wiechmann & Hutter, 2008).

To conclude, the linear approach is similar to the corporate oriented approach. The flexible type is similar to the adaptive approach, when focussing on the adaptive issue. We think that an intentional and deliberate process that starts with analysis then formulates a strategy and then implements the strategy makes sense, if the once formulated strategy is adaptive to changing frameworks, trends, and other conditions. Adaptation is crucial, because otherwise we would have a static approach that is not able to react to changing requirements and challenges. Adaptation does not mean processing an incremental approach and binding together different projects under a general agenda. Strategic planning means considering the impact of interventions on spatial development. Strategic planning is about change; it sets up a goal and the appropriate interventions to start change and reach the goal.

Throughout the subject literature there is much talk of 'strategic' approaches but little or no talk of strategy. The exception is the strategic plan of Fabbro, which relates specific goals to specific territorial interventions. 'Strategic planning can be addressed as a final output (the strategic plan) and as a process, both technical and

social' (Comunità Montana Torre Collio Natisone et al., 2007, 108). So it is useful to look at both, the output or end product and the process.

3. Working definitions of the terms space and strategy

Before we go on to explaining what spatial strategy is and how it is distinguished from strategic spatial planning approaches, we start by laying down the working definitions of both space and strategy.

3.1 Space

What definition of space do we use when developing a *spatial* strategy? We utilize Boesch's definition of space (Boesch, 1989). Boesch distinguishes between three concepts of space, distance, functionality and process.

Distance-space (d-space) is the lowest level of this concept. D-space describes space as container. A distance between A and B is an example for perceiving space as distance space. Using a theatre as an analogy, distance-space is the stage without props and actors.

Functional space (f-space) also views space as container. But now the container contains something; in the theatre analogy now there are props on the stage. For planners functional space is about functions like infrastructures which link locations, like a commuter train. However an infrastructure only makes sense, when people use it and interact with other people.

Process space (p-space) contains distance and functional space. Using the theatre analogy once more there is a stage with props and actors. Traditional planning often encompasses distance and functional space. For example, zoning plans set certain building lines. Up to the building line it is possible to build a building, it is forbidden to go over the line. In this example space is perceived as distance space. As already mentioned as an example other plans are about the commuter train-network of a city region. This network is f-space. Maybe the trains are often late, the coaches are crowded, or the network is missing important links, so that people don't like to use these trains. If space is only perceived as d- and f-space, these issues are overlooked.

The wider and encompassing perception of space is to perceive space as p- space. Process space is about people using space and their specific needs and wants. Traditional planning lacks this perspective. This kind of planning sets certain rules with setting building lines, which is d-space and defines a lot of functions, for example a certain municipality should grow; another municipality should maintain its population level. But zoning and regional plans do not consider p-space. People and their behaviour are not integrated into planning.

D-space, f-space and p-space can be isolated for a while, e.g. when analysing a certain area or location. But problems can only be understood when the three conceptions are put together again. An example for this is a commuter train network in an airport region that does not meet requirements. E.g. a ring line is missing, so that commuters have to go to the main station to change trains and then travel back out of the city to reach their destination. This example shows that it is not sufficient to perceive space as d-and f-space. If the infrastructure is there, people can move. However, if the network is missing certain links that would ease the use of the infrastructure network.

Some of the cited authors in chapter 2 mention different perceptions of space, at least implicitly. ‘The term `spatial' brings into focus the `where' of things, whether static or dynamic; the creation and management of special `places' and sites; the interrelations between different activities and networks in an area; ...’ (Albrechts, 2010, 1119 with reference to Healey). Albrechts, Healey and Kunzmann consider ‘emphasis on place qualities’ as an essential element of strategic spatial planning (Albrechts et al., 2003, 113). CABE, the abolished Commission for Architecture and the Built Environment in England states: ‘The new approach goes beyond land use planning – which is generally two dimensional – and deals with the physical characteristics of a place in all its complexity and in three dimensions’ (Commission for Architecture and the Built Environment, 2010, 12).

3.2 Strategy

A strategy shows which interventions are needed to achieve a certain goal. Strategy is more than a goal, and strategy is action oriented. To choose the most promising interventions and reachable alternative future s knowledge about the main drivers of spatial development and future development trends is essential. So the basic elements of strategy are an ‘accurate understanding of the real situation, choosing realistic goals, a focused orientation of available strengths in goal direction and a persistence of action until significant results have been achieved`(Albrechts, 2010, 1118/1119).

