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Shaping the future: A conceptual review of sociotechnical imaginaries

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ABSTRACT

The literature around sociotechnical imaginaries has proliferated since the seminal publications of Jasanoff and Kim (2009, 2015). In this conceptual review, we examine the evolution of the concept and engagement with it across disciplines. To investigate this, we develop and analyse a corpus of 306 papers that deal with, build on or develop the concept. We provide a description of the citation trends, the journals in which papers are published, and the empirical topics that are covered in the literature. Building on Jasanoff's foundational insights about political differences, time, space, and collective identity, our evaluation examines how scholars have both elaborated and extended these dimensions. Our analysis focuses on four key areas of conceptual development: (1) how the future has been engaged with, (2) how the concept is used to trace changes over time, (3) the forms of comparison employed in research, and (4) the ways in which the spatio-material emphasis is manifested. Our analysis highlights how the concept has evolved through diverse encounters with other fields, and underscores how the concept can be useful for further research. We suggest focusing on the relations between imaginaries and adjacent concepts, the endurance of imaginaries, and the mediums through which imaginaries are channelled for further conceptual development with and through the concept.

1. Introduction

In recent years, the concept of sociotechnical imaginaries (STI) has gained increasing attention, prompting many scholars to engage with it. Research on sociotechnical imaginaries scrutinizes how collective perceptions of the public good and promises of a desirable future shape contemporary politics. With its explicit focus on the future as an object of analytical inquiry, sociotechnical imaginaries have emerged as a relevant concept for futures studies. This interest in sociotechnical imaginaries has also sparked theoretical and methodological debates about how the concept allows us to grasp the future in analytically productive ways. Positioned within the

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constructivist and interpretative traditions of the social sciences, sociotechnical imaginaries are part of a broader set of approaches that understand the future as performative, partial and political (e.g. Muiderman et al., 2020). This paper examines how the concept of sociotechnical imaginaries has been taken up, critiqued, and adapted over the past decade, focusing on its analytical contribution and its interaction with other concepts.

The concept of sociotechnical imaginaries, first coined by Jasanoff and Kim in 2009, describes how a society's shared visions of the future shape its scientific and technological developments. These developments in turn influence how that society imagines its future. This symmetrical approach builds on co-production as an idiom that emphasizes the mutual production and shaping of knowledge and social order – or how epistemic and normative commitments are intertwined (Jasanoff, 2004, p. 2). By elevating imagination from an individual process to a collective sense-making effort, sociotechnical imaginaries highlight how visions of the future play a central role in shaping social and political life. Jasanoff and Kim (2009) build on the work of George Marcus (1995) and colleagues (Anderson, 1983; Appadurai, 1996; Castoriadis, 1987; Taylor, 2004) to explicitly foreground the role of science and technology in constructing and rehearsing collective visions of a good society (see also (McNeil et al., 2017) for an extensive analysis on how the concept 'imaginaries' has been engaged with in science and technology studies). The first iteration of the concept in 2009 emphasized how national endeavours in science and technology align with specific conceptions of nationhood.

Over time, the concept of sociotechnical imaginaries has evolved from its initial formulation. A key milestone in this development was the publication of the edited volume "*Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*" (2015), which offered a more comprehensive account of the concept and acknowledged and built on extant critique. In this volume, Jasanoff redefined sociotechnical imaginaries as "collectively held, institutionally stabilised, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology" (Jasanoff, 2015a, p. 4). This reformulation marked two important theoretical advances. First, it broadened the concept's scope beyond nation-states to encompass other collective formations, such as corporations, social movements, and professional societies. Second, it established a more comprehensive framework around four key dimensions: differences across political regimes, temporal dynamics, spatial variations, and the relationship between collective formations and individual identity. These

