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# Narratives of change: Strategies for inclusivity in shaping socio-technical future visions

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## ABSTRACT

Narratives of change are increasingly becoming the focus in the context of sustainability transition, and one reason for this is the growing awareness of the impact of language on our environment. Drawing on an analysis of narratives of change of the Swedish strategic innovation program *Viable Cities*, in our article we illustrate how intermediary organizations seeking to facilitate sustainable futures use narratives to develop their strategies for inclusivity, and we discuss the value of narrative analysis to understand such mediation. In so doing, we draw on a narrative approach from literary studies and show the added value of analysis of textual presentation techniques for sustainability transitions research. As interpretations of discourse, narratives shape social communities and not only tell us about change, but also witness, and are intended to drive, specific changes. Our analysis of the presentation techniques of the narrative of *Viable Cities* reveals the ways in which the narrative seeks to achieve the goal of inclusion, to help drive change towards the goals of sustainability. This is done through the plurality of the storylines and the narration; while the plurality of perspectives is maintained through the essayistic character of the texts, as well as through stretching the time of the narrative.

## 1. Introduction

In sustainability transitions, mediating organizations such as the Swedish strategic innovation program *Viable Cities*, which is working on the transition of Swedish cities to climate-neutral cities, play increasingly important role as managers and enablers of transitions. The growing need for systematic change in big cities in the context of climate change, as well as their greater complexity due to globalization and technological developments (Grunwald & Kopfmüller, 2022), make the involvement of various stakeholders in transformation processes both crucial and increasingly difficult at the same time. As a consequence, mediating organizations, called also intermediaries, provide support to bring together different actors and develop common visions of the future with them.

The need for building a common vision echoes the observation that future visions have a guiding effect on societal developments and act as important communication media for these (see Lösch et al., 2019; Grillitsch et al., 2019; Grunwald, 2018; Jasanoff & Kim,

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2015). Current research in the context of urban transition and beyond (such as science and technology studies, technology assessment) has recognized the impact of future visions and, as part of action research activities, attempt together with different societal actors to develop visions that are adapted to societal needs; and, as such, to guide societal developments and serve as enablers of societal change (e.g., Dobroć & Lösch, 2022). Such participatory and transparent future visions are intended to initiate meaningful changes that reflect local and individual circumstances and needs.

At the same time, scientific and policy networks increasingly recognize that different communities need to be addressed in different ways if we are to build a common future vision, as communities differ in terms of culture, tradition, geography, etc. In this way, these networks consider plurality, conflict, and resistance in organizational practices as important aspects in the process of pursuing societal change (Berendse et al., 2006, see also da Cunha et al., 2020; Krauß, 2020; Krauß & Bremer, 2020). To achieve the goal of inclusivity of diverse communities, scientific and policy organizations develop different narratives that are interpretations of the general discourse on sustainability, to empower and motivate actors towards sustainable forms of development. Walking the fine line between universal scientific knowledge and the specifics of a particular community (Bremer et al., 2019; Krauß, 2020), its landscape and history on the one hand, and following on from the findings that the discourse on climate change has an impact on the way we relate to our environment (Baú, 2016; Fløttum & Gjerstad, 2017; Jasanoff & Martello, 2004) on the other hand, interpretations of sustainability discourse take the form of narratives.

Narratives are widely understood to both impact and reflect societal change and for this reason they are also referred to in the context of transition research as *narratives of change* (Baú, 2016; Doolin, 2003; Gearty, 2015; Krauß, 2020; Marschütz et al., 2020; Wittmayer et al., 2019). We define a narrative of change (NoC) as a product of storytelling and, accordingly, as an individual (by a person or group) interpretation and realization of a discourse about sustainable transition, the main task of which is to initiate societal change. Particularly in the context of sustainability, which requires the involvement of a wide range of social actors, NoC are challenged by the need to find ways of being open to interpretations to include as many actors as possible in the transition process, while also conveying concrete ideas. One of their most important characteristics is thus their openness, which results from their main focus on convincing those exposed to them.

Furthermore, here we want to strongly distinguish between narrative, story, and storytelling. Often the terms are used alternately, even though they do not refer to the same thing. When we talk about stories, the main focus is on thematic elements and story is, above all, the temporal-spatial development with regard to the protagonist, who or which drives the development of what happens in the story. In a narrative, thematic elements, such as the main character, places and artefacts are considered, but rather with a focus on *how they are interconnected so that they do or do not meet the strategy of the narrative*. Accordingly, a narrative represents a strategy that lies behind the story, the way how the elements of the story are interconnected but the strategy is not the same as the motivation or intention of the author(s) of the story, it must be inferred from the text. Storytelling, the third term we want to clarify, we understand as a practice to develop and transfer narratives that reflect the view of the world and as such have an impact on how the community perceives the world (Moezzi et al., 2017: 3). Storytelling<sup>2</sup> is used, e.g., by mediating organizations to develop common narratives and gain the attention of a specific community, thus acting in an inclusive way.

In current studies on narratives in the context of sustainability transition, the analysis of NoC focuses on the story itself and what is said, i.e., on what is represented by the story, and not on the presentation techniques. When current research turns to analyzing the construction of narratives, questions about how they are used by actors or how these narratives relate to dominant narratives arise (Guske et al., 2019; Wittmayer et al., 2019). We have identified the question of “how” the story is presented and how it shapes communities (which are ordinarily the focus of narrative analysis in literary studies), i.e., the question regarding presentation techniques, as a research gap. To address this research gap, we turn to the method of narrative analysis in the context of literary studies (Barthes, 1975; Genette, 2010; Martinez & Scheffel, 2007), which we believe can make an important contribution to the understanding and analysis of NoC. Against this background, we pose the following research questions here: *What characterizes a narrative analysis as an analysis of presentation techniques and how can the perspective of literature studies contribute to the conscious use and better understanding of the process of co-creating a common vision in sustainability transitions?*

In order to examine the ways in which the development of NoC contributes to building a common vision, we turn in our narrative analysis to the examination of the narrative of the Swedish strategic innovation program on urban sustainability transitions, Viable Cities (2017–2029), which acts as intermediary and was launched by the Swedish government to achieve the goal of climate-neutral cities by 2030. Intermediaries “are often identified through the functions they perform” (Kivimaa et al., 2019: 1063). Following, we focus on them in the context of their role in supporting change, developing strategies and building a network. Viable Cities brings together about 100 members from different fields of social life, research, business, public affairs, and civil society. In this context, its mission is to engage different urban actors in the transformation process and encourage them to participate in the changes. Viable Cities actively engages with building a shared narrative using the method of storytelling to motivate different actors to actively participate in the transformation of cities and the development a sustainable future vision. The organization also appointed a chief storyteller in the person of journalist Per Grankvist, who specializes in sustainable lifestyles. His task as part of his position as chief storyteller is to further develop and promote the storytelling method for urban transition. Accordingly, we have sought to learn what presentation techniques Viable Cities uses, to further reflect on how NoC of Viable Cities and of analogous sustainability intermediaries might learn from it.

<sup>2</sup> “Storytelling is the telling of stories. With this storytelling, professional communicators pursue very different goals in different areas of application: In journalism, it is primarily about attention and entertainment; in advertising, persuasion; in public relations, image building; in internal corporate communications, knowledge transfer” (Flath, 2013: 1, translation by authors).

