

# 21 Framing ‘Evidence’ and Scenario Stories in Strategic Spatial Planning

*Raine Mäntysalo and Kristi Grišakov*

## 5 Introduction

6 Recently, the so-called evidence-based knowledge has had an increasingly domi-  
7 nating role in societal decision-making. With the sustainability and climate  
8 change debates, and the related demands on impact assessments, its role has been  
9 heightened in spatial planning,<sup>1</sup> too (e.g. Davoudi, 2012; Krizek *et al.*, 2010).  
10 However, in planning, the hegemony of evidence-based knowledge is problem-  
11 atic, as planning is largely about coping with the yet unknown future; that of  
12 which we cannot have evidence. This is especially true for strategic spatial plan-  
13 ning that incorporates the methods of scenario planning (Albrechts, 2005; Zegras  
14 and Rayle, 2012). The evidence-based approach addresses the future as a continu-  
15 ation of the existing and known development paths. While, in scenario planning,  
16 there is indeed a need to project the future implications of the present develop-  
17 ment paths, we also need an ability to imagine such development trajectories, of  
18 which we do not have evidence yet, but which might emerge in the future.

19 In scenario planning, the evidence-based approach is thus not sufficient. The  
20 ‘knowledge’ produced in scenario planning is rather based on stories that are able  
21 to integrate convincingly the future extensions of known development trends  
22 with imagined future possibilities. According to Peter Schwartz (1991), scenario  
23 planning is not a science but an art. It aims to identify relevant societal and envi-  
24 ronmental driving forces that push development forward to certain directions.  
25 Further, it aims to anticipate the not yet existing and hidden driving forces that  
26 may emerge in the future and interact with the known and existing driving forces.  
27 Based on such an analysis, alternative scenario stories are made, stemming from  
28 the organization’s activity horizon.

29 Patsy Healey (2009) also recognizes the art dimension in strategic spatial plan-  
30 ning, in the form of design thinking. However, she claims that additional sensitiv-  
31 ity is required that would surpass the limitations of both scientific analysis and  
32 design thinking. According to Healey, the generation of spatial strategies  
33 demands skills to perceive how people and places interrelate in time, drawing  
34 from an understanding that builds on history, an anthropological view and  
35 geographic imagination. A degree of comprehension of the material and cultural  
36 history of the place or region is needed to enable one to perceive the potentiality

1 and desirability of different development trajectories. According to Healey, this  
 2 kind of understanding builds critical judgement skills in assessing how and to  
 3 what extent positive resonance and transformative capacity can be gained among  
 4 the actors to strategic initiatives. This entails experiential probing, as well as  
 5 targeted analysis, imaginative learning as well as reliance on hard evidence.  
 6 Following John Dewey, Healey perceives such strategy work to generate around  
 7 itself a 'community of inquiry' which nurtures the collective intelligence of those  
 8 brought within. This is what Healey calls 'strategic framing' (Healey, 2009; see  
 9 also Abbott and DeMarco and Bryson and Schively Slotterback in this book).

10 In Healey's vein, it is thus a matter of critical judgement in strategic framing  
 11 how scientific evidence and artistic creativity should be combined to gain wisdom  
 12 and joint momentum towards a desired future. While alternative scenario stories  
 13 would probe possible futures, building imaginatively and creatively on the  
 14 evidence of existing development paths and local potentialities, critical judge-  
 15 ment is about selecting the scenario that we value as desirable, and deciding on  
 16 actions that are needed in striving for it.

17 So, with Healey's account on strategic framing, we arrive at three distinct  
 18 capabilities that are essential in strategic spatial planning:

- 19 • the capability to provide scientific evidence on that which exists;
- 20 • the capability to create scenario stories, stretching towards the possible  
 21 future from that which exists;
- 22 • the capability to critically judge which future scenario we value as desirable,  
 23 and to decide on the actions to be taken in striving for it.

24 In this chapter, our intention is to elaborate on these capabilities by drawing on  
 25 Bent Flyvbjerg's (1992, 2004) reading on Aristotle's three 'intellectual virtues':  
 26 episteme, techne and phronesis. We will start our account by first recalling the  
 27 development of scenario planning. Then we will study scenario planning as part  
 28 of strategic spatial planning in the sense of strategic framing. Finally, we will  
 29 discuss how Aristotle's three intellectual virtues can be distinguished as essential  
 30 constituents of strategic spatial planning.

### 31 **Scenario Planning**

32 Scenario planning emerged during the Cold War as a method by which to  
 33 contemplate the 'unthinkable', namely nuclear warfare. Herman Kahn, a military  
 34 strategist, developed scenario planning to analyze the likely consequences of  
 35 nuclear war and the techniques that would be needed to survive them. He  
 36 presented those strategies as stories, which he called scenarios, hence giving the  
 37 name to the method (Kahn, 1962).

38 However, the method of scenario planning did not become widely known until  
 39 it was adapted to business use at Royal Dutch Shell (Wack, 1985). In 1971, Pierre  
 40 Wack started developing a more practical use of scenario planning, as a forecast  
 41 method to guide strategies for Royal Dutch Shell. After the Oil Shock in 1973,

350 *Conceptual and Critical Nodes in Strategic Planning*

1 scenario planning was welcomed in the commercial world as a tool to include a  
2 spectrum of forecasts, ‘unwanted’ ones as well as desired ones, in a business  
3 strategy. Today, the scenario planning method still thrives in the corporate world  
4 as a tool for looking into the future, being more popular than SWOT analysis<sup>2</sup> or  
5 the Delphi method<sup>3</sup> (Konno *et al.*, 2014).

