13. Expecting the unexpected

Decision-centred models of planning in disruptive times

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Introduction

Professional planning has been defined as social action with the ambition to shape the future and the obligation to be rational (Siebel, 2006). While this definition is rather straightforward, the operationalization of what actually constitutes rationality is intricate and contested. There are different understandings of rationality, ranging, for example, from the scientific approach predominant in models of comprehensive planning which Rittel and Webber alluded to as 'systems analysis' (1973: 156), to the rationality of 'muddling through' (Lindblom, 1959: 79) as proposed in incrementalist approaches. Contemporary planning theory has increasingly focused on the political character of planning processes, and on negotiations among self-interested stakeholders and power constellations, as well as how to break these up by way of deliberative, communicative, and/or agonistic approaches (e.g. Hesse and Kühn, 2023). Such approaches advance the idea of a political rationality of planning where good solutions are found in processes of consensus building or conflict resolution among multiple stakeholders. By ascending to a level of meta-rationality, other contributors reflect upon the strengths and weaknesses of diverse individual approaches to rationality and find rationality in combining different approaches in productive ways while enduring their contradictions (Siebel, 2006; Ibert, 2009).

Decision-centred models of planning, which have been introduced in the field of spatial planning by Andreas Faludi (1985), specify the rationality that sets professional planning apart from other types of future-making activities by focusing on the professional planner as a decision maker. As a vantage point

of theorizing, this model, in short, describes planning as a reflexive process of decision-making during which decisions are made about decisions (Luhmann, 1971). Decision-centred models of spatial planning have been influential (and contested) for some decades, although they have received less attention more recently. In particular the timely approaches of deliberative and/or agonistic planning have delegated the planner as a professional expert for decision-making increasingly into subordinate roles of process organizers – or sometimes even as one of several participants in multi-stakeholder bargaining plays.

With a critical reinvigoration of decision-centred models of spatial planning, this chapter seeks to refocus on planners as professionally trained decision makers with a central role in future-making processes. Moreover, while the concept of rationality has been discussed widely in debates on planning theory, the boldness inherent in the ambition to *shape the future* has rarely been examined or problematized to date. This shortcoming also holds true for decision-centred models of spatial planning. Such models assume that planning precedes action. Subsequent decisions made in the course of action, which always have to be made under time pressure and immersed in a practical situation, achieve a higher degree of rationality if being prepared through planning (Faludi, 1985). This simple and compelling conceptualization of planning as a sequence of two distinct decision making activities, however, presupposes that planners when they are planning understand well the situation in which operational decisions will be made in the future. The implicit assumption is that planners have reliable expectations about the future when they plan – a problematic assumption, given diagnoses of the times that emphasize that we are witnessing 'disruptive' (Ibert et al., 2022) times and inhabit an increasingly 'turbulent world' (Scoones, 2024), but also when taking into account the increasing number of empirical observations of multiple crises, extreme events, market shocks, violent conflicts or political upheavals. Against this background, the contribution of this chapter is to explore avenues to advance a novel approach to decision-centred models of planning in which the only certainty about the future is that it most likely will be disruptive.

In the next section, the decision-centred model of professional planning is introduced and critically interrogated. Subsequently, a heuristic notion of disruption is synthesized from the rapidly evolving literature. Finally, important modifications necessary to make the decision-centred model of planning robust in the light of disruption are introduced, namely (1) responding to short-term challenges while maintaining long-term orientation, and (2) accomplishing short-term objectives while enhancing long-term flexibility.

Decision-centred models of planning

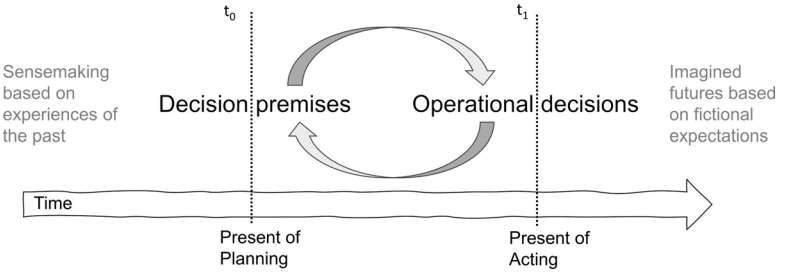
Decision-centred models of (spatial) planning are just one of several possible approaches to theorizing planning. The sociologist Niklas Luhmann (1971) defines the social activity of planning as a reflexive process of decision-making or, in short, as 'decisions about […] decision premises' (Luhmann, 2015: 29). By linking planning with decision-making, the social activity of planning becomes deeply rooted in everyday live. Planning can be seen as 'a prosaic, and ubiquitous, fact of life. It is always with us, in one way or another, because we are constantly either doing it ourselves or we are part of someone else's plan' (Clarke, 1999: 1). However, even in private circumstances, people sense a distinction between decisions with consequences for the future that can be made spontaneously, intuitively or simply by following traditions or societal expectations (see March, 1982, on 'decisions of appropriateness'), on the one hand, and decisions with the 'obligation to be rational' (Rittel and Webber, 1973; Siebel, 2006), on the other. Consider, for instance, the difference between making a choice about what movie to watch at the theatre tonight vis-à-vis a decision about enrolling with a university programme – both choices affect one's future, however, the first one can be taken spontaneously, while the second one calls for rationality, e.g. identifying different alternative choices, understanding the consequences of each alternative and valuing the consequences against the background of existing preferences.