To answer our research questions, first, we introduce the concept of socio-technical future visions in relation to their potential for transformative action. Second, we introduce the method of narrative analysis as a way of analyzing how inclusive future visions are built. Here, we firstly provide an overview of the state of research on narratives in the context of transition research and beyond that inspired us to apply the literary approach to narratives in the context of this research; secondly, we extend the narrative method to include the literary studies perspective. Thirdly, to illustrate this, we analyze the NoC of Viable Cities and exemplify how narratives are used by mediating organizations as strategies to help build a common vision. Fourth, and finally, we conclude the paper by reflecting on the findings and discussing the potential and value of extending narrative analysis for futures studies, specifically in terms of analyzing presentation techniques.

## 2. Theoretical background

### 2.1. Future visions and the claim of building a shared future

Scholars from different fields, such as sustainability transition research, science and technology studies (STS), and technology assessment (TA), focus on future visions to both: (i) learn about current societal developments (Geels, 2005; Grunwald, 2012, 2018; Hodson et al., 2013; Lösch et al., 2019); and (ii) actively influence societal development (Hodson & Marvin, 2010; Krauß, 2020; Noboa, Upham, & Heinrichs, 2018; Schneider et al., 2021). Accordingly, scholars examine future visions to reveal their particularities: their characteristics, breadth, inadequacies, any social deficit with regard to inclusivity and representation, what wishes and suggestions for improvement they contain, and finally what effects they may have on society. The premise is that future visions and related collective expressions such as sociotechnical imaginaries (Jasanoff & Kim, 2015) or collective expectations (Borup et al., 2006; Konrad, 2010; Van Lente, 1993) affect the orientation and interpretation of societal as well as, e.g., technical developments. They do this by referring to societal values and beliefs, i.e. they inscribe and reflect inscription of social structures: “One of their most important characteristics is that they predict fundamental social changes in the future while pointing to the need for action in the present to co-create those changes here and now in order to unfold their transformative potential.” (Dobroć & Lösch, 2022).

The reference to the future as a meaning-making reference (Dobroć, 2022; Assmann, 2013; Luhmann, 1990; Luhmann, 1998) leads to a politicization of future (Dobroć, Lösch, & Roßmann, 2022). As different meanings, desires, and interests are ascribed to future visions, debates about the future become subject of politicization and contested future visions feed into societal debates (Hausstein & Lösch, 2020) about how we want to live. Another observation is that future visions are often pushed and interpreted by only a single or a few stakeholder groups, although they then influence broad sections of society (Lösch et al., 2021). Thus, stakeholder groups with powerful positions push their visions of the future and with them their beliefs and interests. To counteract this, a transformative practice of science and mediating organizations increasingly attempts to develop future visions with a broad public as well as with stakeholders, including those in less powerful positions in society, that reflect current challenges in society as a whole and its needs. They do this in order to consider the diversity of society in shaping the future, since the visions are those of society as a whole, or to involve the stakeholders who are directly affected by the changes and to develop a meaningful future vision with them that is tailored to the needs of locals (Hodson & Marvin, 2010; Krauß, 2020; Noboa, Upham, & Heinrichs, 2018).

Approaches that address existing future visions and modulate or shape these together with locals and affected communities often use the method of storytelling to build a narrative that is inclusive and reflects the needs of broader parts of society. As Milojević and Inayatullah (2015) note, “the challenge, as with all foresight work, is to move from fragmentation to the preferred future, the integrated way forward.” Visioning is in this case a kind of collaborative practice (Noboa, Upham, & Heinrichs, 2018). Storytelling is a method to “invite us to think ‘from what is to what if’” (Wittmayer et al., 2019: 4) and, following Milojević and Inayatullah (2015), a tool that enables the formation of a common vision by assembling fragments of the various desires and needs into a common, shared story. The awareness of the practical and formative power of narratives is leading to its use by various mediating organizations (together with stakeholders and communities) to create common visions. Storytelling attempts to call for participation in the development of visions, thus creating an inclusive effect. The goals of this participation are social challenges, such as sustainability (Gearty, 2015; Krauß & Bremer, 2020; Milojević & Inayatullah, 2015), social inequality, or democracy (Dobroć, Krings, Schneider, & Wulf, 2018; Noboa, Upham, & Heinrichs, 2018). Underpinning narratives are the product of the storytelling practice and are inclusive to varying degrees. Some narratives call for conceptualizing the path toward achieving the goals and thus for collaborative visioning, others for supporting the future vision of mediating organizations. Narratives can thus have a powerful persuasive impact on shaping the future and narrative analyses can contribute to understanding what visions are developed and supported by current narratives (Guske et al., 2019: 4) and to learn how to practice storytelling consciously.

### 2.2. Narratives of change for inclusivity in transitions research and beyond

Recently, there has been a growing interest in narratives and narrative analysis in a range of contexts, spanning organizational change and community studies (Berendse et al., 2006; Doolin, 2003; Gearty, 2015; Krauß & Bremer, 2020; Krauß, 2020), social and political communication (Miskimmon et al., 2013), and also future studies and transitions research (e.g., Guske et al., 2019; Krauß & Bremer, 2020; Milojević & Inayatullah, 2015; Wittmayer et al., 2019). Scientific interest in narratives generally goes in two directions. On the one hand, it is about understanding the impact of narratives that circulate in society. Narrative analyses are carried out to find out how narratives work, what narratives circulate currently in the society and to point out their significance in social developments. On the other hand, narratives are also explored as a method of action research, to encourage a community to reflect and communicate (Gearty, 2015), and to develop a narrative with them that they can connect to, that emerges from their history, and that meets the

community’s needs (da Cunha et al., 2020). The aim in the latter line of research is to engage a population in some form of change process. Narratives are considered enablers of change in these contexts, which is why they are also called narratives of change/for change (da Cunha et al., 2020; Doolin, 2003; Gearty, 2015; Milojević & Inayatullah, 2015; Wittmayer et al., 2019), even though the term is not used consistently and is sometimes referred to as narratives in general, without direct reference to change (Guske et al., 2019; Krauß & Bremer, 2020). *As said, the emphasis on change in NoC relates to the function of the narratives: they not only tell something about a process and changes, they also are witnesses to certain changes and are intended to drive them. For this reason, we consider the term a useful concretization and use it in our analysis.* Narratives enable the understanding of the development of a group: they make the “movement of its members through space and time intelligible. The narratives we are born into therefore not only help shape our identities, they also provide meaningful frameworks for seeing, indeed, constituting reality” (Milojević & Inayatullah, 2015: 153). For some scholars, the relevance of stories for communities’ self-organization processes is such that communities themselves may be described as stories (Cope et al., 2019: 2). Accordingly, the term ‘community’ refers to the attributions of a group of people included in the narrative of the community. This narrative is not constant, it can be further reshaped and redefined (Cope et al., 2019, see also Moezzi et al., 2017). Research in the context of community building and public engagement points out how important NoC are for communities to agree on common goals, values, and reasoning (Berendse et al., 2006; Chivers & Yates, 2010; Cope et al., 2019; Milojević & Inayatullah, 2015; Wittmayer et al., 2019), through which they may be engaged in building a common future vision (da Cunha et al., 2020; Wittmayer et al., 2019). Transitions research focusing on narrative follows on from these findings: NoC are used to analyze the interplay between the individual and the collective (Gearty, 2015; Hermwille, 2016) and in this way the identification processes of the individual with a group, as well as implying different types of futures (Upham & Gathern, 2021).