Albrechts differentiates principally between four possible answers to challenges: ‘Reactive (the rear-view mirror), inactive (going with the flow), preactive (preparing for the future), and proactive (designing the future and making it happen)’ (Albrechts, 2010, 1116 with reference to Gates, 2008). The strategy should be proactive. To think of a possible future and how to get there is about choice. The choice is between multiple possible futures and the ways and instruments to get to the chosen future. As Porter puts it, “If there were only one ideal position, there would be no need for strategy” (Porter, 1996, 68).

According to the ‘Design School’, for the development of a strategy an analysis of external factors is needed (SWOT-analysis). External factors are the conditions of the environment and trends of future development – resulting in opportunities and threats. The internal analysis is about specific resources and competences with strengths and weaknesses as result. Strengths and weaknesses and opportunities and

threats are the base of the development of a strategy. One or several goals are worked out and interventions developed that make it possible to reach the goal(s) (Rüegg-Stürm, 2002).

4. Spatial strategy as a methodology and as a tool

In the previous section we laid out our working definitions of space and strategy. In this section, we operationalise these terms in order to show how spatial strategies are developed. We explain spatial strategy making as a methodology to steer the spatial transformation process. Once developed, the spatial strategy can become a product that can support the political process.

4.1 Spatial strategy as a methodology

While a method is a way of doing things in a certain way, a methodology is the reasoning behind the decision to use methods together to achieve a certain goal. In this section we elaborate on the methods that are used in order to develop spatial strategies and we explain the reasoning why these methods are used. What does the choice of these methods serve and achieve?

Developing a strategy involves the following steps: Analysing existing conditions, choosing a realisable goal, and proposing a sequence of activities to get there. Similarly, developing a *spatial* strategy involves the same steps; the complexity arises as space is the very object of both, analysis and intervention. As mentioned earlier, we understand space as d-, f-, and p-space. Hence, we keep these concepts of space continuously in focus as we undertake analysis and propose possible interventions.

The first step of developing a spatial strategy entails analyzing existing conditions, a spatial analysis is undertaken. The objective is to identify the strengths, weaknesses, opportunities and threats (SWOT's) of the area in question. Scope is crucial, when and where does the analysis stop? The objective of analysis is to identify windows of opportunities, rather than a detailed scanning of the object of analysis.

In order to learn about the future main future development trends are analysed (see also figure below). The strengths and weaknesses confronted with the trends result in the opportunities and threats. Trend analysis is useful for setting up both, alternative future and strategy. Understanding how the area can develop in future tells us something about possible alternative future s. To define the interventions trends have to be considered, otherwise interventions are developed which may not help to get to the alternative future. Analysing trends helps to understand what drives spatial development and what the future conditions are. The understanding of the key drivers is a pre-requisite for processing a strategy, which shapes the future, as it is wanted.

An example is the analyses of the prospering Munich airport region. The key driver is the growing hub airport and as a second hub the city of Munich with its excellent research institutions, knowledge based service industries and high-tech industries and high living standards. However, a SWOT-analysis reveals also weaknesses especially in the corridor between the city of Munich and the airport. Dispersed settlement development, car-based traffic, and locations of the knowledge industries located far away from high quality public transport and without any place qualities.

In the second step an alternative future is proposed, which proposed interventions seek to achieve. The alternative future is grounded in the analysis; it is evidence-based i.e. not intuitive. The alternative future indicates the direction. Selectivity is an important feature of the alternative future. Spatial strategy does not define all possible alternative futures. For example for a quarter of a medium large city, not rapidly growing, and full of brown field areas mixed with housing, some useful questions would be: which developments are basically possible for the area? Which role can the area play for the whole city and wider city region in the future? Which urban functions are to be developed for the area itself and maybe also for the whole city? The opportunities and threats have to be considered and the general trends and challenges such as demographic change, climate change and the public finances. Not everything what should have been done could be done. Due to the financial situation of cities and states it is obvious we need to select those goals that are the most important ones for the actors to achieve.