The argument advanced here about the rationality of planning is less a claim of superiority in favour of rational choice models of decision-making. Rather, it is an argument in the pragmatist tradition that foregrounds the practical usefulness of planning in some social situations. Lee Clarke (1999) has introduced the distinction between the 'functional' and 'symbolic' values of planning. With regard to functionality, the obligation to act rationally is indeed expected to provide an extra value, for example, in the form of evidence-based decisions, systematic assessment of existing alternatives, enhanced certainty about future consequences or a more systematic valuation of alternative choices. With regard to the symbolic dimension, however, Clarke points out that the very fact that planning took place can be (mis)used to legitimate decisions by signifying 'control' and 'competence' to external stakeholders. 'Under conditions of high uncertainty the promise and apparatus of planning itself becomes mainly *rhetorical*, becomes means by which plans – independently of their functional relevance to the task – can be justified as reasonable promises that exigencies can be controlled' (Clarke, 1999: 4; emphasis in original).

The decision-centred model of planning, however, is not primarily concerned with planning as an everyday activity of individuals, but rather with *professional* planning as a collective and organized social activity as it is prevalent, for instance, in strategic management. According to Luhmann (1971; 2015), in a professional context, necessary conditions for true choices are a certain degree of 'arbitrariness' (Luhmann, 2015: 18) on the side of the decision maker, and a degree of uncertainty in the situation in which a decision is made. Only in such situations, Luhmann's argument goes, are professionally trained decision makers needed. If, in contrast, choices were fully determined and the situation completely transparent, a specialized and authorized decision maker whose decisions make a difference is neither plausible nor necessary (Luhmann, 2015). Moreover, unlike in everyday life, where planning and execution of a plan are usually made by the same individuals or groups, in a professional context planning is seen as the domain of professional planners. Deciding about decision premises (planning) and making operational decisions, in other words, have to be seen as separate tasks, executed by trained specialists and undertaken in distinct social contexts.

In decision-centred models, the functional claim of rationality lies in the fact that the process of decision-making takes two loops. In his seminal article Andreas Faludi (1985) introduces the notion of the 'operational decision' to denote those decisions that are made in the course of action, whereas a plan denotes a 'framework which guides us in our actions' (Faludi, 1985: 241) and thus supports operational decision-making. The process of developing and adapting this framework (in Luhmann's words: 'deciding about decision premises') is called 'planning' (ibid.). The rationality of planning is demonstrated by the fact that operational decisions no longer have to be made under time pressure and ad hoc but rely on already carefully elaborated decision premises. Even though decision makers of operational decisions are fully immersed in a situation they can make superior choices as they benefit from preparatory work that could be undertaken in advance, detached from the pressures and expectations characterizing a particular situation and without the immediate necessity to come to terms. With this definition, Faludi takes up and develops further Luhmann's (1971) idea of planning as a reflexive process of decision-making: 'The point of planning is seen as influencing operational decisions. […] If planning can *not* exert this influence, then it is not worth doing' (ibid.: 241; emphasis in original). With the distinction between operational decisions and decision premises, the temporal dynamics in processes of decision-making come to the fore (Figure 1).

Figure 1: Past, present, and future in the decision-centred model of planning.



Source: Author. Based on Luhmann, 1971; Faludi, 1985; Emirbayer and Mische, 1998; Beckert, 2016.

Decision premises pre-structure subsequent decisions; they simultaneously enable and constrain the space within which decision-making can happen. Decision premises can be more or less constraining, depending on the topic or the issue they are directed to. Furthermore, decision premises can take different shapes, for example, as 'programmes' (a fixed procedure of steps to be executed in predefined situations), 'role expectations' (predetermined communication within an organization) or 'personal traits' (individual value preferences, abilities or social responsiveness) (Luhmann 2015: 30f.).

Andreas Faludi (1985) presented an adaptation of decision-centred models of professional planning to the sphere of *spatial* planning. His intention was to integrate rather context-free 'processual' models of planning (such as, for instance, Luhmann's) with the specific requirements of environmental planning as represented by 'substantivist' approaches (ibid.: 239). For Faludi, the object of environmental planning is not the physical environment but, rather, '*the sum total of all operational decisions which the authority concerned could take with respect to environmental measures being addressed to land decision units (respectively to their title holders) within its jurisdiction*' (Faludi, 1985: 251, emphasis in original).