6 The method of scenario planning was not clearly defined until the 1980s. Until  
7 then, it was dependent on the capabilities and imagination of the ‘scenario gurus’  
8 of the time (e.g. Kahn and Wack) (Ogilvy, 2006). A clear step-by-step process  
9 for novices was only published in Schwartz’s 1991 book *The Art of the Long*  
10 *View*, the key textbook for scenario planners, and still relevant today. New prac-  
11 tices, trends and links to strategy development are discussed in several academic  
12 journals, most notably in *Futures* and *World Futures*.

13 In the context of spatial planning, urban planning and architecture, scenario  
14 planning as a method has most commonly extended to the fields of land use and  
15 transportation planning. Urban planning as a field has been slow to incorporate  
16 all aspects of scenario planning (Chakraborty *et al.*, 2011). In the US, the  
17 Department of Housing and Urban Development has even awarded grants for  
18 scenario planning at regional and metropolitan scales that would further promote  
19 this practice. Scenario planning is typically used by various public and private  
20 agencies to identify common regional issues and formulate decisions that serve  
21 multiple jurisdictions. The general goal of many such ‘vision documents’ seems  
22 to be to develop large-scale regional or metropolitan visions and concurrent strat-  
23 egy directions. However, the practice is often still too focused on developing a  
24 single preferred scenario and fails to adequately consider multiple uncertain  
25 futures (Chakraborty *et al.*, 2011).

## 26 **Making Scenarios**

27 The scenario planning method is about finding new opportunities, storytelling,  
28 questioning assumptions and pinning down the critical uncertainties. It includes  
29 a thorough analytical part, for which an extensive amount of data is needed.  
30 These data include recognizing global/local trends and drivers (social, techno-  
31 logical, economic, environmental, political, values), identifying actors and their  
32 agendas (niches) and uncertainties. The actors can range from individuals to busi-  
33 nesses, organizations, public officials, etc. It is equally as important to recognize  
34 the role of global forces as it is to determine the local forces that are expected, or  
35 desired, to have a key role in making every scenario come true.

36 As a starting point, a central question for the object area, a focal issue, is  
37 formulated. This can have quite a general form, such as lack of vision, need of  
38 new functions, bad connectivity, etc. Additionally, a timespan is decided, ranging  
39 usually from five to 50 years. A shorter timespan would make the outcome too  
40 predictable and a longer one usually makes the results too unpredictable. In terms  
41 of analysis, the scenario method assumes that there is never enough information  
42 on which to base a decision that would require certainty about the future (Garreau,  
43 1994; Ogilvy, 2006). Moreover, it assumes that the future is not predictable. If it

1 were predictable, there would be no need for planners. It further assumes that if  
2 the future were predictable, there would be no need for alternative scenarios.  
3 Thus it emphasizes the necessity to prepare for multiple futures, not relying on  
4 deterministic predictability, because, as history has shown, we can rarely count  
5 on predictions.

6 The fantasy of deterministic predictability lives on and lurks among the  
7 assumptions of those who regard scenario planning as insufficiently scientific.  
8 Connect these points together in any of several combinations and you will see  
9 that judging scenario planning against the standard of deterministic science is  
10 non-sensical, paradoxical, and ultimately absurd. (Ogilvy, 2006: 337)

11 The strength of scenario planning lies also in its ability to talk about undesirable  
12 futures – in the end, this motivated the whole origin of the method. It concentrates  
13 on the ‘unthinkable’ and searches for critical uncertainties that influence the  
14 outcome of the problem that is being tackled. A critical uncertainty is something  
15 that exists in every plan and it is very much related to all the elements we think  
16 are predetermined. We can find these aspects of uncertainty by questioning our  
17 assumptions about the predetermined elements or facts. For example, we know  
18 that the population is aging, the oil reserves will be exhausted, global warming  
19 will accelerate, new technologies such as 3D printing and augmented reality are  
20 emerging, but what we do not know is the willingness of people to change their  
21 habits in the face of these developments – and if so, how. It forces us to imagine  
22 the extreme situations, to find coping mechanisms we would not be able to  
23 conceive in safe and comfortable contexts. It can also make us understand better  
24 the outcomes of our actions, or even illustrate what would happen if no action  
25 were to be taken at all.

26 The other key aspect of the scenario planning method is that it enables us to tell  
27 each other stories about how the world might work (Garreau, 1994). A key element  
28 of a great scenario is its capacity to captivate you as if you were a great character  
29 in a novel. The character of a good scenario might be a villain or a hero, but never-  
30 theless it has a familiarity and credibility to it. A scenario is not a linear, mechanis-  
31 tic, number-driven process; it is rather about the story and the assumptions,  
32 perceptions and imaginations that underpin it (Garreau, 1994). Like a good history  
33 lesson, it concentrates on explaining the forces that influence the outcome of events,  
34 rather than plain numbers and names. In this way, it is easier for people to react to  
35 the scenarios, choose a desirable future and start discussing how to make it happen.