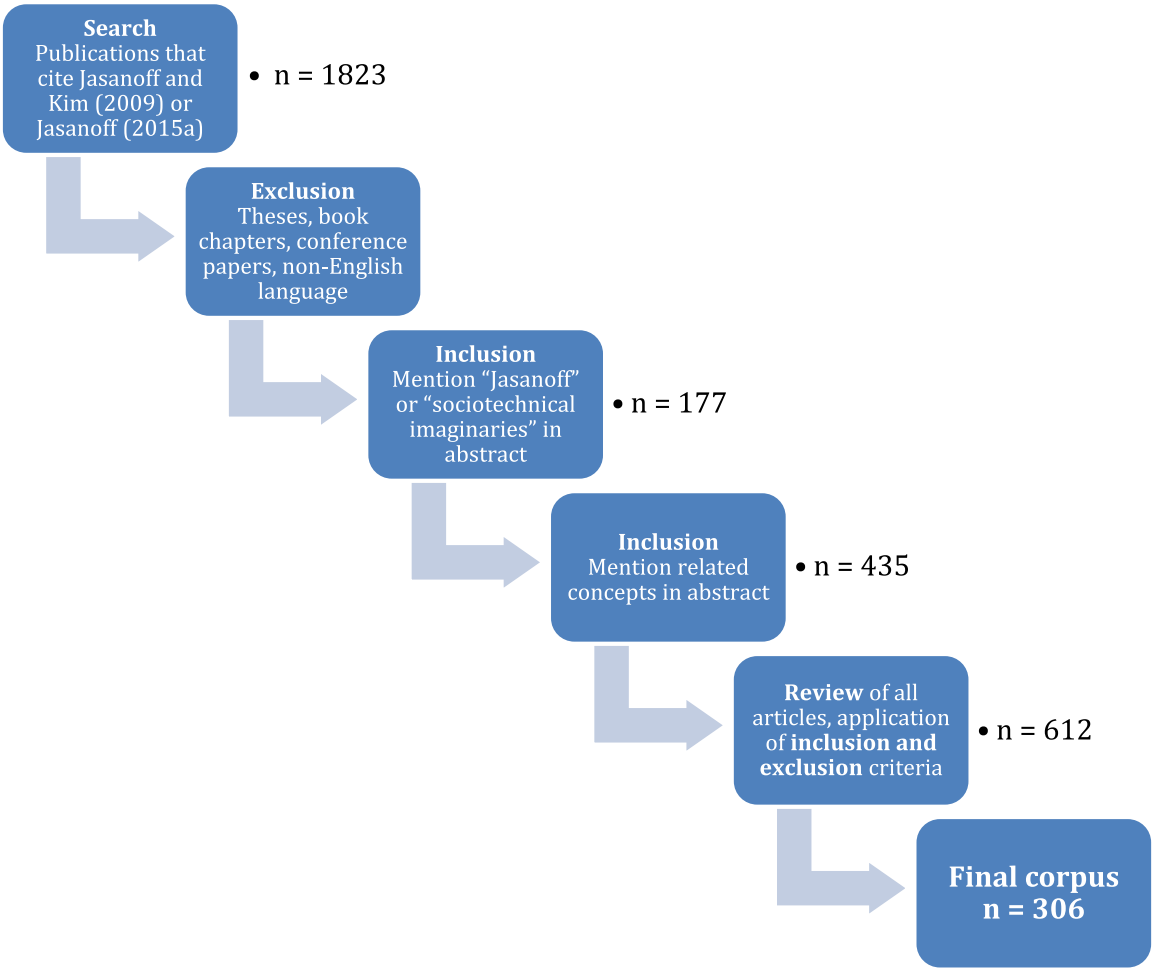

Fig. 1. Schematic representation of the inclusion and exclusion process.

dimensions provided a systematic basis for analyzing how imaginaries take shape and evolve in different contexts (Jasanoff 2015a). (see Fig. 1)

Sociotechnical imaginaries have become an increasingly popular concept that has been adopted and elaborated on across disciplines (see Section 3; Fig. 2 and Fig. 4). These widespread applications have also prompted critical questions and debates about the potential and limitations of the concept (e.g. Beck, Jasanoff, Stirling, & Polzin, 2021; Milkoreit, 2017; Tidwell & Tidwell, 2018). Debates as well as methodological and theoretical developments on sociotechnical imaginaries have been particularly prominent in the field of energy research and social science (Hess & Sovacool, 2020; Jasanoff & Simmet, 2021; Kuchler & Stigson, 2024; Rudek, 2022). These contributions have enriched the ways in which futures are approached in the social sciences, giving weight to how sustained and performed visions of the future influence and structure current societies. However, as will be discussed, the need to explore and expand upon this further remains. As such, the aim of this article is twofold. First, as presented in Section 3, we provide a descriptive account of the widespread adoption of sociotechnical imaginaries across fields and empirical topics. This account broadens the focus beyond the previous attention to energy research. Shifting the focus away from energy research offers a broader perspective on the development of sociotechnical imaginaries, emphasizing diverse engagements across domains that highlight social life together with specific materialities and technologies. Second, as elaborated on in Sections 4 and 5, we analyse how sociotechnical imaginaries have been taken up by other scholars, including how the concept has been developed by scholars interested in analysing and shaping the future, beyond the field of science and technology studies (STS).

Our contribution takes as its starting point the fact that concepts in the field of science and technology studies have a long lineage of cross-disciplinary uptake and travel to new fields (e.g. Star, 2010; Turnhout, Neves, & De Lijster, 2014). Therefore, we seek to interrogate the ways in which this is happening and how these new engagements and applications of concepts contribute to efforts to address the future (e.g. Rip, 2018). While scholars tend to focus on inventing new concepts, existing concepts hold untapped potential that could enhance our theoretical understanding and strengthen analytical approaches. As the concept moves across different academic fields, sociotechnical imaginaries is rediscovered and recontextualized by various scholars. This can occur by applying the same concept over and over again, often at the expense of deeper and/or creative analytical engagement, bearing the risk of cutting the concept off from the theoretical roots that led to its development (e.g. Jasanoff and Simmet, 2021). In contrast, here we examine how the various engagements of the STI concept far beyond the territorial waters of STS have led to conceptual developments that can help improve the analytical and interpretative dimensions of the study of futures.

This paper explores the analytical approaches used to understand and interpret imaginaries, how the concept of sociotechnical imaginaries has been taken up, and how engaging with sociotechnical imaginaries helps in studying the future. Our qualitative mixed-methods review of 306 research articles published between 2011 and 2021 serves as the foundation for this exploration. We contribute by furthering a nuanced understanding of the development and application of sociotechnical imaginaries as well as by highlighting the need for ongoing dialogues about concepts' epistemological origins and how they relate to other concepts and methodologies. This journey through different disciplines and empirical contexts underscores the analytical richness of sociotechnical imaginaries and reveals insights into the dynamic interplay between societal visions and technological developments.

2. Methodology

2.1. Construction of the corpus

We have created a corpus of 306 peer-reviewed articles that engage with, build on or develop the concept of sociotechnical imaginaries. In the first step, we collected all publications that cited the key publications in which the concept of sociotechnical imaginaries is developed by Jasanoff and Kim (2009, 2015)[4]. Our search was limited to literature published up to December 2021 and listed in Scopus and Google Scholar (last search date: 10 December 2021), providing 1823 publications. In the second step, we excluded publications not published in a peer-reviewed journal, such as Master's and PhD theses, book chapters and conference papers, and contributions not written in English. Third, we decided to directly include articles that mentioned "Jasanoff" or "sociotechnical imaginaries" in their abstract, title or keywords (n = 177). Fourth, we highlighted papers that mentioned terms closely associated with sociotechnical imaginaries, such as "imagined futures", "imaginaries", "visions", "expectations", "co-production", "imagination", "future", and "futures" (n = 435) in their abstract, title or keywords. In our fifth step, we have gone through this combined set of papers (n = 612) to decide which articles to include.