The community building and leading function is one of the most important characteristics of NoC. Research on narratives in general highlights two main characteristics that enable the community building process: narratives are open for interpretation and at the same time, they provide orientation. Since their main goal is to convey values and norms (Berendse et al., 2006; Cope et al., 2019; Guske et al., 2019), rather than provide concrete instructions for certain situations, they still need to have a guiding idea to mobilize people to take part in change (Guske et al., 2019). Their mobilizing function aims to “provide a relatable framework for groups of actors and shape our understanding of the world” (Guske et al., 2019). Krauß attributes the need for openness in NoC to its situational character in general, which is strongly connected to knowledge about certain environments and the community (Krauß, 2020: 9). How organizations such as Viable Cities, committed to promoting sustainability, oscillate between their directive function and the simultaneous openness that should lead to participation can be observed in their NoC, which they strategically use to balance openness and providing orientation in action research. We argue that a literature studies perspective on narratives can contribute to a better understanding of how to balance high level, inclusive sustainability discourse with the way in which different communities and different places differ in how they perceive sustainability problems and solutions.

Recent methodological approaches to NoC in the context of transition research have sought to understand which elements have been selected from general discourse. Here, the focus is on what the narrative is about and what its purpose is (Guske et al., 2019; Wittmayer et al., 2019). However, even though in the context of literature studies definitions of narrative also emphasize the content of the narrative, here the focus of the narrative analysis is more on how the narrative is constructed than what the narrative is about. *Accordingly, narrative analysis is an analysis of how a particular story, theme, message is conveyed.* This is because a narrative is the strategy of telling a story and is implemented through presentation techniques. It does not only contain information and metaphors, and it does not only describe events, but it seeks to construct events – narrative aims to be performative. So, there is not only reference to time told, but also the time of the narrative; not only reference to places told about, but also to a place and therefore a perspective of the narrative. The crucial issue for a narrative is the narrator, who connects what is told into a unity, gives it a perspective, and locates it in time and space.

Narrative analysis can be used to highlight how differently existing discourses are interpreted. We understand a narrative as an individual (by a person or a group) realization/interpretation of the discourse, *which puts together certain elements of the discourse in such a way that from it a convincing view on the subject of the discourse is created. What distinguishes a narrative analysis from a discourse*

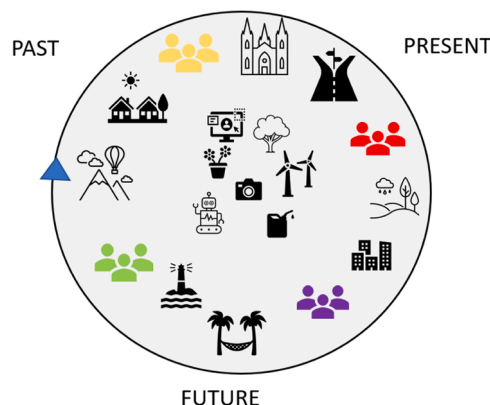


Fig. 1. Potential elements of a narrative that are part of a discourse in general.



analysis is that the former explores the concrete constellation of narrative elements, which we describe as presentation techniques (Fig. 2). The elements of narrative are: actors, places, time, space, and artifacts (Fig. 1). They are connected to each other by a narrator whose perspective constitutes a narrative. By connecting different elements, the narrator's perspective is to be inferred, and this constitutes the peculiarity of the narrative.

We argue that by analyzing the perspective of the narrator and the connections between narrative elements, we can find out what values and beliefs underlie specific NoC, or respectively, which future visions circulating in society are supported and advanced by these narratives. NoC provide an opportunity to interpret discourse and develop solutions in the form of future visions for and with communities. We argue that the analysis of NoC can be methodologically broadened on the basis of narrative theory from the context of literary studies. In doing so, we fall back on the basics of narratology (Barthes, 1975; Genette, 2010; Martinez & Scheffel, 2007).

### 3. Method: analysis of narrative of change as analysis of presentation techniques

Description of narrative analysis as analysis of presentation techniques in this paper is not intended to encompass the whole theory of narrative, but rather aims to introduce the perspective of literary studies on narratives to futures studies and highlights the importance of presentation techniques for the nature of narrative.

To analyze actors' strategies, narrative analysis in the context of literature studies focuses on (1) what the story is about, i.e., what elements of the discourse are highlighted in order to be able to tell: (2) how the story is told. This means that the selection of certain elements and the specific way in which they are connected has an effect on how the text affects readers. To infer the strategy that underlies a story, narrative analysis identifies and characterizes the presentation techniques used. In the following, we introduce how the analysis of presentation techniques is conducted in literary studies. The specific categories applied in such analysis, and their order, depends on the specific research questions or objectives of the analysis. Therefore, below we present the presentation techniques of the NoC that were the most important in the Viable Cities case study presented here and further discuss these in the last section of the article.

#### 3.1. Analysis of the distinction between how the story happened and how it is told

The narrative analysis of presentation techniques focuses on the analysis of the distinction between how the story happened (here are meant the events the story tells about, not the circumstances of the story production) and how it is told.<sup>3</sup> That is, regarding the latter, the means of presentation of the story. Martinez and Scheffel (2007) show that it is possible to distinguish between the story itself and the representation in the text, even if the story doesn't aim to refer to reality (Fludernik & Ryan, 2020; Martinez & Scheffel, 2007). Accordingly, to analyze presentation techniques, we need to distinguish between narrated time (i.e., the time that is reported on, time as a motif<sup>4</sup>) and narration time (which may involve stretching or tightening of time in the narration<sup>5</sup>). In the narrative analysis of presentation techniques, the analysis of narration time plays a crucial role. With regard to narration time, the analysis turns to (1) the sequence of events, (2) the duration, and (3) the frequency. So, the reader is able to perceive that an event is told retrospectively, and consequently he or she will be able to say in what order the story (even if it is fictional) took place. That the event is presented retrospectively will have an impact on the perception of the text. Another example regarding author: There may be one author but the story may be told by various narrators (this can be also other way around). The way in which a story is told has a certain function. Retrospective narration, for example, has the purpose of involving the reader to a greater extent, since the narrator claims to narrate from the same temporal perspective as that of the reader.

The analysis of the differences between how the story happened and how it is presented is intended to show how the narrative achieves the emotional effect or credibility (similar reflections can be found in Krauß, 2020: 5). The analysis of the connection of narrative elements: strings of events, motives, actors and places, support the analysis. Here, the analysis can turn to the question of what is claimed as the main motif in order to further work out how exactly the themes and motifs are connected in the text. Here, discrepancies between what the text claims to be the main motif and what is really the focus of the text (through the analysis of frequency or length of the focus on the motif), can be detected. These indicate the true motivation or give an indication of the potential impact of the narrative. The connections between these elements are important, as are the changes that create the dynamics in the narrative. For example, a change of place can indicate a change of plot,<sup>6</sup> and this can indicate a function of the narrative. These can reveal in the analysis something about what is of particular importance in the story or from which point of view the story is told.