36 The identified development trends and the imagined future possibilities are  
37 fused together into alternative scenario storylines. At the same time, the emerging  
38 scenario storylines are mapped in relation to each other by the use of bipolar  
39 conceptual axes. A few characterizing distinctions are identified to map the  
40 scenarios in relation to other, such as hetero-/homogeneous area character, inno-  
41 vative/conservative policy, local/global focus, etc. The bipolar axes of such  
42 distinctions may further be combined into four-fields, and other arrangements, to  
43 provide a mapping framework for the alternative scenarios (Konno *et al.*, 2014).

*352 Conceptual and Critical Nodes in Strategic Planning*

1 Besides the more known scenario planning method utilized in the field of  
2 economics, there are also other methods, especially those developed by the  
3 French future thinkers in the end of the 1950s, e.g. Gaston Berger and Bertrand  
4 de Jouvenel. These methods are motivated by humanist and societal concerns. As  
5 always, the methods diverge, but the overarching title is Prospective or Foresight,  
6 sometimes also Prospective Through Scenarios. In the latter case, the scenario  
7 building process is not too different from the scenario planning method described  
8 above. However, here the scenarios themselves are not interrelated in terms of  
9 bipolar axes, but variables. With this method, the number of resulting scenarios  
10 is very high, and only a small number of scenarios are selected on the basis that  
11 they illustrate a good spectrum of possible futures. The link between the two  
12 branches of scenario thinking, on both sides of the Atlantic, developed in the  
13 1960s, giving rise to a large number of organizations dedicated to futures research  
14 in the 1970s. Over the last decades the main areas of research have changed along  
15 with the methods and main protagonists (de Jouvenel, 2004).

16 However, regarding Prospective Through Scenarios, it is important to notice some  
17 key problems associated with such a scenario planning method that is not based on  
18 foresight but rather on forecasting. First, forecasting relies of precedent, analogy and  
19 extrapolation. It is based on the assumption that we live in a stable world where the  
20 same things always change in the same way at the same rate according to immutable  
21 laws. Foresight thinking, in turn, derives from the idea that there are phenomena of  
22 discontinuity and abrupt changes that surprise us, among them also those that we  
23 bring upon ourselves. One should not extrapolate on the basis of past trends (see de  
24 Jouvenel, 1999, 2004). This is also the problem of poor scenario planning. Often,  
25 those which are called 'alternative scenarios' are just median projections of  
26 economic growth, transportation flows, even collaboration opportunities. Indeed,  
27 they are not alternative scenarios but simply projections of the 'same old system'  
28 operated optimally or otherwise (de Jouvenel, 2004). A proper alternative scenario  
29 should be capable of creating a completely new story that is built on structural and  
30 qualitative changes to the system, not merely calculated derivations.

31 Second, the Prospective Through Scenarios method seems not to have an  
32 emphasis on strategic planning or a strategic outcome, but rather on exploration.  
33 Nonetheless, de Jouvenel (1999) emphasizes that the future thinkers within both  
34 scenario planning and prospective schools generally share the attitude of the  
35 navigator: 'The navigator makes an effort to anticipate in what way the wind  
36 blows and asks, at the same time, what actions shall he take to arrive to a good  
37 port. He uses tools of vigilance and instruments of piloting' (Jouvenel, 2004;  
38 compare to Hillier, 2011). Albrechts, however, argues that strategic planners  
39 'must be more than navigators keeping the ship on course and they are necessar-  
40 ily involved in formulating that course' (Albrechts, 2015: 514).

**41 Scenario Planning as Part of Strategic Spatial Planning**

42 In strategic spatial planning, the main focus is not on the long-term spatial plan  
43 to be produced, in the sense of blueprint. The focus is actually on the here and

1 now: how can we gain broad and long-term insights to make strategically wise  
2 decisions in our immediate activity horizon (see Bryson and Schively Slotterback  
3 in this volume)? As John Friedmann notes, in strategic spatial planning, the  
4 object 'is not to produce "plans" (not even strategic plans), but insights into  
5 prospective change to encourage and promote public debates about them. [...] It  
6 is a way of probing the future in order to make more intelligent and informed  
7 decisions in the present' (Friedmann *et al.*, 2004: 56). Healey emphasizes a simi-  
8 lar view: 'While strategic thinking may shape planning documents, strategies do  
9 not "live" inside them. They have to be continually "given life" as people call  
10 them up in justifications in the flow of practices' (Healey, 2013: 49). What is  
11 needed is strategic wisdom in planning practices. The objective, then, is not to  
12 produce strategic plans *per se*, but to produce (and reproduce) such strategic  
13 plans that can be used as tools in strategically wise planning practices.

14 This is where the scenario planning method shows its relevance. As argued  
15 above, proper scenarios are not made to serve as forecasts of the future but to offer  
16 foresight into plausible futures in order to inform our decision-making today  
17 (Schwartz, 1991; Zegras and Rayle, 2012). Planning projects, such as redevelop-  
18 ment of former industrial sites and urban densification or completely new neighbor-  
19 hoods, are contingent processes that can take some 20 years only to be planned.  
20 Scenario planning can be a useful tool, not only to manage the vision-making  
21 process and participatory planning of any planning project, but also to help to moni-  
22 tor and guide the process until it is finished. According to Louis Albrechts (2005:  
23 256), '[s]cenarios help us to think about how places/institutions will operate under  
24 a variety of future possibilities and they enable decision-makers/civil society to  
25 detect and explore all or as many as possible alternative futures in order to clarify  
26 present actions and subsequent consequences'. As further noted by Albrechts  
27 (2005: 255), being stories, the scenarios can be integrated with the tradition of  
28 stories in planning (Albrechts, 2005; see also Throgmorton, 1996; Forester, 1999).