In comparison to other forms of professional planning, the distinctiveness of *spatial* planning is that it does not primarily address decisions within a single organization but is geared towards a multitude of 'land decision units' (ibid.) within the sphere of influence of a planning authority. Imagine, for instance, land use plans that cover certain territories and address all landowners within those territories who make operational decisions when developing their properties. These units represent sub-territories, each under individual (public or private) ownership, and each with a unique relational position in space and

equipped with specific sets of resources. These land decision units are influenced by multiple policy measures created in different parts of the administrative system, such as housing policies, economic development policies or ecological legislation, and distributed across scales in multilevel systems, from the local to the national or even supra-national level. Land ownership is most likely driven by self-interests. As each land unit occupies a unique location in geographical space, it represents a particular position from which operational decisions are made. Furthermore, these units are interrelated. The mutual influence between land decision units depends on how proximate or distant the locations are and how immediately they affect each other.

From a decision-centred point of view, the functional superiority of planning is seen in the existence of a framework that affords the possibility to consider multiple decisions in their interrelatedness. Taking operational decisions in spatial planning requires insights into a complex spatio-temporal system as well as into multilevel, public-private governance constellations (Faludi, 1985):

In the *temporal* dimension, plans afford operational decision-making in the course of action. In concrete, dynamically evolving situations, there is usually not enough time for proper preparation during operational decisions (Faludi, 1985). Therefore, all efforts previously invested in the design of decision premises allow operational decision makers to respond quickly in the course of action *and* to be well-prepared, as they have already identified the spectrum of choices, considered their consequences, and valued possible outcomes. Moreover, as decision premises have validity for several subsequent decisions, planning offers a chance that several decisions made at different points in time by different actors point in a similar direction, as is theorized, for example, in the notion of 'perspectival incrementalism' (Sieverts and Ganser, 1993).

In the *spatial* dimension, plans provide frameworks that allow participants to consider the particular positionality of land decision units, which each respond differently to policy measures due their unique location in space and which are mutually inter-related. This includes consideration of the different self-interests of landowners as well as public and private agendas with regard to land use. A plan, in other words, offers a chance that multiple decisions, made from different positions by operational decision makers with divergent interests, contribute to an overarching coherence nevertheless.

In the *institutional* dimension, plans afford a comprehensive view of different measures made by different state authorities located on different scales and/or in different sectors of the political-administrative system. Planning thus promises to coordinate such measures in a way that maximizes mutual

support and/or minimizes contradictory effects. Here again, the effects of measures on different decision makers can be considered.

Limitations of decision-centred models of planning

The decision-centred model of planning has never been undisputed, and it continues to create severe ambiguities in the practices of planning and strategic management (e.g. Rittel and Webber, 1973; March, 2006; Kornberger et al., 2019). However, such ongoing struggles indirectly assert the enduring relevance of the model. The rationality advantages outlined above are first and foremost promises, not evidence-proven performances of planning as will be demonstrated in the following paragraphs. Limitations of the decision-centred model of planning are related to the impossibility for planners to step aside the situation they are planning for, the moderate level of complexity that can be processed in planning processes as well as the neglect of power asymmetries. Most importantly, this chapter will discuss the insufficient conceptualization of uncertainties related to future making, especially in times which are characterized by disruption.

First, restrictions are related to the degree of complexity and the quality of uncertainty of the social context in which planning takes place. Planning does not make sense in very simple, transparent or fully determined situations (Luhmann, 2015), rather, an obligation to decide rationally is mainly felt in the face of some uncertainty and complexity. James G. March argues that rational technologies have good success rates, although 'these successes have not been repeated reliably in more complex situations' (March, 2006: 207). In a similar vein, Clarke (1999) seconds that planning works fairly well when the level of uncertainty is moderate, but as soon as the level of uncertainty increases, planning is no longer useful with regard to functionality. Instead, its symbolic value predominates. In this case, planning is likely to produce little more than 'fantasy documents' whose main practical usefulness is to signal control to external stakeholders where in fact there is no control. Contingency planning denotes an approach that contains 'actions that may or may not be executed, depending on the circumstances that hold at the time' (Pryor and Collins, 1996: 289). Such plans incorporate uncertainty by preparing for a set of contingencies and matches them with appropriate actions. However, as such plans simply incorporate complexity, they are very slow in responding to dynamic situ-

ations. Therefore, they work only in narrow and rather clearly arranged fields of application.