#### 3.2. The author and the narrator

In order to reach the reader and the goal of inclusivity, narratives are constructed in such a way that the reader can relate it to their own experiences and knowledge. Moreover, in certain texts, such as contemporary literary texts, the distance between reader and author is often broken, creating an intimate and familiar atmosphere and involving the reader in the story. This strategy is also

<sup>3</sup> A wealth of examples of how presentation techniques are analyzed can be found in Genette's (2010) work, in which he demonstrates exclusively in literary examples, but which also find application in non-literary texts, as here.

<sup>4</sup> Here the question is: Is the story about future, past or present events?

<sup>5</sup> Here the question is: In which tense is the story written? How much space in the text does the described event or motif fill?

<sup>6</sup> Plot is the sequence of events where each event affects the next one through the cause-and-effect principle.

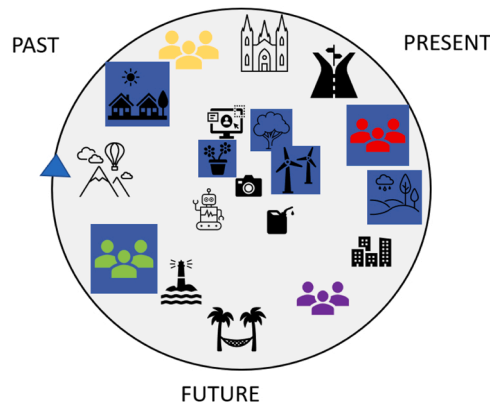


Fig. 2. Elements highlighted through a specific narrative.

currently followed by the NoC in order to involve the readers and motivate them to participate in the transformation. Part of the construct to reach inclusivity is the *narrator*, who has to be distinguished from the author. Through the narrator, the author presents himself or herself as required by the goals of the narrative. For example, if the story aims at inclusion, the narrator will pretend to be someone similar to the readers, living at the same time or place, affected by the events in the same way as the readers. He or she will emphasize in the narrative the qualities of his or her person that are meaningful for the credibility of the narrative.

Depending on how involved or uninvolved the narrator appears (Genette, 2010; Martinez & Scheffel, 2007), he or she will have a different function and relation to the narrated world and can be recognized as a narrator, as an observer or as a character. The relationship of the narrator to the narrated world can tell us a lot about narrative strategies: How the emotionality of the telling instance or its absence affects the story, how a particular perspective or its change in the story has an impact on transparency or legitimation strategies. That is, how the narrator positions himself or herself so that the story he or she is telling seems credible.

For the analysis of the NoC of Viable Cities, we collected 24 texts published on the social platform medium.com by Viable Cities as organization or project partners and/or Viable Cities employees. This platform is interesting in the context of narrative analysis, as it aims to introduce “a new model for digital publishing [...] that supports nuance, complexity, and vital storytelling without giving in to the incentives of advertising.”<sup>7</sup> The selection of the specific 24 texts was made via a reading of all of the texts on medium.com, with selection made on the basis of these being explicitly presentational. To assist with the interpretative analysis, we used MAXQDA<sup>8</sup> qualitative data analysis software to organize extracts for analysis, with selection being for evidence of presentation techniques and typicality for the Viable Cities NoC. The aim was to infer themes evident in the texts rather than to impose any a priori, beyond pre-specification of our focus on presentation techniques. Thereafter, we performed a qualitative narrative analysis of the texts using MAXQDA, applying the analytical perspective presented in Section 2.

#### 4. Analysis results. Presentation techniques for achieving inclusivity in the NoC of Viable Cities

In our analysis of the Viable Cities NoC,<sup>9</sup> we show that the focus on presentation techniques can reveal important aspects about the strategy behind the stories told by the organization, i.e., about its narrative. In the following section, we will show which textual presentation techniques Viable Cities uses to achieve its goal of inclusivity through the storytelling method. To elaborate these, we analyzed the texts in terms of presentation techniques, i.e., how and by what textual means the NoC is conveyed to achieve the goal of inclusivity and participation in vision development.

##### 4.1. Strategies for inclusivity – plurality of storylines

Narrative analysis shows that the NoC of Viable Cities is multi-level. Three storylines can be distinguished, each of which entails a sequence of events, where each influences the other through the principle of cause and effect and which in sum present a coherent picture of an event. The storylines are the compositions of narrative elements abstracted in the analysis that form a plot. The following storylines can be distinguished in the NoC of Viable Cities:

- (a) The first storyline focuses mainly on the description of Viable Cities as a project. These texts mainly present the story of Viable Cities and its role in the transition of Swedish cities. The main goal of this storyline is to introduce the Viable Cities project and

<sup>7</sup> <https://medium.com/about>.

<sup>8</sup> MAXQDA is a software for computer-assisted qualitative data and text analysis.

<sup>9</sup> The authors of the article have been researchers in a research project associated with the Viable Cities case, such that it has been an analytical object for us, while some of us have also been participant observers.

- to show, with a view to transparency, what principles and values underlie the project, as well as to present the state of research and general knowledge about what is going wrong in society and what needs to be changed. We call it “Viable Cities Story.”
- (b) The second storyline is about the need for change toward sustainable cities and is predominantly viewed from different perspectives. The goal of this storyline is to provide different perspectives on Viable Cities and at the same time on the transition of cities in general. This part of the NoC is particularly fragmentary, as each perspective is presented as a part of the story about urban transition. These texts are written by different authors involved in Viable Cities. We call it “Urban Transition Story.”
  - (c) The third storyline is the meta-narrative. Its aim is to explain how storytelling can be used “to get people engaged enough to change their behavior and norms” (Grankvist, Explaining and exploring<sup>10</sup>). In this storyline, the subject of the Viable Cities approach to storytelling predominates. These texts reflect on how to build an NoC. They have the function of a commentary, which means that they are part of a meta-level of the NoC. We call it “Meta-Narrative.”

The interplay of the storylines results in an NoC that (a) explains how the Viable Cities program came into being and what its goals are, (b) highlights different perspectives on Viable Cities and the transition, and (c) takes on a commentary function and explains in a didactic manner how to do the storytelling. The analysis reveals that Viable Cities seeks to achieve inclusivity by appealing to the personal feelings of the recipients and giving them all the information, they need to actively participate in the change: (1) What is Viable Cities and what is the reason for its emergence? (2) Why is the transition necessary? (3) How is the transition managed by Viable Cities in terms of transparency? To further examine the variability and complexity of the NoC, we turned to the analysis of the narrator.

#### 4.2. Strategies for inclusivity – variable narration

Our analysis revealed three different narrators for the three storylines. The three narrators were also indicators of the existence of 3 storylines. In the “Viable Cities Story,” the narrator is Viable Cities as mediating organization that presents and reflects on its work. In the “Urban Transition Story,” there is a multi-perspective narrator. This means that it is told by different actors (Viable Cities staff or project partners) involved in the transition story. And in the “Meta-Narrative,” the narrator is Per Grankvist in his role as chief storyteller, whose task is to comment on the NoC of Viable Cities and to show how to achieve inclusivity through storytelling like Viable Cities does.