29 However, there is a lot of work to be done to fully utilize scenario planning as  
30 part of strategic spatial planning. While there are quite a lot of step-by-step guides  
31 for scenario planners to start from, there are only a few modified guides for  
32 spatial planners (see Petrov *et al.*, 2011). Today, the scenario planning method is  
33 often linked with spatial planning in the cases of big regional and cross-border  
34 projects, through background analysis compiled by experts with a background in  
35 economic geography or public administration, in some cases also think tanks. In  
36 such cases, scenario planning is usually used to create background documents for  
37 visions and strategies. A good example is the planning process around the  
38 connection of the capitals of Finland and Estonia, which has a multitude of  
39 scenario documents of varying quality linked to it (Uusimaa Regional Council,  
40 2004; Demos Helsinki, 2009; Terk, 2012). Such documents often concentrate on  
41 various processes, most notably on investments, business climate, transportation  
42 and governance, but they rarely have spatial implications or a spatial dimension  
43 to the scenarios. This means that the scenario storylines of possible future devel-  
44 opments are seldom played out on a map or a physical plan. If they were, it would  
45 offer a very different understanding and illustration of the impact of each of the

1 scenarios. As noted by Petrov *et al.* (2011: 245): ‘Many stakeholders/policy-  
2 makers are familiar with scenarios work, but less with spatial modeling’.

3 Scenario work has also been mentioned as a typical method of strategic plan-  
4 ning in Europe, the USA, Canada and China (see the chapters by Abbott and  
5 DeMarco, Bryson and Schively Slotterback, Xu and Yeh, Cao and Zheng, Fedeli,  
6 and Olesen and Metzger in this volume). However, a methodological description  
7 of how it is actually carried out is often missing. A likely deduction, then, is that  
8 ‘scenarios’ are used to describe a variety of approaches, starting from the actual  
9 scenario planning method described in this chapter, to mentioning transportation  
10 scenarios or spatial scenarios to denote various models, plans and visions.  
11 Scenario work is also mentioned as a method of participation for various interest  
12 groups involved in the strategic planning process. In the Canadian (Abbott and  
13 DeMarco) and Italian (Fedeli) cases presented in this volume, the need for  
14 scenario planning was rather linked to the need to deal with uncertainties in  
15 general. Even if scenario planning is carried out fully, the related documents are  
16 presented only as an appendix of the actual planning document, thus further  
17 reducing its value and further use (Myers and Kitsuse, 2000).

18 Both vision and scenario planning belong to the family of futures approach and  
19 are both used as techniques in spatial planning alongside the Prospective Through  
20 Scenarios approach. These futures exercises, undertaken by towns, cities and  
21 regions, vary in regard to their aims, structures, budgets, timescales and methodolo-  
22 gies (Krawczyk, 2007). The outcome and quality of any futures approach depends  
23 on who is involved in the process, especially the capabilities of experts behind the  
24 futures methodology (Myers and Kitsuse, 2000; Gaffikin and Sterrett, 2006).

25 Scenarios and visions are thus often mentioned in literature as parts of the  
26 wider strategic planning process, but the actual method or meaning behind the  
27 terms ‘vision’ and ‘scenario’ remains vague, and the terms can be used to mean  
28 almost anything. A vision is not a fantasy, but an ‘optimistic picture of what  
29 might be achieved in a municipality or region given available capacities and  
30 resources’ (Myers and Kitsuse, 2000). The visioning movement has generally  
31 emphasized process and goal-setting over the means of accomplishing the goals.  
32 However, it has been criticized for not meaningfully informing future-oriented  
33 action and for remaining merely a version of future, disconnected from the  
34 present. Similar vagueness is also associated with the use of urban modelling or  
35 models, which is rather regarded as one of the tools for illustrating scenario work.  
36 ‘It assumes a concept of the city, rather than a creation of a conception’ (Healey,  
37 2007). As modelling works on fixed assumptions about the cause–effect relations,  
38 the extensive use of modelling can rather limit the imaginative scope necessary  
39 to perceive urban qualities and dynamics (Healey, 2007).

#### 40 **Strategic Momentum as a Second-order Effect of** 41 **Scenario Planning**

42 In adapting the scenario planning method to strategic spatial planning, we also  
43 have to address the issue of organizational complexity. The business world,

1 where the method has been developed, provides organizational contexts of  
 2 private enterprises and corporations that are considerably simpler in their goal-  
 3 setting and distribution of duties than the world of spatial planning, where the  
 4 relationships between the public and private sectors and the civil society are  
 5 complicated. Whose strategic practice are we talking about? The local or regional  
 6 government that is in charge of making the strategic plans, or also the stakehold-  
 7 ers (e.g. developers, investors, citizens, non-governmental organizations) who are  
 8 needed in implementing the strategic decisions and in giving legitimacy to the  
 9 decision processes themselves, but who also have strategic practices, and related  
 10 motivations, of their own? Whereas in the business world the organizational  
 11 boundaries are relatively clearly defined, spatial planning has fuzzy boundaries  
 12 involving multiple organizations, thus making it difficult to determine who and  
 13 what is inside and outside. As noted by Christopher Zegras and Lisa Rayle (2012:  
 14 314), 'given heterogeneous participants with different realms of influence, factors  
 15 clearly external to one organization might be within the influence of another,  
 16 making it difficult to separate scenarios that represent uncertainties from scenar-  
 17 ios that represent possible strategies'.