Second, decision-centred models of planning are relatively blind to questions of power asymmetries, even though, of course, in the practice of planning, the possibilities of successfully pursuing one's own interests are unequally distributed among the participants of a planning process, as political and conflict-theoretical approaches reiterate (Reuter, 2000). Within the decision-centred model, power can be addressed, but problems arising from power asymmetries cannot be resolved. With the professionalization of the planning function, the activities of making decision premises are delegated to a specialized group of actors that is no longer responsible for operational decision that become salient during implementation. This raises concerns about who actually has the legitimacy to create decision premises for other constituents. Furthermore, a dilemma of implementation can arise when actors responsible for decision-making in operation have not been involved in creating the decision premises. They might, for example, be unwilling or feel unable to act accordingly or they may pursue different interests. In the sphere of spatial planning, the implementation dilemma is even more pronounced, as here, usually state actors are assumed to create decision premises while private actors make operational decisions that actually change the socio-material space. Against this background, the growing power asymmetry between state actors and the private sector undermines the applicability of decision-centred models of spatial planning.

Third, decision-centred models of spatial planning include rather traditional ideas of rationality in the sense that 'cognition precedes action' (Kornberger et al., 2019). This assumption, however, is problematic as it suggests that it is possible to step out of the situation in order to reflect carefully upon possible actions and their consequences and to step in again, after having come to terms. However, Horst W.J. Rittel and Melvin M. Webber (1973) have reminded us that one of the 'dilemmas of planning' is that it necessarily takes place in situ and in real time. Hence, it is practically impossible to be rational, as both the exploration of alternative choices and the consideration of the respective consequences of those choices lead to potentially ever more loops of reflections, e.g. considering the consequences of consequences ad infinitum. Hence, in practice, they argue, there is no logical point to terminate a planning process. Moreover, as planning itself also has consequences, it would be necessary to also reflect on the consequences of a planning process before starting it. Again, there is no natural entry point to initiate a planning process, as these consider-

ations can be continued endlessly. Finally, if one nevertheless succeeds in starting planning, one soon realizes that the object of planning will evolve permanently. While forging decision premises, ongoing operational decisions create their own consequences. And these cannot be part of the plan. This last point reassures us that the analytical distinction between decision premises and operational decisions can easily become blurry in practice, as any decision made most likely changes the situation for subsequent decisions. Thus, operational decisions turn into decision premises as a matter of fact (Luhmann, 2015) with or without an intention behind that.

This chapter takes issue with the ambition of planning to shape the future and seeks to expand on the latter group of limitations. By putting the act of deciding centre-stage, decision-centred models of (spatial) planning enact a temporal order, similar to the model of social agency (Emirbayer and Mische, 1998), in which the moment of decision constitutes the present and separates the past, which can no longer be changed (but can, of course, be reinterpreted) from the future, where it has effects. When planning, planners make decisions about decision premises in the present in order to open up a space of possibility for operational decisions to be made in the future (Luhmann, 2015). At the same time, they reduce uncertainty through determining certain fixes with their decisions (Aspers, 2018). Operational decisions, in turn, constitute a present that benefits from efforts made in the past to constitute a framework for decision-making (Figure 1).

Planning is future oriented. As the future is by definition unknown, even unknowable, decisions in the present have to deal with uncertainty (Dequech, 2011; Scoones, 2024), in the sense that 'we cannot predict or foresee what will happen when acting or not acting' (Aspers, 2018: 133). Jens Beckert (2016) argues that social actors have to deal with this uncertainty in a productive way, otherwise they are overwhelmed by contingency and paralyzed by a state of undecidedness. In order to be able to make decisions with far-reaching consequences, Beckert (2016) argues, participants need 'fictional expectations' about the future. By confidently pretending to know about the future, they overcome the paralysis of not knowing and bring themselves into a new position in which it becomes possible again to make decisions. Of course, these decisions have consequences on the future, they might in fact contribute crucially to create the foreseen future. Such confidence and the related performative creation of the future is arguably also an intrinsic feature of planning. will primarily discuss a fourth type of restriction: 'future expectations' (Beckert, 2016).

Two decisive questions are thus: What kind of future is imagined when making decisions about decisions? And how accurate are the future expectations from the past that are inscribed into the decision-making premises in the light of the present in which operational decisions are actually made? The problem of inaccurate future expectations becomes even more severe in the light of recent debates that advance the idea that we are witnessing times of disruption in which mankind is more frequently than ever confronted with phenomena that evade a 'control-oriented, risk-based calculative approach, where we assume we know about and can manage the future' (e.g. Scoones, 2024: 2). Such time diagnoses are based on collective experiences made, for instance, during the global Covid-19 pandemic or the Russian invasion of Ukraine in February 2022. In the background, the slowly evolving process of human-induced global warming is increasingly framed as 'climate crisis', indicating that its consequences, such as storms, droughts, floods, and bush fires, have become tangible for many people in their everyday lives. In a comprehensive diagnose, diverse disruptive phenomena have been found to intersect and mutually enforcing each other, forming a systemic and emergent 'global polycrisis' (Lawrence et al., 2024). In addition to that, for many municipalities, more local and mundane events, such as the collapse of a bridge on a main traffic artery, or a surprising court decision, can have similarly disruptive effects. But what does disruption mean exactly?