The different narrators all share the task of describing Viable Cities and its goals, explaining them, and encouraging people to participate in the change. Each narrator takes a stronger focus on one task. The narrator in the “Viable Cities Story” introduces Viable Cities as a mediating organization. The goal is to introduce Viable Cities through storytelling and to explain the tasks undertaken in the context of urban sustainability. In the “Urban Transition Story”, the function of the different narrators is to give examples of how different actors within Viable Cities think about transition and why they are involved in the transition of Swedish cities, and thus to create objectivity/intersubjectivity and transparency. Furthermore, allowing one or more characters in the story to be voiced (which is called variable internal focalization, see [Genette, 2010](#)) not only has the purpose of introducing the particular characters, but also gives an opportunity to introduce the main character, in this case Viable Cities, from a different perspective than that of the main character itself. It creates credibility as various actors who have their say confirm the work and the goals of Viable Cities. The main function of the narrator in the “Meta-Narrative” – the chief storyteller – is to explain how storytelling works, and in this way to hand over the powerful tool to other actors. The chief storyteller takes on a commentary role. He explains the method of Viable Cities to reach people and also introduces the method so that other people can use it as well.

All narrators together present themselves as narrators who do not know everything about the story, which is why the story can only be told in fragments. In this way, the NoC achieves inclusivity: it calls on each individual to co-shape the story, so that it is also a story of the people who will be affected by the course of this NoC. The switch between various narrators has metaphorical value as well. It illustrates how the transition should proceed according to Viable Cities: by listening to different perspectives and ascribing agency to them. With the different narrators, Viable Cities implements its program at the level of presentation techniques: engaging diverse perspectives to drive meaningful and sustainable transition:

No one has the opportunity to solve their society’s challenges on their own, or enough money to develop all new ideas themselves, or the power to tackle all the problems at the same time. Not everyone can do everything, but everyone must do something [...]. Although we are moving towards the same goal, we will choose different paths because we are in different places. The global goals for sustainable development are a common compass. [...] But the solutions that work in one place can be a disaster in other contexts. (Viable Cities, The Declaration)

The presentation of the project partners and Viable Cities staff as well as the chief storyteller in the texts as private persons is intended to achieve an emotional connection with the listener. It opens up the possibility of identification with the characters. Concrete staff members can be more private, emotional, and human than Viable Cities as organization.

#### 4.3. Strategies for inclusivity – essayistic character of the texts

The NoC of Viable Cities is largely essay-like. The Handbook of Literary Genres lists the following qualities as characteristic of an

<sup>10</sup> This mode of citation refers to the analyzed texts of Viable Cities NoC, which can be found in the [Annex](#).



essay and addresses the presentation techniques in essayistic texts: (a) abandonment of a structure strictly oriented to scientific standards, (b) experimental character of the writing, (c) deviation from any textual norm, and (d) exercise of style or self-examination by the author (Schärf, 2009: 224). Subjectivity and incompleteness play a formative role in the essay and are one of its most important characteristics. This description of essayistic form includes elements of the presentation techniques in the essayistic texts.

The essayistic Viable Cities NoC serves (a) to comment on and thus reveal the goals and activity of Viable Cities, (b) to involve the recipients of the text in the transition, and (c) to present the NoC as open and in progress, since it still needs to be developed and must be completed by the recipients. This serves to motivate the recipients to participate in the changes in the cities and is therefore a strategy to generate inclusion. This is achieved by blurring the rigid boundary between the author of the essayistic text and the reader through everyday language, narration without an end and direct address to the reader, through multi-perspective and subjective narration, and through deviation from any literary form, as in the case of the “Declaration”:

This is not a declaration that you should sign, physically, but the ambition is that as many people as possible that read it will think, “I’ll sign on to this.” (Viable Cities, The Declaration)

The texts with the strongest essayistic character in the NoC of Viable Cities are those of the chief storyteller and those of the different project partners. Here, the essayistic form is used by the narrators to comment on the actual work (cf. Stanitzek, 2013). They showcase subjectivity, which is meant to create the impression of transparency and encourage emotional engagement. Viable Cities sets the goals of the NoC in its texts and explains how it wants to achieve its goals of inclusion: through affective engagement, the use of everyday language (Grankvist, A better story) by exploring the whole, the context (Grankvist, What cities can learn). All this is captured in the essayistic style of the NoC and thus in the presentation techniques.

An essay, and thus the texts of Viable Cities, not only breaks the boundaries of texts by questioning the boundaries between reader and narrator by directly addressing the reader but also aims to develop a culturally critical view of the world/society. The essay does this by attempting to take individual experience and undogmatic reflection as the starting point for critical opinion making. This also fits with the Viable Cities NoC, which points out that climate change is closely related to the social order and therefore has a socio-critical or cultural-critical impact, and connects this reflection with personal notes from Viable Cities staff and project partners:

Cities, towns and municipalities are aware of the large-scale transformations necessary to address the climate emergency. But we need to recognize that the climate crisis is not a nascent property of the environment. Alongside biodiversity loss, global inequality, financial injustices and other wicked problems — climate change is but one symptom of a deeper structural failure; our inability to construct meaningful relations through social and democratic processes enabling humane thriving. (Viable Cities, Climate City Contracting)

The reduction of the distance between the narrator and the reader is achieved through the use of the pronoun “we.” But the “we” is not always the same in the Viable Cities NoC. Sometimes it means “we as humanity” and sometimes “we as Viable Cities.” Accordingly, there are these two main characters in the NoC: humanity and Viable Cities.

The analysis of actors and actions related to them confirmed that one of the main characters of the NoC are the readers, represented by the pronoun “we”, and that this includes cities, municipalities and citizens, as well as governments and Viable Cities. The pronoun “we” as well as the cities and citizens are the actors most often linked to verbs, suggesting that “we” as citizens are agents in the NoC and perform actions.

The following list of verbs shows what needs to be done by the main actors. According to the NoC, citizens should support, implement, build, and develop Fig. 4, which means strong involvement and not just support in creating and enforcing the vision of sustainable cities.

The actors remain mostly abstract citizens, and concrete actors are only enumerated as examples (see Fig. 3). The same applies to motifs and places. Most of the places mentioned in the NoC are cities and specific places in the cities. They are abstract, and when

Main actors	Actors with exemplary role in the narrative		
Cities and municipalities	Program managers	Construction companies	Financiers/financial
Citizens/residents	The Swedish Energy Agency	Non-governmental organizations	institutions
Local actors: civil society,	Housing associations	Teknikföretagen	Property owners
companies, local	ElectriCITY	Smart City Sweden	Organizations
authorities	Drive Sweden	Vinnova	Urban planners
Researchers	WWF Sweden	UN-Habitat	Climate activists
Governments	Volunteers	Representatives from cities	Swedish government
Viable Cities	Entrepreneurs	Urban living labs	Global Utmaning
	Young and old	Linköping University	Donald Trump
	Women and men	Lund University	Greta Thunberg
	Pension fund managers	District Hammarby Sjöstad	Young people
	Police officers	Stockholm	
	Construction companies	EU	

Fig. 3. Actors of the Viable Cities NoC.

concrete locations are mentioned, they are considered as examples. This is in line with the openness of the NoC and its inclusive character. It is also consistent with Viable Cities' aspiration to be a role model not only for Swedish cities but also for other European cities.