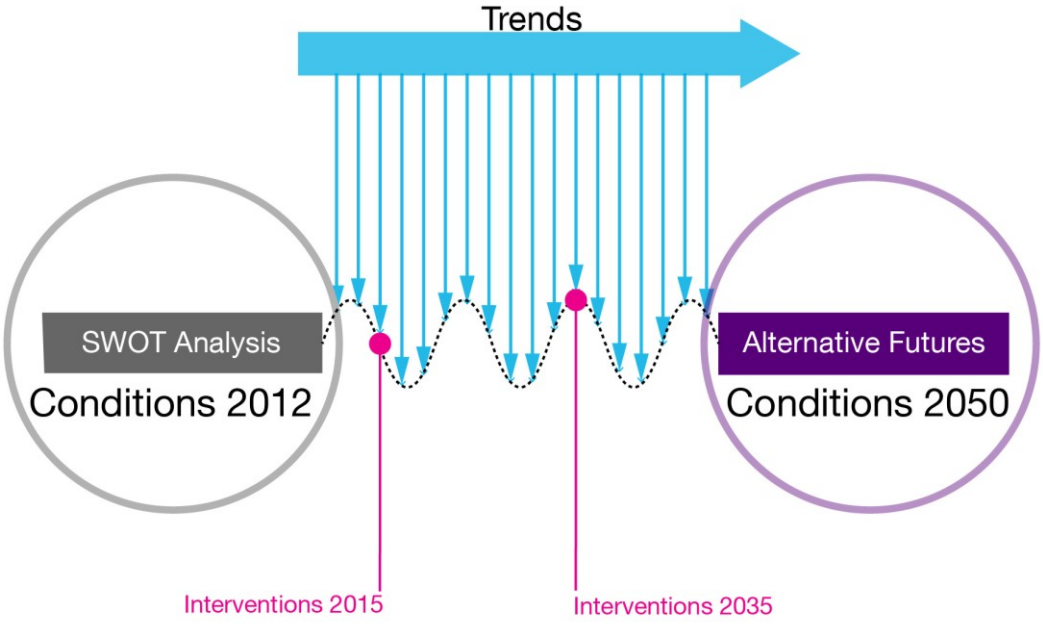

Figure 1: Spatial strategy making (own draft)

In the third step, interventions needed to make the alternative future happen are proposed. The most crucial question about interventions is what their impact will be. In general, an intervention produces more than one impact and at this stage of spatial

strategy making it should be asked whether the intended impact – with regard to the alternative future – is produced with a certain intervention. Moreover a certain impact will produce certain activities, which will produce certain impacts. For example figure 2 demonstrates the general impact of the expansion of a railroad for high-speed rail. The expansion triggers improved accessibility. This impact allows certain activities, e.g. that people commute to previously not accessible loci of employment and education (compare the inner circle in figure 2). This activity triggers an impact that is that the number of qualified workers increases. The following activity is that firms invest in the region, which produces a higher demand on transport infrastructure. It is necessary to understand these impact chains because it has to be considered whether the impact chains will produce the alternative future or not. Figure 2 shows an impact chain, which was produced to show the impacts of a new high speed railway track.