Disruption is not an established concept with a clear definition. Rather, most typically, it is used as a self-evident attribute to more conventional terminology to specify a certain quality, as in the case of 'disruptive philanthropy' (Horvath and Powell, 2016) or 'disruptive innovation' (Christensen, 2006), or it is used as a verb ('to disrupt'). In the following, I provide a tentative definition of disruption with the help of a heuristic that synthesizes different semantic facets that are highlighted in the emerging debate.

Disruption denotes an 'intense period of change' (Mahanty et al., 2023: 177), which is a major change in a relatively narrow time frame. There are no fixed thresholds, for instance with regard to time frames or radicality of change, to unequivocally determine a disruption. It is unclear whether disruption denotes a process, or a stage in a process, in which 'probability and impact evolve over time' (Hernes et al., 2025: 2) – or only an (extreme) 'event' (e.g. Hällgren et al., 2018; Aquino et al., 2022; Hernes et al., 2025). As disruption is in the eye of the beholder, it can be characterized as a collectively perceived acceleration of change over the course of time.

Disruption takes the people it affects by surprise; they are hit 'off guard' (Hällgren et al., 2018) and are therefore ill prepared to respond quickly and adequately. The shock is perceived as being 'exogenous' (Hernes et al., 2025), as if coming from nowhere, disconnected from the known reality. Typically, in hindsight, actors realize overlooked warning signals and symptoms, so the feeling of surprise tells us more about the actors who perceive a disruption than about the event (or process) itself. Once established, disruption causes fundamental forms of uncertainty (Scoones, 2024). A source of uncertainty can be a classic lack of knowledge, but more importantly, it can be an ambiguity of meaning, in the sense that the situation supports several different, potentially contradictory meanings at the same time (Ibert et al., 2021). The focal change is too dramatic simply to be incorporated into existing cognitive frames; it is incompatible with existing interpretation patterns. For those who experience it, disruption can lead to what Weick has termed a 'collapse of sensemaking' (Weick, 1993), the inability to interpret what has happened or is about to happen with the available categories and schemes. Therefore, to re-establish normality in situations of disruption, participants need to create a novel worldview, one that includes the change associated with the disruption and that, in a way, 'makes sense' again. Such 'cosmology episodes' (Orton and O'Grady, 2016), for instance, 'force actors to draw novel connections between past and future events' (Hernes et al., 2025: 2). Moreover, also the 'temporal depth' (Bluedorn, 2002: 114), meaning the distance into the past and future that is considered, is open for consideration. In this regard, disruptions mark social 'tipping points' in the sense of a 'shift into a state from which reversal is difficult, if not impossible' (Hernes et al., 2025: 12).

Finally, disruption attracts (public) attention. Attention is a finite resource. It can be devoted to almost everything, and more and more people and problems compete for attention. However, the amount of attention an individual (or organization) can devote to something is limited, as attention requires focus and time. Therefore, attention has ascended into becoming *the* finite resource of human information processing and can be seen as a highly esteemed currency (Franck, 1998). In an attention economy, one no longer pays attention but pays *with* attention. From the multitude of societal problems that compete for attention, only few make it to the top of the political agenda. Thomas A. Birkland (2006) introduces the term 'attention-grabbing event' for dynamically escalating situations that, due to their emergency, urgency, and threat, literally force decision makers to pay attention. This provides an opportunity (and, of course, raises new ambivalences) to lift as yet underrated problems

onto the most prominent positions of the agenda (while ignoring other problems that deserve at least as much attention). Moreover, disruptions 'grab' our attention because not only do they pose intellectual challenges, but they also evoke strong, mostly averse emotions on behalf of social actors (Mahanty et al., 2024: 330).

For decision-centred models of spatial planning the insight that those expectations and assumptions about the envisioned future that have been inscribed in a plan will most likely be disrupted in surprising and unknowable ways is consequential. In the subsequent section these challenges are further elaborated and possible ways of adapting the decision-centred model to disruptive times are explored.

Infusing adaptability into decision-centred models

When uncertainty rises to a level of a 'collapse of sensemaking' (Weick, 1993) and attention is driven by the logics of popular media, the functional surplus of reflexively deciding about decisions appears limited. What can be done to make frameworks for operational decisions robust in the light of disruption?

First, 'future expectations' (Beckert, 2016) in professional spatial planning need to be radically rethought (Scoones, 2024). The insight that 'the future will most likely be anything but an extension of the present' (Gümüsay and Reinicke, 2024: 1) has to be embraced and incorporated into our expectations about the future. This requires, for example, a shift from 'probabilistic' to 'possibilistic' modes (Clarke, 2007; Grimes and Vogus, 2021; Scoones, 2024) or 'shifting attention away from the mean […] toward the tails or outliers. Anomalies represent a discrepant outcome relative to historical patterns and normative expectations' (Grimes and Vogus, 2021: 3). Possibilistic thinking cannot predict future disruptions: Such disruptions will continue to come surprisingly and hit social actors off guard. Yet, possibilistic thinking takes into account that plans made in the present can be, or, more to the point, most likely will be, disrupted in the future. In such a way, decision-centred models need to incorporate the expectation of the unexpected.