#### 4.4. Strategies for inclusivity – stretching time

In the analysis, we distinguished between time as a motif and the time of the narrative. Time as a motif is part of the analysis of what the story is about. We speak of time as a motif when the future, past, or present become the subject of the NoC. The time of the narrative is the grammatical time in which the story is written: here a distinction must be made between future, past, and present tense and their derivatives. When analyzing the time of the narrative and time as a motif, we looked more closely at the following questions:

- (1) What role does the reference to the future, past and present play in this NoC of Viable Cities?
- (2) How are the future, past and present connected and how is inclusivity achieved in this way in the NoC?

Looking at time as a motif in the Viable Cities NoC, it becomes evident that the action takes place mainly in the present and the future is merely a time horizon. Little attention is paid to the question of what will happen in the future depending on what we do today. Rather, the vision of a future is interpreted as a common goal and the future is not determined. The analysis of the time of the narrative confirms this: Most verbs are in the present tense, describing the present. The role that the reference to the future plays in the NoC of Viable Cities becomes evident in the following quotation:

The idea was is [sic!] to create a generic vision statement of 2030 for cities to tell their citizens, something that could work as pre-face to city plans on how to achieve the vision of becoming climate neutral. Whereas city plans are filed [sic!] with facts on how to achieve specific goals, **the vision statement is the story that makes sense of the facts** [emphasis authors]. They complement each other — the plans are “the how”, the statement is “the why”. (Grankvist, A better story)

So the idea is to create here and now a common vision of the future that provides for change. Descriptions of what the future will look like, such as in the text *Singularity* (Kjellström, Singulariteten) are rare in the analyzed NoC. The focus on the present tense in the NoC is a consequence of the program's mission: to develop a future vision to support change in the present. Stretching time and zooming in on an event or a motif strengthens the focus on the present and has the function of opening up space for reflection. Consequently, not so much happens in the plot; rather, in this case we are dealing with a *narrative mode* that opens the NoC for pausing and transferring what is read to one's own experience.

The strong reference to the present tense highlights what the vision is needed for: to encourage residents to act now. The future and its vision are the subject of creation with the reader as co-shaping entities. The NoC of Viable Cities further focuses on what can and should be done today for a better life in society. The task of the NoC here is to create inclusivity and to encourage citizens now and here to be a part of the future planning team. As a consequence, the future is present in the NoC more as a motif than as a time of action. It can be said that the NoC of Viable Cities focusses strongly on what can be done now to usher in the future already today.

## 5. Discussion and conclusions

The analysis of the presentation techniques of the Viable Cities NoC reveals the strategic character of the narratives in general. They not only include thematic aspects but are strategies to attract the readers' attention and, in the case of the NoC, to achieve inclusivity. In this way, they motivate the readers to participate in the change, though it should be noted that we have not investigated readers' perceptions or the material impact of the narratives – only their nature and intended effects, from the perspective of literary narrative analysis. The presentation techniques are likely to be perceived by the recipients rather subconsciously. Recipients are often unaware of them, although presentation techniques represent the way a message is to be interpreted and are therefore of special interest for the analysis. Four main presentation techniques have been identified in the analyzed NoC: (1) plurality of storylines, (2) variable narration, (3) essayistic character of the NoC, and (4) stretching time. It has been shown that the presentation techniques are used (a) to explain why the transition of the cities must take place and simultaneously, with a view to transparency, to introduce the readers

to drive	happen
to act	to achieve
to come	to create
building	to contribute
want	to use
to enable	to have
to develop	to make
must	to change

Fig. 4. List of the most common verbs in the NoC of Viable Cities connected to main actors, found with help of MAXQDA.

into the role of Viable Cities in the transition, (b) to offer a wide range of possible characters for identification, (c) to open the NoC to the readers and give them the awareness of being a part of it, and (d) to open up space for reflection and, in this way, to allow the readers to apply what they have read to their own experience. These strategies, which aim to call for participation and transparency, are hidden in the design of the story told by Viable Cities, that is, in its NoC. Viable Cities reflects, especially in the Meta-Narrative, some of the presentation techniques, such as using everyday language, working with examples, and giving voice to different actors. These reflections show that the mediating organization is deeply engaged with the topic of storytelling and narratives.

The analysis of the Viable Cities NoC has revealed that the NoC is multi-layered and includes different storylines and different narrators, so it also presupposes various tacit addressees. The Viable Cities Story addresses humanity in general and, in its direct speech, calls people to action to stop climate change. At first glance, it seems similar in the case of the “Urban Transition Story”, which contains texts by Viable Cities staff or project partners. Here, emotional and very personal stories are told and the narrators tell their stories as humans in general, but from time to time it becomes clear that the addressees of the stories are actually urban stakeholders. Viable Cities’ motivation to engage potential partners through intrinsic and personal motivation seems to be the reason why they are addressed personally, as people who are affected by climate change. It is a strategy to reach the goal of inclusivity through affective engagement.

However, this also has a downside. In general, it is not clear at first glance from the NoC who the addressee is: potential partners of Viable Cities or people in general? The Meta-Narrative makes this clear by explaining how the method of storytelling works: it is about urban stakeholders, not about people in general, who can use the method of storytelling to engage people in the sustainable development of cities. And still, even in the Meta-Narrative, at the linguistic level, it is not always easy to tell who the addressee is. Reading these texts, it seems that everyone is the addressee of the Viable Cities NoC. Moreover, Viable Cities seems to find it challenging to distinguish – in its texts – between various tacit addressees. To achieve participation through the NoC, it needs to be clear what Viable Cities expects from the various addressees, or (which seems to be more the case for Viable Cities) that there is only one addressee, the urban stakeholders, but addressed in his or her different functions: as a human being, as an urban stakeholder, as an employee, as a mother or father, and so on.

Our review of the literature in this context finds a growing interest in and recognition of NoC in research. NoC shape social communities as well as research and represent different interpretations of discourses. Due to the growing awareness of the impact of language on our environment, there is currently also a growing interest in discourses and discursively generated visions of the future as well as in NoC that serve as a means to build a future vision or to persuade one (Guske et al., 2019). NoC are therefore increasingly becoming the focus of action research and societal change in order to have an inclusive effect and thus allow as many as possible to participate in the sustainable transformation. Yet, as we have shown, NoC operate not only on the surface of language. They do not only include elements of a story, but rather are strategies to connect the elements in a way that supports particular visions. Their persuasive power and their effect come from their presentation techniques, which are rather hidden and not reflected at first glance, but which affect our perception. This is a key value of the narrative analysis of presentation techniques: it reveals the NoC that circulate in society, helping an understanding of underlying values and principles. Drawing on the difference between narrative and story, we have shown that what Raven and Elahi (2015) call story design, and what is referred to as presentation techniques in literature studies, is a core characteristic of NoC. Underpinning the case of Viable Cities studied is an NoC that aims to act transparently and inclusively to achieve the goals of the urban transition to sustainability.

What literature studies perspective on NoC teaches us is that the task of every narrative (in a greater or lesser manner) is to achieve inclusivity. Inclusivity is needed so that the story told is understood and is listened to. In particular, NoC is characterized by a high motivation to create inclusivity, because it is not only used to hear and understand a story, but its task is also to motivate the readers and listeners to act. The literary studies approach makes clear that narrative strategies are not only to be worked out with analyzes of grammar. A literary approach, as we introduce in the article, puts the analysis of the individual use of language by also resorting to the established esthetic tools in the society, which we have described here as presentation techniques. The presented case study of Viable Cities serves here to illustrate the analytic approach, instead of generalize empirically from the case on how every NoC achieve its goals of inclusivity. The literary approach further teaches us, what is generally applicable to Futures Studies, that not only at the level of grammar, language influences our perception, but also that the presentation techniques that actually make up a narrative are what motivate readers to persuasion and action. General language- and discourse-oriented approaches in the field of Futures Studies can draw inspiration from this for the analysis of the strategies that lead to the implementation of different visions in society, but also to learn further techniques for motivating the broad social groups to participate in the creation of their own future (in terms of futurising as a practice).