For this, we developed a set of inclusion and exclusion criteria to decide which articles should be included in the final corpus. We included papers that:

- make conceptual use of sociotechnical imaginaries to interpret and better understand an empirical phenomenon,
- build on sociotechnical imaginaries to develop another concept, heuristic, or theoretical framework.

We have excluded articles that:

- mention sociotechnical imaginaries in passing, such as in the introduction, methods, or conclusion of the article.[5]

[4] We have not focused on Jasanoff and Kim (2013) as it is a shorter and more empirically-focused article, without substantive conceptual development on the concept of sociotechnical imaginaries

[5] In these cases, imaginaries were often presented as an alternative approach to exploring futures than the one employed in the article or as an adjacent area of research. This was the main reason for exclusion.

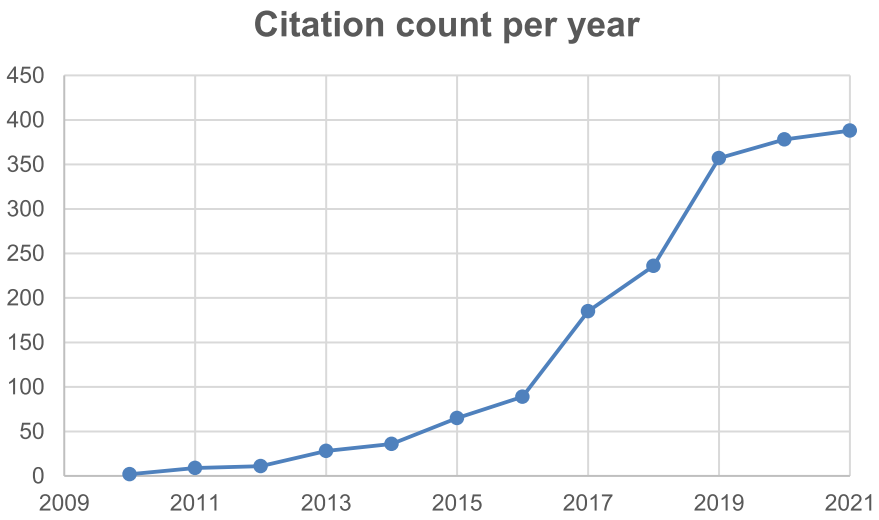

Fig. 2. Yearly number of publications that cite Jasanoff & Kim (2009); (2015). Source: Figure created by the authors.

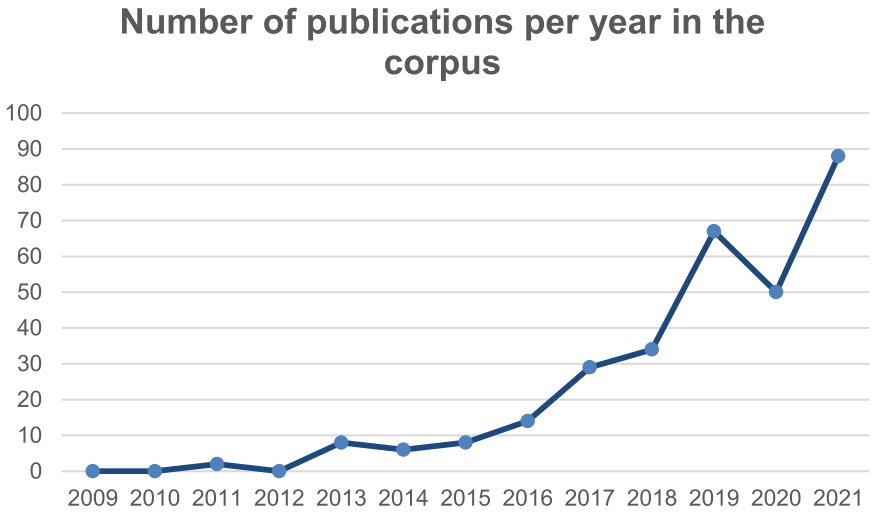

Fig. 3. Number of publications included in the corpus that cite Jasanoff & Kim (2009); (2015). Source: Figure created by the authors.

- devote a section to summarizing the concept of sociotechnical imaginaries, for example in a review or introduction to a special issue, but do not offer new conceptual insights or empirical engagement with the concept.

This process resulted in half of the 612 articles being included in the final corpus of 306 articles. The sharp decrease demonstrates how there is a diversity of terms regarding imagination and the future – there were plenty of articles in the second to last stage that discuss imagination and futures without explicitly engaging with and building on Jasanoff and Kim's concept of sociotechnical imaginaries. These articles employed other analytical angles and theoretical lineages in more depth and tended to mention sociotechnical imaginaries only in passing. As such, it does not necessarily mean that the engagement with sociotechnical imaginaries was superficial, instead, it implies that those articles have other concepts that were at the core.

The construction of the corpus has been an iterative and interpretative process, in which the inclusion and exclusion of articles, as well as ambiguous cases, have been discussed and agreed upon by the first two authors. We have been quite broad in the inclusion of articles, resulting in a large corpus of 306 articles (see Appendix A). This allows us to respond to the aims of the review to both describe and analyse how sociotechnical imaginaries have been engaged with. The limitation of such a large corpus is that it is difficult to summarize and categorize the rich and nuanced analyses individual studies provided.