Second, as has been argued above, planning is usually needed at a medium level of complexity and uncertainty. In a world rife with disruption, decision makers are confronted with surprisingly and rapidly rising levels of uncertainty and with a devaluation of established rules, procedures, and interpretive schemes that, under ordinary conditions, can tame complexity. Hence, deci-

sion-centred models of planning need to be adaptable to sharply increasing levels of complexity and uncertainty.

Third, from an analytical point of view, the distinction between decision premises and operational decisions is rather clear. This suggests that planning is highly susceptible to disruptions because decision premises run the risk of making inappropriate assumptions about the future. It is one of the decisive features of disruption that rules and procedures that used to work well in the past no longer apply in the present, in a radically new situation. In the case of surprising change and radical uncertainty, in other words, planning might fail as alternative choices are missed, important consequences of decisions overlooked, and entrenched preferences are no longer valid. Moreover, strict connections between decision premises and operational decisions, as for instance in the case of 'programming' (Luhman, 2015), might force participants onto a too-narrow path of possibilities. Modes of 'contingency planning' (Pryor and Collins, 1996) are also not helpful in the light of disruption, as they become overly complex when confronted with fundamental uncertainty.

However, the basic idea that decisions can become more rational when participants purposefully engage in reflective loops of decision-making can still have traction in times of disruption. Two key ideas taken from the theorizing on 'robust action' (Padgett and Ansell, 1993) are compatible with the idea of decision-centred models of planning and are, in the following, discussed in terms of their potential to make planning in the face of disruption more 'robust' (Ferraro et al., 2015). The first one implies a moderate revision of the decision-centred model, the second one a more radical revision:

The first, moderate revision seeks to enhance the robustness of decision-centred planning by maintaining the temporal order of decision premises preceding operational decisions, but by relaxing the binding nature of decision premises for operation decisions. This approach highlights that decision premises are still helpful to maintain long-term orientation during operational decision-making. At the same time, the plan provides a wider framework which leaves higher degrees of freedom to enhance the ability of operational decision-making to be able to respond flexibility to short-term challenges. Crucially, in the case of disruption, operational decision making can be confronted with situations that have changed surprisingly and deviate fundamentally from former certainties. As Lucy Suchman (1987) has put it, plans should then no longer be understood as 'programmes' (Luhmann, 2015) that predetermine the subsequent execution of operational decisions but rather should be seen as multifunctional 'resources' that can be leveraged dur-

ing operational decision-making at different stages, for different purposes, and depending on the concrete situation.

Suchman (1987) uses the metaphor of a plan as a map that helps seafarers when navigating through rough seas towards their destination. The map provides a frame for possible decisions to be made during the journey. It can be used to determine the goal of the journey and to maintain the grand direction during the journey. However, the map is of little help if one tries to predetermine every single step during each stage of the journey, given the existence of uncontrollable (potentially disruptive) forces, such as pirates, heavy weathers, shallow areas, sickness or wind lulls. Turning to a recent situation of disruption, the immediate responses to the energy crisis following the start of the Russian war in Ukraine appear not very robust. Instead of subsidizing energy consumption with public money (which reduces economic pressures on citizens at the cost of further stabilizing a path away from long-term climate goals), the disruption could have been used as a valuable opportunity to strengthen efforts of energy saving (e.g. by reducing energy prices by limiting demand on energy, for example through a speed limit on German motorways). Both possible operational decisions are useful as immediate responses to the disruptive event, but the former sacrifices long-term goals with regard to climate policies, whereas the latter (not-taken) decision would have been more robust, as it would have contributed to the requirements of both short-term response and long-term transformation.

The general idea that a plan provides a 'framework for operational decisions' (Faludi, 1985) should be maintained even if, or more to the point, particularly when, the probability is high that subsequent operational decisions may need to be made under conditions of disruption. Plans can be seen as artifacts that afford 'multivocal inscription' (Ferraro et al., 2015), that is, a 'discursive and material activity that sustains different interpretations among various audiences with different evaluative criteria in a manner that promotes coordination without necessarily requiring consensus' (Ferraro et al., 2015: 373). The notion of sustainability, for example, is used prominently as a 'guiding principle' in § 1(2) of the German Raumordnungsgesetz (ROG), the federal spatial planning law, or as attribute to describe 17 development goals prioritized by the United Nations. It is concrete enough to be relevant to a diverse public, yet fuzzy enough to allow the coexistence of several meanings. This affords both an ongoing negotiation of its meaning and a certain degree of coordination among heterogenous, otherwise autonomous agents. Moreover, if disruptive events change the setting, the ambiguity caused by divergent yet co-existing

semantics in the same term can become productive by shifting from one connotation to the other: 'Allowing for dissonance is thus crucial to transform indeterminate situations into specific, defined problems and to open up alternatives' (Farias, 2015: 288).