18 On the other hand, Zegras and Rayle (2012) emphasize the potentiality of  
 19 scenario planning to overcome the difficulties of organizational complexity in  
 20 strategic spatial planning. At best, scenario planning becomes an educational and  
 21 transformative exercise that may 'persuade participants to dislodge pre-existing  
 22 views, improve understanding of the organizational context, provide a common  
 23 instrument of communication among disparate actors, and encourage relation-  
 24 ships among participants. In particular, the scenario planning process may be a  
 25 means of building networks and initiating collaboration' (Zegras and Rayle,  
 26 2012: 303). Scenario planning can thus also be a capacity-building exercise,  
 27 widening narrow perspectives, revealing the stakeholders' mutual interdependen-  
 28 cies and inviting joint momentum towards an envisioned future. Zegras and  
 29 Rayle regard such collaboration-inducing properties of scenario planning as its  
 30 'second-order effects' (Zegras and Rayle, 2012: 305).

31 With her concept of strategic framing, Healey has such second-order effects in  
 32 mind. In Healey's view, strategic framing brings together local resources and  
 33 imaginative visioning into a setting that invites the actors to change their thought  
 34 and action schemes and their approaches to each other (Healey, 2009: 451).

35 Spatial strategies get to 'work' by providing an orientation, or reference  
 36 frame, which gets shared by many stakeholders in urban development  
 37 processes. [...] Spatial strategies which get to have transformative effects  
 38 accumulate the power to frame discourses and shape action through their  
 39 resonance with issues and problems which are causing concern within a  
 40 political community, or 'polity', and through the persuasive power of their  
 41 core arguments and metaphors. (Healey, 2009: 441)

42 In attempting such joint momentum towards strategic action, Healey stresses the  
 43 role of critical judgement:



356 *Conceptual and Critical Nodes in Strategic Planning*

1 [W]hat is the momentum for an explicit spatial strategy-making initiative?  
 2 What forces and actors are driving this? [...] How strong is the momentum?  
 3 Can it be strengthened and what might weaken it? [...] How are the initiators  
 4 situated in relation to this momentum, and how am 'I' as an actor in such a  
 5 process situated, in terms of role, skills, potential to exert influence and  
 6 legitimacy? (Healey, 2009: 443)

7 Most importantly: 'What seems to be at stake and around which issues will criti-  
 8 cal judgements have to be made?' (Healey, 2009: 443).

9 Healey regards critical judgement in strategic framing as a 'practical art'  
 10 (Healey, 2009: 440), but here her notion of 'art' is different from Schwartz's  
 11 notion of the 'art' of scenario planning. Healey's 'practical art' addresses the  
 12 'second-order' level of scenario planning, while Schwartz's 'art' remains at the  
 13 'first-order' level. Schwartz sees scenario planning as an art in the sense of being  
 14 able to create coherent narratives of alternative futures, integrating existing and  
 15 imagined driving forces in a given activity horizon. Healey, in turn, deals with  
 16 the 'practical art' of framing the produced palette of alternative scenarios, in the  
 17 sense of identifying a desired scenario and probing on the initiatives, arrange-  
 18 ments and decisions to be made, in order to gain consent and joint momentum  
 19 behind this scenario. For Healey, this is less an art of creative production and  
 20 more an art of dealing with people in politically contentious contexts.

21 However, Ogilvy (2006) additionally stresses the role of desire in critical  
 22 judgement. Desire often misreads facts, meaning that our values, hopes and  
 23 biases can cause us to misread evidence. Alternative scenarios are the medium to  
 24 represent the age-old dialectic of the creative art of what we want and the science  
 25 of what must be. For Ogilvy, scenario planning should strive towards articulating  
 26 shared hopes in order to move towards futures we truly desire not towards futures  
 27 that must be.

28 Next, we will elaborate on these different types of capacity, which are neces-  
 29 sary in strategic spatial planning utilizing scenario planning. For this purpose, we  
 30 will draw on the three 'intellectual virtues' that Aristotle identified in his  
 31 *Nicomachean Ethics*.

### 32 **Aristotle's Three Intellectual Virtues in Strategic** 33 **Spatial Planning**

34 The first of Aristotle's intellectual virtues, 'episteme', is familiar today as the  
 35 etymological origin for the word 'epistemic'. Episteme concerns knowledge that  
 36 is universal and invariable in time and space and achieved with the aid of analyti-  
 37 cal rationality. It corresponds to the modern scientific ideal, as expressed in  
 38 natural science. With the Enlightenment tradition, this scientific ideal has become  
 39 dominant. According to Flyvbjerg (2004: 285), '[t]he ideal has come close to  
 40 being the only legitimate view of what constitutes genuine science, such that even  
 41 intellectual activities like planning research and other social sciences, which are  
 42 not and probably never can be scientific in the epistemic sense, have found

1 themselves compelled to strive for and justify themselves in terms of this  
 2 Enlightenment ideal'. Accordingly, in the beginning of this chapter we noticed  
 3 the hegemony of the evidence-based approach in the production of knowledge in  
 4 planning. In scenario planning, the episteme type of inquiry would concentrate on  
 5 knowledge regarding existing conditions and development paths and their projec-  
 6 tions to the future.