## Conflicts of Interest

The authors declare no conflict of interest.

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## Annex. List of analyzed texts published on medium.com

1. Grankvist, P. 2019. Explaining and exploring our common future.
2. Grankvist, P. 2020. A better story about a city that is better for all.
3. Grankvist, P. 2021. What cities can learn from car makers.
4. Grankvist, P. 2020. I vilken sorts skog möter Rödluvan vargen, egentligen?
5. Grankvist, P. 2021. The local pandemic.
6. Grankvist, P. 2019. Med tro, hopp och kärlek.
7. Viable Cities 2020. The Declaration.
8. Viable Cities 2021. Climate City Contracting for Humane Thriving.
9. Viable Cities 2019. Creating cities that are liveable, lovable and viable.
10. Viable Cities 2021. Tak – stadens och fastighetsägarens gröna guld.
11. Viable Cities 2021. New alliance for Climate-Smart Mobility 2030.
12. McCormick, K. 2020. Navigating Mission for Climate Neutral Cities.
13. McCormick, K. 2021. The Future of Sharing: Twelve Insights from a Roundtable for Horizon Scanning on Sharing Cities.
14. Mistry, J. 2020. The World Urban Forum: placing people and culture at the heart of the smart city.
15. Westin, M. 2020. Covid-19 and the role of experts: Insights for sustainability transformations.
16. Westin, M. 2020. Rethinking deliberative planning in times of crisis.
17. de Gheldere, S. 2021. How to finance and scale climate action in cities.
18. Larson, A. 2021. A journey into climate transition.
19. Andersson, E., Kambli, N. 2020. Five ways of meaningfully involving citizens in climate action.
20. Dierks, O. A. 2020. Preparing to scale climate solutions in cities.
21. Kjellström, H. 2020. Singulariteten... Är det verkligen den mest angelägna frågan?
22. Svane, Ö. 2021. Fyll klimatgapet –del 1.
23. Boman, M. 2019. Att framtidsskriva en stad.
24. Leonette, J. 2021. Att dela framtiden i Sege park och vägen dit.

## References

- {C}Jasanoff, S., & Kim, S.H. (Eds.){C}, (2015). *Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power*. Chicago.
- Assmann, A. (2013). Transformations of the modern time regime. In C. Lorenz, B. Bevernage (Eds.), *Breaking up time. Negotiating the borders between present, past and future* (pp. 39–56). Göttingen. (<https://doi.org/10.13109/9783666310461.39>).
- Barthes, R. (1975). An introduction to the structural analysis of narrative. *New Literary History*, 6(2), 237–272. <https://doi.org/10.2307/468419>
- Baú, V. (2016). A narrative approach in evaluation: “Narratives of change” method. *Qualitative Research Journal*, 16(4), 374–387. <https://doi.org/10.1108/QRJ-08-2015-0072>
- Berendse, M., Duijnhoven, H., & Veenswijk, M. (2006). Editing narratives of change. Identity and legitimacy in complex innovative infrastructure organizations. *Intervention Research*, 2, 73–89. <https://doi.org/10.4236/jssm.2009.24040>
- Borup, M., Brown, N., Konrad, K., & Van Lente, H. (2006). The sociology of expectations in science and technology. *Technology Analysis & Strategic Management*, 18 (3–4), 285–298.
- Bremer, S., Wardekker, A., Dessai, S., Sobolowski, S., Slaattelid, R., & van der Sluijs, J. P. (2019). Toward a multi-faceted conception of co-production of climate services. *Climate Services*, 13, 42–50. <https://doi.org/10.1016/j.ciser.2019.01.003>
- Chivers, M., & Yates, A. (2010). The narrative turn in action learning practices: From restitution to quest. *Action Learning: Research and Practice*, 7(3), 253–266. <https://doi.org/10.1080/14767333.2010.518372>
- Cope, M. R., Park, P. N., Jackson, J. E., Muirbrook, K. A., Sanders, S. R., Ward, C., & Brown, R. B. (2019). Community as story and the dynamic nature of community: Perceptions, place, and narratives about change. *Social Sciences*, 8(2), 1–16.
- da Cunha, C., Rocha, A. P. F., Cardon, M., Breton, F., Labeyrie, L., & Vanderlinden, J. P. (2020). Adaptation planning in France: Inputs from narratives of change in support of a community-led foresight process. *Climate Risk Management*, 30, 1–14. <https://doi.org/10.1016/j.crm.2020.100243>
- Dobroć, P. (2022). Zukunftsvisionen als Kulturtechniken und ihre Rolle im Prozess der kulturellen Regelbildung. In P. Frey, P. Dobroć, A. Hausstein, R. Heil, A. Lösch, M. Roßmann, & C. Schneider (Eds.), *Vision Assessment. Theoretische Reflexionen zur Erforschung soziotechnischer Zukünfte*. Karlsruhe. <https://doi.org/10.5445/KSP/1000142150>
- Dobroć, P., & Lösch, A. (2022). Politicization of the 3D printing future: How cultural semiotics can improve transformative Vision Assessment. *Eur. J. Futures Res.* [forthcoming].
- Dobroć, P., Lösch, A., & Roßmann, M. (2022). (Hrsg.). In *Politicization of Sociotechnical Futures. Prerequisites and limits*. SpringerOpen.
- Dobroć, P., Krings, B. J., Schneider, C., & Wulf, N. (2018). Alternativen als Programm. Plädoyer für einen Perspektivenwechsel in der Technikfolgenabschätzung. *TATuP. J. Technol. Assess. Theory Pract.*, 27(1), 28–33. <https://doi.org/10.14512/tatup.27.1.28>
- Doolin, B. (2003). Narratives of change: Discourse, technology and organization. *Organization*, 10(4), 751–770. <https://doi.org/10.1177/13505084030104002>
- Flath, H. (2013). *Storytelling im Journalismus*. Tübingen.
- Fløttum, K., & Gjerstad, O. (2017). Narratives in climate change discourse. *Wiley Interdisciplinary Reviews: Climate Change*, 8(1), 1–15. <https://doi.org/10.1002/wcc.429>
- Fludernik, M., & Ryan, M. L. (2020). Factual narrative. An introduction. In M. Fludernik, M. L. Ryan (Eds.), *Narrative factuality. A handbook*. Berlin-Boston. (<https://doi.org/10.1515/9783110486278-001>).
- Gearty, M. (2015). Beyond you and me: Stories for collective action and learning? Perspectives from an action research project. *Action Learning: Research and Practice*, 12(2), 146–165.
- Geels, F. (2005). Co-evolution of technology and society: The transition in water supply and personal hygiene in the Netherlands (1850–1930)—A case study in multi-level perspective. *Technology in Society*, 27, 363–397. <https://doi.org/10.1016/j.techsoc.2005.04.008>
- Genette, G. (2010). *Die Erzählung*. Stuttgart. (<https://doi.org/10.36198/9783838580838>).