2.2. Analysis of the corpus

To review the articles, the first two authors summarized information into a database that covered conceptual, descriptive, and

Journal title	Number of publications
Energy Research & Social Science	29
Science as Culture	17
Science Technology & Human Values	16
Futures	10
Social Studies of Science	9
New Media & Society	8
Big Data & Society	6
Public Understanding of Science	5
Humanities and Social Sciences Communications	5
Geoforum	5
BioSocieties	5

Fig. 4. Number of publications across different journals. Source: Figure created by the authors.

methodological details. For this, the authors read all the articles, focusing in more detail on the sections that explicitly dealt with imaginaries. For the database, we extracted bibliographical information on authors, journal, publication year, title and abstract. In terms of conceptual engagement, we noted the research question; type of paper; extent of engagement with sociotechnical imaginaries; and if sociotechnical imaginaries were paired with any other theories or concepts. For descriptive elements, we noted the timeframe of the case study, case, and empirical topic. For methodology, we noted the type of data employed, the type of analysis and the degree of methodological reflexivity. If the article discussed or identified a sociotechnical imaginary, we noted that as well. We did not have predefined categories for any of these but approached the large corpus in an open-ended manner and sought to utilize the author(s) own words whenever possible. During the analysis process, we developed some descriptive categories to present the corpus (see Section 3).

Our research process involved a combination of quantitative and qualitative elements, where quantitative trends (such as the number of publications in each empirical field) were used as a starting point to interpret the corpus. This analysis process was accompanied with active discussion and iteration on whether certain articles fulfil the inclusion and exclusion criteria, on how we could interpret the author's engagement with sociotechnical imaginaries, or on what constitutes the case or scale in the different studies. Reading, analysing, and discussing the articles formed the main part of our research process.

3. Description of the corpus

3.1. Citation trend

Since the concept was coined by Jasanoff and Kim (2009), the yearly number of publications on sociotechnical imaginaries has grown significantly as recognized in the first step of our corpus construction (n = 1823) (Fig. 2).

In our constructed corpus of 306 articles, the first years show only a few publications per year, while 2013–2015 shows a clear increase in citations. The publication of *Dreamscapes of Modernity* in 2015 marks an increase in publications, with especially the years 2019–2021 exhibiting over 50 publications per year (Fig. 3).

3.2. Journals

The articles included in our corpus have been published in 150 journals (see Appendix B). The vast majority (105) of these journals have only a single publication, demonstrating the extensive reach of the concept across disciplinary boundaries, including anthropology, sociology, history, geography, futures studies, urban studies, area studies, media studies, agricultural studies, research on education and pedagogy, medical humanities, and information and communication studies. There are 26 journals with more than two publications and only 19 journals with at least four publications. We have listed the twelve journals with the highest number of publications (Fig. 4).

Energy Research & Social Science (ERSS) is the main outlet for research on sociotechnical imaginaries in our corpus. The difference with other journals becomes even clearer when we make a distinction between theme-specific journals (such as ERSS and *Big Data & Society*) and disciplinary journals. A large proportion of publications appear in journals specifically from the academic STS community:

Science as Culture (SaC), *Science, Technology & Human Values* (ST&HV), and *Social Studies of Science* (SSS).

3.3. Empirical topics

To understand the range of empirical topics covered by the corpus, we conducted a simple inductive coding, giving each article a maximum of three keywords. We present the popularity of codes by a word cloud (Fig. 5), which should be interpreted cautiously as a schematic representation of the breadth and popularity of the empirical topics engaged with.[6]

Not surprisingly, energy is the most popular empirical topic examined in our corpus (see also Hess & Sovacool, 2020; Jasanoff & Simmet, 2021; Rudek, 2022). Of the examined energy sources, nuclear energy is the most popular topic (e.g. Bayer & Felt, 2019; Santos Pereira et al., 2017; Santos Pereira et al., 2018), followed by other controversial technologies, such as geoengineering and hydraulic fracturing (e.g. Flegal & Gupta, 2018; Metze, 2018). This is likely influenced by the initial orientation of sociotechnical imaginaries research on nuclear energy (Jasanoff & Kim, 2009) as well as the wider focus in STS on sociotechnical controversies.

The focus on other environmental topics was more scattered. The topics covered included, for example, agriculture (Bain, Lindberg, & Selfa, 2020), food (Lupton, 2017) and resource use, and land (Schoenberger & Beban, 2021; Sippel & Visser, 2021). Despite the societal pervasiveness of climate change, climate change as a scientific, social and political phenomenon was not extensively analysed through the lens of sociotechnical imaginaries (for notable exceptions, please see Davoudi & Machen, 2021; Marquardt, 2020; Milkoreit, 2017). We suspect this may be due to a parallel line of research on socio-climatic or climate imaginaries (Davoudi & Machen, 2021; Milkoreit, 2017), which both draws on and contrasts with sociotechnical imaginaries research.

Another broad empirical topic that received attention was biomedicine and health. Imaginaries related to various aspects of reproductive health, including fertility treatments, egg donation, and cryopreservation received a lot of attention (e.g. Bach, 2020; Kroløkke, 2019; Molas & Whittaker, 2021), but so did different innovations in biomedicine and health, including personalized medicine (Tarkkala, Helén, & Snell, 2019), brain research (Mahfoud, 2021), and genetics (Chiapperino & Testa, 2016).

A further cluster of imaginaries research looks at questions related to data, artificial intelligence, digitalization, social media, and the Internet. This interest spanned several contexts, applications, and scales. For example, studies examined imaginaries situated at the intersection of education, data, and digitalization, focusing on how imaginaries originating from digital entrepreneurs and the business world travel to an educational context (e.g. Rahm, 2018, 2021; Saner, 2019; Williamson, 2015, 2017, 2018). Digitalization and data also arose in studies examining cities, particularly different formulations of "smart cities" (e.g. Cinnamon, 2020; Miller, 2020).

Other empirical topics that have only more recently gained wider recognition in STS, including critical security studies (see Evans, Leese, & Rychnovská, 2021) and critical race or queer STS studies (e.g. Benjamin, 2016), were somewhat represented in our corpus, with security receiving more attention. We note a diversity of topics, ranging from cybersecurity and digital futures (Haddad & Binder, 2019; Matos, 2019) to national security (Blair, 2019) and different surveillance systems (Lawless, 2021; Spektor, 2020). Articles examining race, sexual or gender identity were not as prevalent and their principal focus was often elsewhere than with sociotechnical imaginaries (e.g. Ferris & Duguay, 2020; Garcia & de Roock, 2021). This leaves space for studying the intersection between identity, the making of collectives, and imaginaries in future studies.