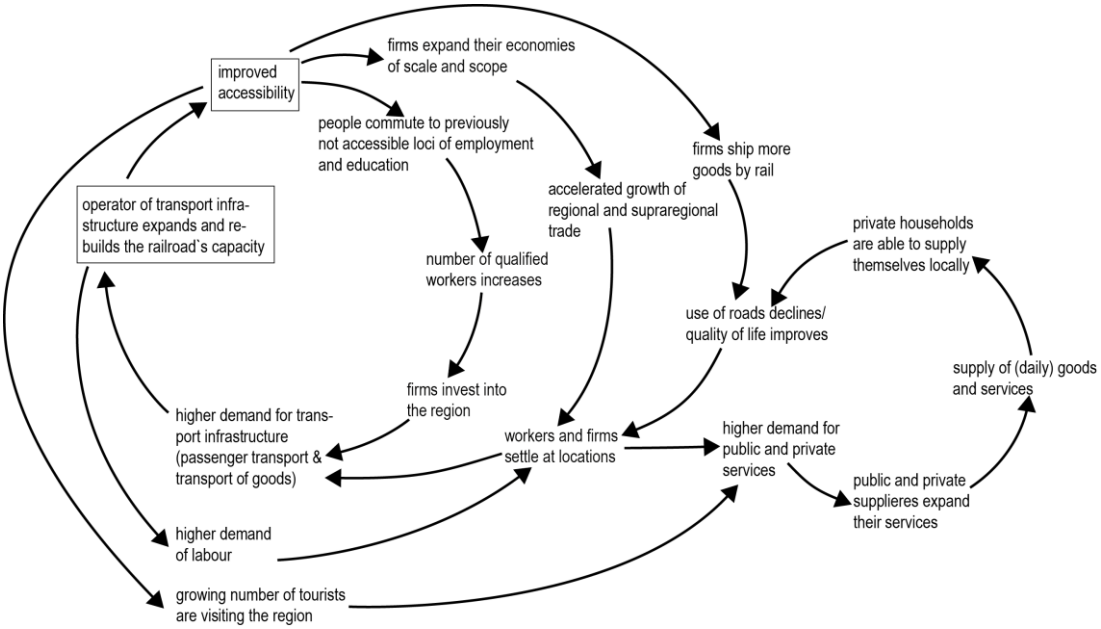

Figure 2: model, which demonstrates the impact of a new high-speed railway track (own draft)

A number of issues are particularly important for choosing interventions. The spatial scale has to be considered with respect to the area for which the spatial strategy is set up. Interventions might only be possible for this particular area and not on a broader scale. This would be an area based approach, where the goal is to set up a strategy for a certain area and to apply interventions in this area and nowhere else. For example, an expansion of the main station might be useful to allow more high speed trains to stop. More business people would have access to the city and also to destinations in the designated area. But if the broader scale is not involved in the strategy process and the approach is area based, the expansion might not be possible. The interventions should generate the intended impact. We have argued that the perception of space is overlooked if space is only perceived as d- and f-space. Building open space, e.g. a place that people can take a rest, sit down, and talk to each other, is first of all d-space. Sometimes even the prerequisites for this function

are missing: Trees for providing shade, benches and more. If the f-place is considered and prerequisites are implemented in the new place, the next step is analysing p-space. The question is how the place has to be like that people really make use of it.

The impact of interventions can occur in other areas or on other spatial scales. An example is a road with four lanes, built in the 1960s or 1970s to develop an industrial zone which is mixed with housing. Much of the industry might be run down today, but the housing is still there. Traffic has increased so that noise pollution is produced. Additionally, the four lane road is a barrier for the people, who might want to cross the road. On city level this four lane road works as p-space because it facilitates good connectivity. In both examples f-space is addressed in the designated area, but the impact on p-space occurs on the city level (see figure 3).

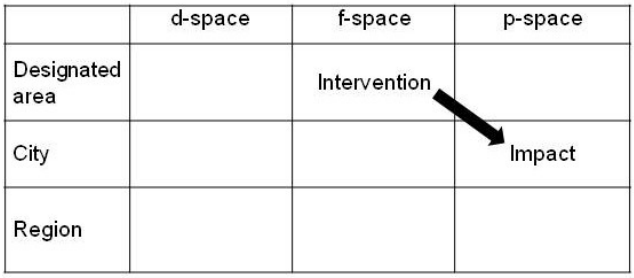

Figure 3: Intervention and impact on different spatial scales (own draft)

The relationship between certain interventions is crucial and has to be looked at on the time scale. Whenever new housing is build infrastructure such as kindergartens, schools, shops, and bus stops are needed. Often the infrastructure is implemented some time after the first people have moved in. So these first movers have to look for this infrastructure in the vicinity. Thus interventions have to be carefully organised. Additionally, spatial strategy making is not a linear process; it is adaptive. When new findings change former assessments, or the framework changes, or investors back out, the interventions will be adapted to the changes and or to new alternative futures.

4.2 Spatial strategy as a tool

Spatial strategy is a product that a certain party develops and delivers as a proposal. A spatial strategy as a product, say a document, says ‘this is where a certain area can head to and these spatial interventions along the time axis are what is needed in order to make this area head there’. Engaged citizens or government officials can use this product as a tool to sort out/evaluate the purposes of intervention proposals. Will a new metro line from the city centre to one of the municipalities help to achieve the goal of the airport region? Will it hinder this evolution? It might look like a good idea today, but if we look at it within the context of a strategy we are able to assess

whether it has negative future externalities that could even hinder such an evolution. So here the strategy is used as a tool to assist in the political decision making process. As shown in the following section setting up spatial strategy is a process, in which stakeholders and visualisation are basic elements. Their role is discussed next.