- Grillitsch, M., Hansen, T., Coenen, L., Miörner, J., & Moodysson, J. (2019). Innovation policy for system-wide transformation: The case of strategic innovation programmes (SIPs) in Sweden. *Research Policy*, 48, 1048–1061. <https://doi.org/10.1016/j.respol.2018.10.004>
- Grunwald, A. (2018). *Technology assessment in practice and theory*. London, New York.
- Grunwald, A., & Kopfmüller, J. (2022). *Nachhaltigkeit*. Frankfurt am Main.
- Grunwald, A. (2012). *Technikzukunft als Medium von Zukunftsdebatten und Technikgestaltung*. Karlsruhe.
- Guske, A. L., Jacob, K., Hirschnitz-Garbers, M., Peuckert, J., Schridde, S., Stinner, S., Wolff, F., Zahrnt, D., & Ziesemer, F. (2019). Stories that change our world? Narratives of the sustainable economy. *Sustainability*, 11. (<https://www.mdpi.com/2071-1050/11/21/6163>).
- Hausstein, A., & Lösch, A. (2020). Clash of visions. Analysing practices of politicizing the future. *Behemoth*, 13(1), 83–97. <https://doi.org/10.6094/behemoth.2020.13.1.1038>
- Hermwille, L. (2016). The role of narratives in socio-technical transitions—Fukushima and the energy regimes of Japan Germany, and the United Kingdom. *Energy Research & Social Science*, 11, 237–246. <https://doi.org/10.1016/j.erss.2015.11.001>
- Hodson, M., & Marvin, S. (2010). Can cities shape socio-technical transitions and how would we know if they were? *Research Policy*, 39, 477–485. <https://doi.org/10.1016/j.respol.2010.01.020>
- Hodson, M., Marvin, S., & Bulkeley, H. (2013). The intermediary organisation of low carbon cities: A comparative analysis of transitions in Greater London and Greater Manchester. *Urban Studies*, 50(7), 1403–1422. <https://doi.org/10.1177/0042098013480967>
- Jasanoff, S., & Martello, M. L. (2004). *Earthly politics. Local and global in environmental governance*. Cambridge, M. A.
- Kivimaa, P., Wouter, B., Sampsas, H., & Laurens, K. (2019). Towards a typology of intermediaries in sustainability transitions: A systematic review and a research agenda. *Research Policy*, 48, 1062–1075. <https://doi.org/10.1016/j.respol.2018.10.006>
- Konrad, K. (2010). Governance of and by expectations. In *Tentative governance in emerging science and technology. Actor constellations, Institutional Arrangements and Strategies* (pp. 67–77). Enschede: University of Twente.
- Krauß, W. (2020). Narratives of change and the co-development of climate services for action. *Climate Risk Management*, 28. <https://doi.org/10.1016/j.crm.2020.100217>
- Krauß, W., & Bremer, S. (2020). The role of place-based narratives of change in climate risk governance. *Climate Risk Management*, 28. <https://doi.org/10.1016/j.crm.2020.100221>
- Lösch, A., Böhle, K., Coenen, C., Dobroć, P., Heil, R., Grunwald, A., ... Wentland, A. (2019). Technology Assessment of Socio-Technical Futures – A Discussion Paper. In Lösch, A., Grunwald, A., Meister, M., & Schulz-Schaeffer, I (Eds.), *Socio-Technical Futures Shaping the Present: Empirical Examples and Analytical Challenges* (pp. 285–308). Wiesbaden. doi:10.1007/978-3-658-27155-8\_13.
- Lösch, A., Roßmann, M., & Schneider, C. (2021). Vision Assessment als sozio-epistemische Praxis. In S. Böschen, A. Grunwald, B. J. Krings, C. Rösch (Eds.), *Technikfolgenabschätzung. Handbuch für Wissenschaft und Praxis* (pp. 337–351). Baden-Baden. (<https://doi.org/10.5771/9783748901990-337>).
- Luhmann, N. (1998). Describing the future. In *Writing science, observations on modernity* (pp. 63–74). Stanford, CA, USA.
- Luhmann, N. (1990). Die Zukunft kann nicht beginnen. Temporalstrukturen der modernen Gesellschaft. In P. Sloterdijk (Eds.), *Vor der Jahrtausendwende: Berichte zur Lage der Zukunft* (pp. 119–150). Frankfurt a. M.
- Marschütz, B., Bremer, S., Runhaar, H., Hegger, D., Mees, H., Vervoort, J., & Wardekker, A. (2020). Local narratives of change as an entry point for building urban climate resilience. *Climate Risk Management*, 28. <https://doi.org/10.1016/j.crm.2020.100223>
- Martinez, M., & Scheffel, M. (2007). *Einführung in die Erzähltheorie*. München.
- Milojević, I., & Inayatullah, S. (2015). Narrative foresight. *Futures*, 73, 151–162. <https://doi.org/10.1016/j.futures.2015.08.007>
- Miskimmon, A., O'Loughlin, B., & Roselle, L. (2013). *Strategic narratives. Communication power and the new world order*. New York.
- Moezzi, M., Janda, K. B., & Rotmann, S. (2017). Using stories, narratives, and storytelling in energy and climate change research. *Energy Research & Social Science*, 31, 1–10. <https://doi.org/10.1016/j.erss.2017.06.034>
- Noboa, E., Upham, P., & Heinrichs, H. (2018). Collaborative energy visioning under conditions of illiberal democracy: results and recommendations from Ecuador. *Energy Sustain. Soc.*, 8(31), 1–17. <https://doi.org/10.1186/s13705-018-0173-0>
- Raven, P. G., & Elahi, S. (2015). The new narrative: Applying narratology to the shaping of futures outputs. *Futures*, 74, 49–61. <https://doi.org/10.1016/j.futures.2015.09.003>
- Schärf, C. (2009). Essay. In D. Lamping (Eds.), *Handbuch der literarischen Gattungen* (pp. 224–233). Stuttgart.
- Schneider, C., Roßman, M., Lösch, A., & Grunwald, A. (2021). Transformative vision assessment and 3-D printing futures: A new approach of technology assessment to address grand societal challenges. *IEEE Transactions on Engineering Management*. <https://doi.org/10.1109/TEM.2021.3129834>
- Stanitzek, G. (2013). Essay. In T. Anz (Eds.), *Handbuch Literaturwissenschaft. Vol. 2: Methoden und Theorien* (pp. 160–166). Stuttgart, Weimar.
- Upham, P., & Gatherm, L. (2021). Actors in transitions: narratives of roles and change in the German e-mobility transition. *Environ. Innov. Soc. Transit.*, 40, 450–460. <https://doi.org/10.1016/j.eist.2021.09.009>
- Van Lente, H. (1993). *Promising technology: The dynamics of expectations in technological development*. Delft: Twente University.
- Wittmayer, J. M., Backhaus, J., Avelino, F., Pel, B., Strasser, T., Kunze, I., & Zuijderwijk, L. (2019). Narratives of change: How social innovation initiatives construct societal transformation. *Futures*, 112, 1–12. <https://doi.org/10.1016/j.futures.2019.06.005>