Our analysis demonstrates that imaginaries research is vibrant in several empirical contexts, albeit with a focus on topics at the intersection of science, technology, policy, and societal institutions. We note also an empirical focus on the emergence of new technoscientific phenomena and on sociotechnical controversies (Jasanoff, 2004, pp. 5–6). Most studies examined relatively recent sociotechnical imaginaries with empirical materials collected in the 2000s and particularly the 2010s (more than 300 mentions[7]). This is not surprising, as sociotechnical imaginaries offer a way to problematize current visions of the future and how they structure political action in the present. At the same time, there is a danger that recent developments are not placed in a longer historical perspective. The corpus also contains a few (fewer than 10) studies of historical imaginaries (e.g. De Bont, 2020; Kapoor, 2019).

4. Demonstrating the analytical contribution

In their seminal work, Jasanoff (2015a) contends that sociotechnical imaginaries provide analytical value by explicating how and why specific sociotechnical outcomes emerge and gain traction within society. Building on the idiom of co-production (Jasanoff, 2004), sociotechnical imaginaries enable scholars to explore connections between ways of imagining and knowing, and ways of acting. As cultural ideas and practices underpin visions of a desirable future, ostensibly descriptive imaginaries inherently hold normative elements, as they present not only what futures are considered desirable but also how these futures can be realized (Beck et al., 2021; Jasanoff, 2015a). Building on previous literature and identifying key gaps in both political theory and STS, Jasanoff (2015a) outlines four non-exhaustive and overlapping dimensions where sociotechnical imaginaries provide analytical insights: (1) differences across political regimes, (2) differences across time, (3) differences across space, and (4) the relationship between collective formations and

[6] The full list of codes is presented in Appendix A. Our coding was inductive and contained both specific (e.g. bioenergy) and general (e.g. environment) codes to describe the topics. Specific codes were used when possible, but if a code appeared only once, it was combined with a more general category. We opted for an open inductive coding to determine the empirical subject of the case at hand (e.g. whether agriculture or smart cities), as a data-mining approach would have produced a list of word frequencies, likely resulting in a high frequency of theoretical and analytical concepts (e.g. imaginaries, visions) and not an analysis of the empirical case.

[7] We conducted a cursory counting of the decades examined in the studies. When several decades were mentioned, all of these were counted, explaining the high number of recent decades.

Fig. 5. Word cloud on empirical topics in the corpus. The largest words received the most counts. Each article was given a maximum of three key words, all key words (n = 51) are listed in Appendix A. Source: Figure created by the authors.

individual identity. In this section, we discuss these four dimensions with examples that illustrate how the dimensions have been taken up. Following, in Section 5, we will show how distinct engagements with sociotechnical imaginaries have led to conceptual development beyond these four dimensions.

The first analytical dimension by Jasanoff (2015a) is that sociotechnical imaginaries help explain differences in sociotechnical outcomes in distinct political regimes and the motivations behind choosing specific societal pathways over others. Au's (2020) analysis of China's precision medicine policies, alongside studies of stem cell research in South Korea (Kim, 2014), and energy futures in Norway and Ukraine (Berling, Surwillo, & Sørensen, 2022), illustrate this. Au shows how precision medicine was framed in China through three anticipatory discourses: addressing demographic transitions, spurring innovation amid slowing growth, and competing technologically with the US. This contrasts sharply with the US approach, where initiatives like "All of Us" emphasize patient empowerment and diverse participation. While Western debates often centre on ethics and religious concerns (see also Kim, 2014), Au (2020) demonstrates that China's key tensions emerged between state/industry actors viewing precision medicine as crucial for national competitiveness and activists concerned about democracy and social justice. These competing visions reflected broader contestation over China's development path - whether it should be oriented toward industrial competitiveness or democratic governance founded on social equity. The analytical value here lies in revealing how political regime characteristics directly shape which aspects of technology development become contentious and how such conflicts are mediated.

Second, sociotechnical imaginaries shed light on questions related to time and change, particularly in understanding why certain sociotechnical arrangements endure while others fade. Bach and Kroløkke (2020) demonstrate this through their analysis of ovarian tissue freezing. The emergence of this possibility created a new sociotechnical imaginary that connected past medical achievements with new future possibilities: one that envisions cancer survival and future motherhood as compatible and achievable through medical technology. Their research shows how technology serves a dual role: it builds upon established medical practices and cultural values about motherhood (showing stability), while simultaneously transforming our understanding of what is "natural" in reproduction and who can become a mother (representing change). Thus, this collectively held vision of technological intervention in reproduction has reconfigured both intimate experiences of reproductive temporality and broader societal notions of family planning and life after cancer.

Third, sociotechnical imaginaries illuminate questions of space and scale, such as how ideas travel and transform across different contexts. Jasanoff (2015a) identifies both political regimes and space and scale as analytical dimensions. However, these dimensions offer distinct insights with political regimes focusing on governance and institutional arrangements, whereas the spatial dimension highlights how geographical contexts, territorial organization, and scalar relationships shape imaginaries. Pfotenhauer & Jasanoff (2017) demonstrate the relevance of the spatial and scalar dimension in their study of how the seemingly "same" MIT innovation model was interpreted and implemented differently in the UK, Portugal and Singapore. In the UK, the model was envisioned as a targeted, localized intervention cluster, confined to Cambridge University, aimed at rejuvenating British leadership. In Portugal, it was rather reimagined on the national level, as a nationwide network to overcome perceived developmental delays. In Singapore, it was reinterpreted as part of a global alliance strategy to transcend the city-state's size limitations. These interpretations of the seemingly "same" model also differ in how they conceptualize space itself—concentrated versus dispersed, bounded versus networked, locally contained

versus globally connected.