7 Aristotle's second virtue, 'techne', can be translated into English as 'art' in the  
 8 sense of 'craft' (Flyvbjerg, 2004: 286). Unlike episteme, techne does not deal with  
 9 the universal truths of existence; instead, it has to do with the goal-oriented produc-  
 10 tion of new things. According to Flyvbjerg (2004: 286), '[p]lanning research prac-  
 11 ticed as techne would be a type of consulting aimed at arriving at better planning by  
 12 means of instrumental rationality, where "better" is defined in terms of the values  
 13 and goals of those who employ the consultants, sometimes in negotiation with the  
 14 latter'. Regarding scenario planning, we associate the 'craft' of techne with the abil-  
 15 ity to produce imaginative, yet convincing, scenarios that are not mere projections  
 16 of existing trends. However, we do not see them as instrumental in the sense of  
 17 producing a scenario for a given goal, but rather as explorative in their effort to  
 18 generate plausible scenarios that can be deemed both desirable and undesirable.

19 Aristotle's third intellectual virtue, 'phronesis', concerns practical wisdom and  
 20 ethics. It has to do with deliberation on how things ought to be done for the  
 21 purpose of doing well, of making ethical choices. It does not deal with the invari-  
 22 ables of episteme, as you cannot deliberate and make ethical judgements on the  
 23 eternal truths. Thus its concern is on the context-dependent variability of produc-  
 24 tion – yet, itself, phronesis is not production in the sense of techne, but action. As  
 25 Aristotle says, 'production aims at an end other than itself; but this is impossible  
 26 in the case of action, because the end is merely doing well' (*Nicomachean Ethics*,  
 27 cited in Flyvbjerg, 2004: 287). Phronesis is closely associated with political  
 28 action, which, according to Hannah Arendt (1958), was treated in ancient Greek  
 29 political philosophy as an art among other arts. Contrary to the 'productive arts',  
 30 such as painting and sculpture, it was likened to such activities as healing or  
 31 navigation, where, as well as in a dancer's or play-actor's performance, the 'prod-  
 32 uct' is identical with the performing act itself (Arendt, 1958: 207). As in dancing,  
 33 where the dance is brought to existence and maintained by the very activity of  
 34 dancing, the political community is created and maintained by people acting  
 35 politically. Political action is an end in itself, and it is not instrumental to any  
 36 external purpose. Regarding strategic spatial planning, we associate Healey's  
 37 notion of critical judgement with phronesis. It is a practical art of political action  
 38 that aims to develop a 'community of inquiry' of strategic planning.

39 Thus, we can link Aristotle's three intellectual virtues to the three capacities of  
 40 strategic spatial planning, suggested in our Introduction, as follows:

- 41 • episteme – the capability to provide scientific evidence on the local-historical
- 42 developments and trends that exist;
- 43 • techne – the capability to create scenario stories, stretching towards the
- 44 possible future from that which exists;

358 *Conceptual and Critical Nodes in Strategic Planning*

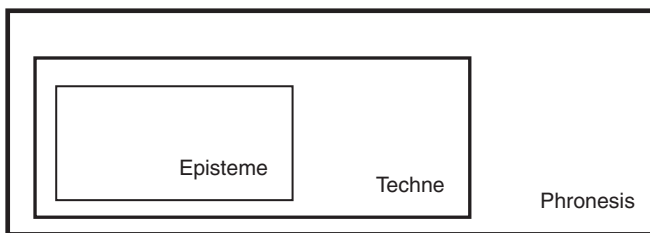
- 1 • phronesis – the capability to critically judge which future scenario we value  
 2 as desirable, and to decide on the actions to be taken in striving for it.

3 For Aristotle, phronesis was superior to the other two virtues. Using Max  
 4 Weber’s distinction between instrumental and value rationality, Flyvbjerg reformu-  
 5 lates Aristotle’s argument by stating that ‘[p]hronesis is most important  
 6 because it is that activity by which instrumental rationality is balanced by value-  
 7 rationality’ (Flyvbjerg, 2004: 285). Concerning strategic spatial planning, we also  
 8 regard phronesis as superior to episteme and techne, in the sense of the ‘second-  
 9 order’ framing of plausible scenarios and judging critically which scenario to  
 10 hold as desirable and how political consensus and momentum can be gained  
 11 behind it. Accordingly, in scenario planning, as a constituent of strategic spatial  
 12 planning, techne can be seen as superior to episteme. Through creating scenario  
 13 stories, it frames the relevance of evidence on existing local properties and  
 14 resources, and development trends, integrating it narratively with imagined future  
 15 development directions and possibilities. Conversely, episteme can be seen as a  
 16 knowledge resource for the techne of imaginative scenario stories, which, in turn,  
 17 can be seen as a resource of providing alternative future development paths for  
 18 the phronesis of choosing a desirable path.

19 Hence, all of Aristotle’s intellectual virtues are essential for strategic spatial  
 20 planning utilizing scenario planning. Flyvbjerg’s claim is that the phronetic  
 21 approach is most appropriate in planning research, which in his interpretation  
 22 would focus especially on detailed case analysis and normative reflection of  
 23 power in planning (Flyvbjerg, 2004). We, however, emphasize that for under-  
 24 standing and learning strategic spatial planning, whether as researchers or practi-  
 25 tioners, we need to grasp the interplay of all of Aristotle’s three intellectual  
 26 virtues: how phronesis frames techne, and how, in turn, techne frames episteme.