More generally, societal 'values' (Göpel, 2025) have been discussed as useful signposts to set a frame for 'desirable futures' (Gümüsay and Reinecke, 2024). Societal values, such as liberty, equality or democracy, do not change easily. Even if societies are transforming rapidly, values can provide stable 'orders of worth' (Boltanski and Thévenot, 2006). In the face of disruptive change, values offer a chance to regain stable grounds from which it becomes possible to reassess a situation that has escalated beyond the cognitive frames that are usually utilized to make sense of the world. In practice, robustness of planning can thus be enhanced by making explicit reference to the values that underlie decision premises. For example, if one explains that the goal to become a climate-neutral region in the coming 10 years has been developed to achieve sustainability goals within a democratic consensus, the reference to values (here, sustainability and democracy) allows operational decision makers at later stages to reassess the decision premises and, if necessary, adapt them to radically new or slowly shifting circumstances.

The second, more radical revision of the decision centred model of planning is to reverse the established sequencing of decision premises and operational decisions in response to disruptions. Here, making operational decisions comes *before* decision premises, that is, decision premises are developed ex post from preceding operational decisions. This is, of course, possible because any decision made in the present turns into a decision premise for subsequent decisions, as has been argued above. This revision seeks to accomplish '*short-term objectives while maintaining long term flexibility*' (Eccles and Nohria, 1992 quoted in Ferraro et al., 2015: 371; emphasis added). The logic of this approach is to realize goals that are within reach while maintaining future flexibility. 'Such flexibility aims at avoiding irreversible damage to societal and planetary health and leaving in place desirable initial conditions and a range of options that allow future generations to realize their own goals and preferences' (Gümüsay and Reinecke, 2024: 17). In the light of such ideas, decisions in favour of privatization of public services, such as water, public transport or housing, which proliferated during the 1990s, have to be seen much more critically, as the short-term gains come at the cost of sharply delimiting possibilities for future-making (e.g. reduced numbers of housing units under control of the public). Moreover, such decisions that shift power

from state authorities to private firms reduce robustness, as they aggravate the implementation dilemma inherent in decision-centred models of spatial planning.

Taking into account the likely disruptions in the future, a 'plan can often be more effective as an interpretation of past decisions than as blueprint for future ones. It can be used as part of our efforts to develop a new, somewhat consistent theory of ourselves that incorporates our recent actions into some moderately comprehensive structure of goals' (March, 1982: 32). Reversing the sequential order between operational decisions and decision premises, in other words, can be extremely valuable and deliberating in times of high uncertainty and turbulent dynamics. 'Making do in difficult circumstances' (Scoones, 2024: 19) at first sight provides little more than a provisional relieve in a disruptive situation. Yet at the same time, such solutions might already contain seeds of more encompassing, long-term strategies as well. 'Goals may evolve and emerge from theorizing for an evolving system' (Gümüsay and Reinecke, 2024: 17). Along similar lines, Martin Kornberger, Stephan Leixnering, and Renate E. Meyer (2019) suggested that in times of crisis and uncertainty, decision-making may benefit from what they called the 'logic of tact'. With reference to the 19th Century Prussian general Carl von Clausewitz's (1780–1831) theorization of action in war situations, where decisions need to be made while the truth lies in the fog of uncertainty caused by the turmoil of the battle, tact is a mode of 'feeling out the truth' (Kornberger et al., 2019: 255) while acting. It combines ways of 'guessing' the truth out of partial information by trusting one's own experiences and intuition with a swift but bold and determined willingness to act, being fully immersed in the situation. In such situations it is impossible to follow a plan, but by 'rapidly switching between thinking and acting' (ibid.: 256) it becomes possible to develop a plan out of the insights won during action.

Planning in the light of disruption in this sense can become more robust through approaches of 'distributed experimentation' (Ferraro et al., 2015). This principle values the explorative potential of operational decisions and trusts in the 'truth' found in the fog of the struggle. This truth will (by some magic) subsequently solidify, transforming into future decision premises. In a critical appraisal of rational strategic management, March concludes that traditional forms of strategic management derive their adaptive advantages of exploitation only under relatively simple conditions. However, when complexity increases and uncertainty prevails, they suffer from 'adaptive myopia', which can lead to dramatic failures. He therefore suggests that strategic management must equally pursue the exploitation of existing knowledge and the exploration

of new knowledge. To balance exploitation and exploration, he refers, for example, to practices of making 'small experiments with wild ideas, while retaining the possibility of diffusing those that prove to be good ones' (March, 2006: 210).