Fourth, sociotechnical imaginaries engage with questions of how people's individual identities shape and are shaped by their participation in collectives. Higham (2019), for example, documents how clinical-academic investigators construct distinct identities as "care-givers" rather than "profit-makers" when participating in cell therapy trials, expressing discomfort with commercial priorities taking precedence over clinical needs. These investigators navigate tensions between academic values of transparency and collaboration versus commercial demands for confidentiality and intellectual property protection. Thus, we see how different institutional frameworks and individual identities can represent competing visions of the future. One emphasizes commercial success and standardization, the other prioritizes clinical care and localized innovation. Through a mixed methods study of UK cell therapy trials, Higham (2019) emphasizes these tensions in concrete ways: from manufacturing choices (centralized vs. local production), to cultural practices (open vs. protected knowledge sharing), to moral stances about profit versus patient benefit. This detailed examination of identity formation in cell therapy trials helps us to see how the roles of individuals are actively negotiated, while also highlighting how institutional structures can privilege certain identities and futures over others.

These four dimensions of sociotechnical imaginaries – political differences, temporal dynamics, spatial variations, and individual-collective relationships – provide valuable contributions for understanding how societies envision and shape their technological futures. In the following section, we discuss how researchers have encountered practical and analytical challenges in engaging with sociotechnical imaginaries as a lens, and how they have expanded our understanding of imaginaries.

5. Diverse engagements with sociotechnical imaginaries

In this section, we examine how scholars have conceptually developed sociotechnical imaginaries through diverse engagements. Through our iterative and abductive analytical process, four key themes emerged that represent conceptual developments: the relationship between visions and imaginaries, approaches to temporal analysis, forms of comparison, and the integration of spatial and material dimensions.

While most of the publications stayed close to and cited Jasanoff and Kim's (2009); (2015) original definitions and applications, we observed that the concept has been mobilized through a variety of ways. Rather than evaluating the literature strictly through Jasanoff's conceptualization or the four dimensions elaborated in Section 4, we examine how researchers have developed the concept of sociotechnical imaginaries through different perspectives. For instance, futures studies has deepened our understanding of how emerging visions relate to established imaginaries, while geography and political ecology have revealed how spatial and material dimensions fundamentally shape imaginaries. These developments represent not just applications of the original concept but further developments of it. While scholars have carefully distinguished sociotechnical imaginaries from related concepts such as policy agendas, master narratives, and actor-network theory (see also Beck et al., 2021; Jasanoff & Simmet, 2021), our analysis highlights that the concept's theoretical richness emerges through careful engagements with adjacent fields and frameworks. As such, the four themes we identify reflect this productive tension between maintaining conceptual clarity and enabling conceptual development through diverse engagements.

Using *Dreamscapes of Modernity* (Jasanoff & Kim, 2015) as a turning point, we examine how scholars have developed these four analytical dimensions through empirical applications and theoretical developments across different fields. While some approaches share common ground with Jasanoff's original framework, they also represent distinct patterns of scholarly engagement that have emerged through diverse disciplinary perspectives.

5.1. *Engagement with the future*

The concept of sociotechnical imaginaries occupies a central position for collectively held and publicly performed visions (Jasanoff & Kim, 2009; Jasanoff, 2015a). However, our analysis reveals that subsequent scholarship has clarified and worked on the relationship between sociotechnical imaginaries and visions. This has focused in particular on the character of visions themselves, the process of vision stabilization, and how visions perform future-oriented work.

First, the notion of "visions" itself requires conceptual attention. Across the corpus, scholars engage with a variety of interpretations of the term "visions", such as sociotechnical visions (Longhurst & Chilvers, 2019) and technovisions (Eriksson & Petitt, 2020).This multiplicity of terms raises a question: do these various terms for "visions" simply describe similar phenomena differently or do they reflect genuinely distinct interpretations of what future visions entail? Rather than assuming that visions are homogeneous or fully realized, these conceptualizations point to the fluid and evolving character of visions. They suggest that how we conceptualize visions shapes what aspects of future-making become visible – whether that is the role of different actors, the relationship to established practices, or the interaction between emerging proposals and institutionalized futures.

Second, the relationship between unfixed visions and collectively held and performed imaginaries provides an interesting lens through which to examine questions of stability and change. The distinction here is between unfixed visions – those held by individuals or smaller collectives that have not yet gained broader traction – and established imaginaries that have achieved institutional stability. Hilgartner's (2015) influential concept of vanguard visions has been particularly important in theorizing how elite, small-scale visions relate to broader sociotechnical imaginaries. Christiansen and Carton (2021), for example, demonstrate this dynamic through their analysis of negative emissions technologies in Sweden. Rather than documenting the process of stabilization, they have theorized how technical, policy, and public acceptance processes interact in non-linear ways. They show how visions can achieve technical and policy stability while failing to gain broader societal resonance - a finding that challenges linear models of vision-to-imaginary progression. As such, Christiansen and Carton (2021) show how certain visions, despite a strong backing from technical experts and some

policymakers, remain in an emergent state because they lack broader societal resonance and institutional embedding. Trautmansdorff and Felt (2021) further illuminate the stabilization process through their study of digital border control technologies in Europe. They show how visions become stabilized through repeated practices of experimentation and project implementation, particularly within laboratory settings. However, they emphasize that this process is far from straightforward: "what is imagined and performed as abstract and unidirectional in the laboratory comes into being in the real world as distinctly distributed, messy, and contested infrastructures" (p.20).