27 **Conclusion**

28 For strategic spatial planning, scenario work is a valuable tool, in its attempt to  
 29 identify critical uncertainties and opportunities for longer-term development, and  
 30 to base its strategically wise choices here and now. However, there is much room  
 31 for methodological development to fully utilize the potential of scenario work.



*Figure 21.1* The nested hierarchy of Aristotle’s three intellectual virtues in strategic spatial planning utilizing scenario planning

1 While there is a lot to learn from the elaborate scenario planning methods devel-  
 2 oped in the world of business management, they tend to neglect the spatial impli-  
 3 cations and resources related to scenario work. On the other hand, strategic  
 4 leadership in business management is less complicated than in strategic spatial  
 5 planning, where the stakeholders are more diverse, new networked governance  
 6 forms are ambiguous in their relationship to existing institutional governance  
 7 structures, and thereby the political legitimacy of strategic governance is often  
 8 contested. The strategic leadership ideas are thus not straightforwardly applicable  
 9 in the context of strategic spatial planning. What is perhaps most valuable to learn  
 10 from the corporate world, though, is its readiness to explore also those plausible  
 11 scenarios that go against the normative visions. Such readiness can be much more  
 12 difficult to achieve in the political world of public governance.

13 Indeed, the capability to explore various scenarios without prior judgement  
 14 makes scenario work a most useful planning instrument. It utilizes our imagina-  
 15 tive powers to frame the scope of possibilities, and thereby shapes the agenda for  
 16 critical judgements on what to choose as the normative scenario and what deci-  
 17 sions need to be made in striving for it. In the format of rhetorically strong stories  
 18 (both verbally and visually), the scenarios, as a medium, can be easily accessible  
 19 beyond disciplinary and cultural boundaries, inviting broad political dialogue.  
 20 Thus, they have potential for widening perspectives, revealing mutual interde-  
 21 pendencies and generating joint momentum towards an envisioned future. These  
 22 second-order effects of scenario planning are instrumental for establishing such  
 23 strategic framing capacities that Healey recognizes to be at the core of strategic  
 24 spatial planning.

25 In our view, planning, especially strategic spatial planning, requires the full  
 26 utilization of all of Aristotle's three intellectual virtues. This is emphasized when  
 27 strategic spatial planning utilizes the foresight of scenario planning. In turn, if  
 28 reduced only to forecasting, often based solely on precedent and analogy,  
 29 scenario work loses much of its intellectual and transformative potential. In  
 30 Aristotle's terms, it overlooks our intellectual virtues of phronesis and techné,  
 31 relying only on episteme. As such, scenario work may perform as a tool of analy-  
 32 sis, but not as a proper planning instrument.

### 33 Notes

- 34 1 With the concept 'spatial planning' we refer to a view (or set of views) on planning,  
 35 recently emerged in continental Europe, that Haughton *et al.* (2010: 5) identify to have  
 36 four key dimensions: (1) long-term strategic thinking that draws on visions agreeable by  
 37 the stakeholders; (2) a policy mechanism for bringing together and building coherence  
 38 between the different policy branches of governance; (3) a central tool for bringing  
 39 society to a more sustainable development path; and (4) an emphasis on openness and  
 40 inclusivity of planning to wider groups of society. With the notion of 'strategic spatial  
 41 planning' we, in turn, refer especially to those approaches to spatial planning that  
 42 emphasize the first dimension.
- 43 2 The SWOT analysis is a structured planning method used to evaluate the strengths,  
 44 weaknesses, opportunities and threats involved in a project or in a business venture.

360 *Conceptual and Critical Nodes in Strategic Planning*

- 3 The Delphi method is a structured communication technique, originally developed as  
 2 a systematic, interactive *forecasting* method, which relies on a panel of experts. The  
 3 experts answer questionnaires in two or more rounds. After each round, a *facilitator*  
 4 or change-agent provides an anonymous summary of the experts' forecasts from the  
 5 previous round as well as the reasons they provided for their judgements.