4.3 The role of stakeholders and visualisation

The role of stakeholders in developing a spatial strategy is a very crucial and basic one. Stakeholders have knowledge which e.g. planners of a region or city administration or external service providers which are mandated to steer the process don't have. Stakeholders may also be part of the 'users' of new locations and places. The user perspective is about process space and therefore crucial for strategy making. These users have to be asked about their evaluation of plans for these new locations and places or – which would be best – they participate directly in the planning process.

Additionally some of the stakeholders become actors when starting the implementation. If politicians, sector planning, transport associations and so forth participate in the process of designing a spatial strategy, these actors can feed in their special knowledge – furthermore the spatial strategy is *their* strategy. They have participated in developing it; they have put time into the process. Probably they will contribute in the implementation and do what they can do to carry out activities which are part of the strategy and necessary to achieve the goal(s).

Basically two types of visualisations are crucial for spatial strategy making: Type one visualises the process itself, for example the parts of a SWOT analysis or the whole process as in figure 1 above. Type two visualises the three concepts of space, the alternative future, findings of the SWOT analyses, interventions and their impact.

Firstly, the alternative future as such has to be visualised in maps, sketches, designs and other media. It is crucial to see how a certain location or whole region should look in the future. Maps show new infrastructure, areas for certain functions, mixed-use areas, locations which are to be important hubs in the future and so on. Designs show what quality certain places have in the future, how areas change and achieve new relevance.

Secondly, the analysis of the current conditions also needs visualisation: Maps, illustrate the strengths and weaknesses and opportunities and threats, differentiated in the three concepts of space. The focus is especially on the p-space, which encompasses the everyday life dimension of certain areas. Besides outlining p-space in maps sketches and photos can help to demonstrate the character of p-space.

Thirdly, the analysis for choosing interventions is visualised. Consideration must be given to which interventions are basically possible. If strategy making is limited to a certain area only interventions in this area are possible. However, the impact of these interventions might occur in other areas or on other spatial scales. Visualisations

such as in figure 2 help to analyse where interventions are possible and in which areas and on which scales their impact can occur. Furthermore visualisations help to handle the challenges to address p-space. P-space can be visualised so that stakeholders can imagine and evaluate the appearance of spatial interventions. Alternative futures can be visualised through designs or photos of similar places and locations.

Fourthly, the series of interventions on the time scale is visualised. Some interventions have to be started before others. Often infrastructure like public transport is used early in the development process of a certain area. Other interventions follow, such as housing, shops and office space.

Fifthly, the impact of certain interventions is considered. Probably there is more than one impact that is visualised to get a general view of the impacts of certain interventions. Impacts produce certain activities that in turn produce certain impacts. One way of demonstrating these impact chains is the impact model, shown in figure 2.

5. Conclusion

Spatial strategy making and strategic spatial planning are two different perspectives. We have argued in this paper that, strategic spatial planning is constrained by the format of the product that it is expected to deliver, usually structure plans, land use plans and regional plans – whose objective is focused on addressing physical space requirements. Hence, spatial strategy making is an effective methodology that can be utilized within current planning approaches to overcome the challenges that they are faced with. Spatial strategy can be used as a tool. Government officials, stakeholders, or engaged citizens can use this product as a tool to evaluate the effectiveness of alternative intervention proposals.

Spatial strategy is operationalized in this paper. Crucial for the development of spatial strategy is consideration of the three concepts of space at various scales in both analysis and an intervention proposal to get the intended impact. Choosing the appropriate interventions is crucial for focussing on the intended impact. We have argued that the perception of space is overlooked if space is only perceived as d- and f-space. Thus interventions have to consider p-space in particular. Furthermore the relationship between certain interventions is crucial and has to be looked at on the time scale. Before starting interventions, their impact has to be carefully analysed, so that the intended impacts will occur.

Visualisation enables stakeholders to understand the complexity of the concepts of space. Visualisation helps stakeholders to join in the analysis and strategy making as well as to get an image of how intended impacts may look like in the future. The future is visualised in plans, designs, and sketches so that stakeholders can discuss and propose alternatives.

Spatial strategy is not be set up exclusively by government officials or single actors. Spatial strategy is based on manifold knowledge of different stakeholders. Each of the stakeholders implements his or her unique knowledge. Furthermore, important actors have to be involved in strategy making, because they later are in charge of the implementation. If they work on the strategy and take their time for it, they become the owners of the strategy and the strategy is more likely to be implemented.

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