Third, engagement with related theoretical frameworks, particularly the sociology of expectations, has developed our understanding of how visions perform different kinds of future-oriented work. While both visions and imaginaries engage in future-making, their performative dimensions differ significantly. Expectations, as defined by Borup et al. (2006, p.286) are "real-time representations of future technological situations and capabilities" which are strategically constructed to garner attention, legitimize investments, and align networks around specific technological innovations (see also van Lente, 2012). The sociology of expectations focuses on how these future projections are actively used to mobilize resources and coordinate efforts that serve immediate, strategic goals. In contrast, sociotechnical imaginaries encompass broader, collectively held visions of desirable societal futures that are not confined to specific strategic goals or technologies.

For example, Meyer (2019) shows how companies used Industry 4.0 to create immediate strategic expectations around operational efficiency ("process optimization") or new business models ("combining products with intelligent services"). The sociology of expectations focuses on how these future projections are actively used to mobilize resources and coordinate efforts, serving immediate goals. This is evident in how industry associations promoted Industry 4.0 to their members, explaining "what do I need Industry 4.0 for?" and helping companies justify specific technological investments (Meyer, 2019). In contrast, sociotechnical imaginaries encompass broader, collectively held visions of desirable societal futures, not confined to specific goals or technologies. Meyer's (2019) analysis of Industry 4.0 demonstrates this distinction – while individual organizations created strategic expectations around specific technological implementations, the broader Industry 4.0 imaginary encompassed collective visions about Germany's industrial future, competitiveness, and societal progress. This distinction enhances the concept of sociotechnical imaginaries by positioning them as less instrumental and more expansive than expectations (Jasanoff, 2015a; Sovacool et al., 2019; Völker, 2014).

The interplay between expectations and imaginaries enriches both concepts by revealing how specific technological expectations are embedded within larger societal imaginaries. For example, as Muiderman et al. (2020) note, imaginaries perform political work by shaping not just individual technological pathways, but the broader sense of what futures are seen as desirable and achievable. This perspective shifts the focus from isolated technological expectations to the broader sociotechnical imaginaries that guide them. Sociotechnical imaginaries thus provide the societal context in which strategic technological expectations gain or lose traction, as the meanings associated with technology are constantly adaptable, malleable, and subject to interpretation (e.g. Sovacool et al., 2019).

Further exploration of this dynamic can be found in studies by Mahony (2019), Metze (2018), Grubert (2018), Bergman et al. (2017), Korsnes (2016), Mutter & Rohracher (2022), Mwale & Farsides (2021), Bareis & Katzenbach (2021), Meyer (2019), Lafontaine et al. (2021), who examine how specific expectations align with or diverge from broader imaginaries. These studies offer valuable insights into how different actors – governments, businesses, or civil society – engage with sociotechnical imaginaries, and how these imaginaries, in turn, shape technological innovation and policy development. This dual focus on the strategic and the societal deepens our understanding of the performative power of imaginaries, positioning them as key frameworks within which societal futures are actively constructed and contested.

Together, these three dimensions – conceptual diversity, stabilization processes, and performative work – reveal the richness and complexity of how societies engage with sociotechnical futures. Our analysis shows how visions are not uniform constructs but take multiple forms, from individual aspirations to collective imaginaries. The path from vision to imaginary is neither automatic nor linear, as demonstrated by cases ranging from negative emissions technologies to digital border controls. Stabilization processes require complex alignments between technical possibilities, institutional structures, and broader societal acceptance. Finally, different types of future-oriented work serve distinct but at times complementary functions: while expectations mobilize resources and coordinate immediate actions, imaginaries provide the broader frameworks that determine which futures seem possible and desirable.

5.2. *Tracing changes over time*

Jasanoff (2015b) outlines four key phases in the development of imaginaries, similar to the phases previously identified by Felt (2015): origins, embedding, resistance, and extension. Together, these phases provide an account of how collective beliefs take shape in societies engaged with science and technology (Jasanoff, 2015b). We recognize that several authors have taken on these phases, not only to provide empirical evidence of them, but also to further develop the phases conceptually. Building on Jasanoff's (2015a) temporal dimensions, scholars have expanded our understanding of how imaginaries evolve over time.

Jasanoff (2015b) notes that sociotechnical imaginaries can **originate** from individuals who envision a future shaped by scientific and technological practices that are capable of restructuring existing social order. As discussed in the previous section, the relationship between unfixed visions held by individuals or smaller collectives and fully institutionally stabilized imaginaries is complex and not always straightforward. This complexity also extends to the temporal dimension of visions. Vanguard visions (Hilgartner, 2015), for example, can evolve rather directly into collectively held visions, but this is not guaranteed (e.g. Cirac-Claveras, 2021; Flegal & Gupta, 2018; Quinlan, 2021; Rahm, 2018).

A key question is how these visions evolve over time and become established imaginaries. For a novel imaginary to become established, it must be **embedded** within the existing societal frameworks, including cultural norms, values, social structures, and economic systems (Mutter, 2021). Mutter (2021) explores this embedding by examining how practices in a policy setting, such as

research, consultation, and regulation, contribute to the stabilization and embedding of imaginaries. Narratives also play a crucial role in the temporal development, aligning imaginaries with cultural norms, moral values, social structures, infrastructure, political institutions, and economic systems over time (Jasanoff, 2015b; Sadowski & Bendor, 2019; Schiølin, 2020). Sadowski and Bendor (2019), for example, focus on how the smart city imaginary is linked to a narrative of urban crisis and technological salvation. Their empirical observations highlight the processes through which specific organizations like IBM and Cisco have advanced smart urbanism through their corporate narratives.

The development of imaginaries can include a period of **resistance** in which challenges to new ideas are raised or dissatisfaction with the present is translated into possibilities for alternative futures (Jasanoff, 2015b). Resistance can take various forms, including critique, protest, or the presentation of alternative visions. Recent research has increasingly emphasized the contestation between different visions (Burke, 2018; Delina, 2018, 2021; Mutter & Rohracher, 2022; Trencher & van der Heijden, 2019). Delina (2021), for example, describes the conflict between competing imaginaries, showing how over time a pro-coal imaginary that focuses on securing domestic energy supplies and economic development encounters growing resistance from an anti-coal imaginary that prioritizes a just and democratic energy transition while addressing pollution and human rights violations. The elaboration of resistance can stimulate the development of more inclusive and democratic visions, as different groups articulate their aspirations within the sociotechnical landscape.