6 **References**

- 7 Albrechts, L. (2005). Creativity as a drive for change. *Planning Theory* 4(2), 247–269.  
 8 Albrechts, L. (2015). Ingredients for a more radical strategic spatial planning. *Environment  
 9 and Planning B: Planning and Design*, 42, 510–525.  
 10 Arendt, H. (1958). *The human condition*. Chicago, IL: The University of Chicago Press.  
 11 Chakraborty, A., Kaza, N., Knaap, G.-J. and Deal, B. (2011). Robust plans and contingent  
 12 plans. *Journal of the American Planning Association*, 77 (3), 251–266.  
 13 Davoudi, S. (2012). The legacy of positivism and the emergence of interpretive tradition  
 14 in spatial planning. *Regional Studies*, 46 (4), 429–441.  
 15 Demos Helsinki (2009). *Talsingi/Hellinn*. [pdf] Tallinn: Helsinki-Tallinn Euregio and  
 16 Helsinki city. [pdf] Available at: [http://www.demoshelsinki.fi/wp-content/  
 17 uploads/2012/11/TalsinkiHellinna\\_EST.pdf](http://www.demoshelsinki.fi/wp-content/uploads/2012/11/TalsinkiHellinna_EST.pdf) [accessed 9 July 2015].  
 18 Flyvbjerg, B. (1992). Aristotle, Foucault and progressive *phronesis*: Outline of an applied  
 19 ethics for sustainable development. *Planning Theory*, 7–8 (Summer–Winter), 65–83.  
 20 Flyvbjerg, B. (2004). Phronetic planning research: Theoretical and methodological reflec-  
 21 tions. *Planning Theory and Practice*, 5(3), 283–306.  
 22 Forester, J. (1999). *The deliberative practitioner: Encouraging participatory planning  
 23 processes*. Cambridge, MA: MIT Press.  
 24 Friedmann, J. *et al.* (2004). Strategic spatial planning and the longer range. *Planning  
 25 Theory and Practice*, 5(1), 49–67.  
 26 Gaffikin, F. and Sterrett, K. (2006). New visions for old cities: The role of visioning in  
 27 planning. *Planning Theory and Practice*, 7(2), 159–178.  
 28 Garreau, J. (1994). The Global Business Network. *Wired* 2(11), 98.  
 29 Haughton, G., Allmendinger, P., Counsell, D. and Vigar, G. (2010). *The new spatial plan-  
 30 ning: Territorial management with soft spaces and fuzzy boundaries*. Abingdon: Routledge.  
 31 Healey, P. (2007). *Urban complexity and spatial strategies: Towards a relational plan-  
 32 ning for our times*. London: Routledge.  
 33 Healey, P. (2009). In search of the 'strategic' in spatial strategy making. *Planning Theory  
 34 and Practice*, 10(4), 439–457.  
 35 Healey, P. (2013). Comment on Albrechts and Balducci 'Practicing Strategic Planning'.  
 36 *DisP*, 49(3), 48–50.  
 37 Hillier, J. (2011). Strategic navigation across multiple planes: Towards a Deleuzean-  
 38 inspired methodology for strategic spatial planning. *Town Planning Review*, 82(5),  
 39 503–527.  
 40 de Jouvenel, H. (1999). 'You must discover trends not to be caught unprepared', interview  
 41 with J. Rodrigues [online]. Available at: [http://gurus.janelanaweb.com/uk/conteudos/  
 42 jouvenel2.html](http://gurus.janelanaweb.com/uk/conteudos/jouvenel2.html) [accessed 22 June 2015].  
 43 de Jouvenel, H. (2004). *An invitation to foresight*. Trans. H. Fish. Paris: Futuribles.  
 44 Kahn, H. (1962). *Thinking about the unthinkable*. New York: Horizon Press.  
 45 Konno, N., Nonaka, I. and Ogilvy, J. (2014). Scenario planning: The basics, world futures.  
 46 *The Journal of New Paradigm Research*, 70(1), 28–43.

- 1 Krawczyk, E. (2007). Geography, planning and the future. In P. van der Duin, ed.,  
2 *Knowing tomorrow? How science deals with the future*. Delft: Eburon, Chapter 7.
- 3 Krizek, K., Forsyth, A. and Slotterback, C. A. (2010). Is there a role for evidence-based  
4 practice in urban planning and policy? *Planning Theory and Practice*, 10(4), 459–478.
- 5 Myers, D. and Kitsuse, A. (2000) Constructing the future in planning: A survey of theories  
6 and tools. *Journal of Planning Education and Research*, 19, 221–231.
- 7 Ogilvy, J. (2006). Scenario planning, art or science? *World Futures: The Journal of New*  
8 *Paradigm Research*, 61(5), 331–346.
- 9 Petrov, L. O., Shahumyan, H., Williams, B. and Convery, S. (2011). Scenarios and indica-  
10 tors supporting urban and regional planning, *Procedia- Social and Behavioral Sciences*,  
11 21, 243–252.
- 12 Schwartz, P. (1991). *The art of the long view*. New York: Doubleday.
- 13 Terk, E. ed. (2012). *Twin city in making: Integration scenarios for Tallinn and Helsinki*  
14 *capital regions*. [pdf] Tallinn: Tallinn University Estonian Institute for Future Studies.  
15 Available at: [https://www.tlu.ee/UserFiles/Eesti%20Tuleviku-uuringute%20Instituut/  
16 twin\\_city\\_veebi.pdf](https://www.tlu.ee/UserFiles/Eesti%20Tuleviku-uuringute%20Instituut/twin_city_veebi.pdf) [accessed 9 July 2015].
- 17 Throgmorton, J. A. (1996). *Planning as persuasive storytelling: The rhetorical construc-*  
18 *tion of Chicago's electric future*. Chicago, IL: The University of Chicago Press.
- 19 Uusimaa Regional council (2004). *UTU35: A future for you too? Uusimaa 2035: Scenario*  
20 *project*. [pdf] Helsinki: Uusimaa Regional council. Available at: [http://www.  
21 uudenmaanliitto.fi/files/6168/UTU35\\_A\\_future\\_for\\_you\\_too](http://www.uudenmaanliitto.fi/files/6168/UTU35_A_future_for_you_too). [accessed 9 July 2015].
- 22 Wack, P. (1985). Scenarios: Uncharted waters ahead. *Harvard Business Review*, 63(5),  
23 73–89.
- 24 Zegras, C. and Rayle, L. (2012). Testing the rhetoric: An approach to assess scenario plan-  
25 ning's role as a catalyst for urban policy integration, *Futures*, 44, 303–318.

Taylor & Francis  
Not for distribution