The principle of distributed experimentation becomes visible in the evolution of 'collaborative workspaces' (Stockdale and Avdikos, 2025) and their diffusion from urban to rural regions during the past two decades. These spaces originally emerged in a few urban centres as experiments to test 'wild ideas' about how to host the work practices of digital nomads and workers in other creative occupations. Later, coworking evolved into a common and widely shared new work practice across a range of professions, though its locations still predominantly occurred in urban areas. Only very recently have these solutions travelled to rural areas and peripheral locations; however, in this context, as an additional infrastructure to complement mobile and multilocal work practices that encompass the classical office in the centre and the 'home office' in the periphery (Schmidt, 2019). With the parallel unfolding of such an idea and the movement of that idea in different spaces, isolated solutions tailored to idiosyncratic local conditions can consolidate to general approaches that can be adapted to different contexts. When higher-level policy-making levels start to design programmes to support such solutions, such ideas can also be 'scaled up' (Kern, 2019) in order to 'touch down' elsewhere.

Experiences collected during the past three or four decades in what has been termed 'innovation-oriented planning' modes (Ibert, 2003) can become fruitful to enhance the robustness of decision-centred models of planning. For example, such innovation-oriented planning modes relax the binding nature of decision premises that are usually formulated in formally decided land use plans in order to open up possibilities for novel and local solutions. Moreover, such approaches afford multiple local experiences with experimental solutions, as they are 'anchored' at the local level, for example by citizen participation (Butzin et al. 2024) and thus resemble what Ferraro et al. have called 'distributed experimentation' (2015: 376f.). Innovation-oriented planning modes were pioneered during the International Building Exhibition Emscher Park (1989–1999) and have, since then, been further diffused within professional communities of planning practitioners (Füg and Ibert, 2020). The International Building Exhibition (IBA) format has experienced a boom since the early 2000s (Sept and Kurth, 2024), and the principle has been transferred to other types of festivals too, for instance, state garden shows (German: Landesgartenschau) (Diller, 2020) at the national, state, or regional level. More

recently, the ecology of innovation-oriented practices has been supplemented with a plethora of lab formats enabling real-life experiments and all kinds of spatial contexts. Such instances can be interpreted as 'prefigurative sites for experimentation and innovation' (Scoones, 2024: 22) and as contrafactual instantiations of the future in the present.

Conclusion

In this chapter I presented the decision-centred model of spatial professional planning in order to scrutinize how it should be adapted when taking into account the insight that the only certainty we have about the future today is that it will continue to be disruptive. Disruption, in short, can be defined as intense periods of change that hit affected people surprisingly and off guard. Therefore, disruption gives rise to high levels of fundamental uncertainty that challenge people not only intellectually but also emotionally. Under these conditions, it is argued, the traditional model of planning as making decisions about operational decisions is widely challenged. In this chapter I advance the argument that the general idea that planning can be described as a reflexive process of decision-making (Luhmann, 1971; 2015; Faludi, 1985) needs to become more 'robust' (Ferraro et al., 2015). Two distinct though related revisions of the decision-centred model have been identified and discussed, a moderate revision and a more radical one.

The first, moderate revision of decision-centred planning models, maintains the general relationship between decision premises and operational decisions. A plan in the sense of a framework for decision-making still exists, but it makes planning more robust by providing only a wide frame that affords a great amount of flexibility and agility for operational decisions. This openness enhances the capabilities to respond swiftly and improvise openly when being hit by disruption. At the same time, the plan still provides long-term goals and explains the underlying values to provide signposts to assess the consequences of operational decisions.

The second more radical revision of decision-centred models reverses the traditional sequencing of reflexive decision-making; it shifts from 'cognition precedes action' to 'action precedes cognition' (Kornberger et al., 2019). Here, widely disconnected operational decisions at a local level predominate, with the idea that the 'truth' that can be found in an immediate immersion with practical problems will consolidate over time and eventually turn into novel

decision premises for others not by design but de facto. In other words, 'wild ideas' (March, 2006) can become surprisingly useful when a response to unexpected challenges is required. It has been argued that innovation-oriented planning approaches (Ibert, 2003) at first sight appear to produce little more than a seemingly chaotic redundancy of novel solutions. However, in the case of disruption, some of these solutions may prove a surprising value in response to these unforeseen challenges. Having proven themselves to be a good preparation for stakeholders to respond effectively in the event of disruption, there is a possibility that they could be further developed into integral components of more comprehensive new strategies.

Both, the moderate and the more radical suggested revision of decision-centred models of planning presented above promise to make such approaches more robust in turbulent times. By expecting the unexpected, planners increase their ability to respond flexibly to disruptions, while leveraging the long-term orientation and stability of their plans as a valuable resource.

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