Finally, established imaginaries can be **extended** and traverse across different scales (Jasanoff, 2015b). This process of extension is closely related to the embedding of an imaginary, which involves its secure integration into a new context. Extension, however, occurs when an imaginary "travels" from an established context to new locations and contexts (Bayer & Felt, 2019; Pfotenhauer & Jasanoff, 2017). Bayer and Felt (2019) provide a detailed analysis of this process through their study of nuclear energy imaginaries in post-World War II Austria. They demonstrate how the extension of nuclear imaginaries involved active reinterpretation rather than simple adoption. Austrian stakeholders deliberately modified existing nuclear imaginaries to align with Austria's postwar identity as a peaceful, neutral nation, showing how extension requires careful navigation of both historical legacies and contemporary political contexts. In this, networks and coalitions play a crucial role in promoting and disseminating imaginaries, connecting like-minded actors, and facilitating collective action (Pfotenhauer & Jasanoff, 2017). As imaginaries become more established, they can adapt to different contexts and challenges play out through negotiations and struggles among various stakeholders (Jasanoff, 2015b). Forlano (2019) provides a practical example of this by illustrating how the imaginary of driverless cities extends across time and space. This extension occurs through designated testbeds, such as entire driverless neighbourhoods, where previously conceptualized ideas about smart cities become materialized in new places. Importantly, extension does not simply mean replicating a previous situation but always signifies a new engagement between the established imaginary and the novel context in which it is established.

In addition to the phases outlined by Jasanoff (2015b), Sippel and Visser (2021) discuss the importance of studying the **demise and termination** of sociotechnical imaginaries. Their suggestion is timely and links to ongoing discussions of sociotechnical endings (Stegmaier et al., 2014), ruination (e.g. Mah, 2012), and technological decline (Koretsky et al., 2022). They suggest that there is a need to better understand the factors that contribute to and influence the pace and trajectory of how an imaginary loses its appeal. They also emphasize the importance of studying the material afterlives of imaginaries, which can have lasting effects on landscapes and relationships.

These theoretical developments demonstrate how scholars have built upon Jasanoff's temporal framework while maintaining its fundamental insights. Rather than simply describing phases, recent work reveals the specific mechanisms through which imaginaries emerge, stabilize, transform, and potentially decline. Studies have shown, for example, how corporate actors strategically embed their visions through narrative alignment (Sadowski & Bendor, 2019), how resistance movements construct alternative futures rather than simply opposing dominant visions (Delina, 2021), and how the extension of imaginaries to new contexts involves active reinterpretation rather than mere replication (Pfotenhauer & Jasanoff, 2017). The recognition of material afterlives in declining imaginaries (Sippel & Visser, 2021) further demonstrates how temporal dynamics extend beyond simple presence or absence to include complex legacies and transformations.

5.3. Forms of comparison

The comparative dimension of sociotechnical imaginaries has evolved significantly since its initial conceptualization. Jasanoff's (2015) seminal work established comparison as a fundamental method for studying imaginaries, emphasizing how established norms, cultural values, and political traditions in different contexts fundamentally co-constitute the development of science and technology. Comparison serves as a valuable tool for interpreting phenomena across different places or times, with Jasanoff (2015a, p.4) noting that "multiple imaginaries can coexist within a society in tension or in a productive dialectical relationship."

Building on this foundation, subsequent scholars have advanced comparative analysis in several key ways. First, they have developed approaches to studying imaginaries across different scales. Research on energy transitions (Korsnes, 2016; Smith & Tidwell, 2016; Trencher & van der Heijden, 2019), and health policy (Mwale & Farsides, 2021) demonstrates how imaginaries operate differently at local and national scales. These studies reveal how local imaginaries tend to be more situated, contextual, and connected to everyday experience, while national imaginaries often reflect more abstract, generalized visions. This insight extends beyond sociotechnical imaginaries alone, as Pfotenhauer et al. (2022) show in their later analysis of how scale shapes social and technical developments.

Rather than treating scales as fixed categories, recent work emphasizes how scales themselves are constructed and contested. Davoudi and Brooks (2021) exemplify this approach through their analysis of city regions in England. They show how scales are actively produced through the co-production of scientific justification with technical demarcation, while simultaneously being subject

to resistance. Their work highlights how examining imaginaries across different scales can reveal both variation within seemingly unified visions and contestation between competing futures. This attention to the construction and contestation of scale has deepened our understanding of how imaginaries form, circulate, and transform across different contexts.

Second, scholars have expanded our understanding of what constitutes a collective, moving beyond traditional political units to examine various forms of social organization. This development resonates with Jasanoff's (2015a, p. 36) questioning of what constitutes a "collective achievement". The examination of scale here becomes crucial, as it often represents an institutionalized idea about which actors and processes are included or excluded from analysis. Bain et al. (2020) and Eriksson and Petitt (2020), for example, demonstrate how comparing competing imaginaries within the same domain—such as genetic engineering in agriculture and cattle breeding—can reveal different visions of the future simultaneously competing for attention.

Third, comparative analysis has revealed patterns in how dominant imaginaries persist and how alternatives emerge. Scholars have identified a cluster of dominant imaginaries intertwined with narratives of modernity, linear progress, and technological determinism. In doing so, comparative analysis points to how these imaginaries relate to contemporary developments in capitalism, neoliberalism, digitalization, various iterations of the "smart", artificial intelligence, and so on. While diverse, these imaginaries share core elements such as a belief in the problem-solving capacity of technology, the economic rationality of humans, and the role of science in social progress. These elements have been presented with different nuances, such as imaginaries of techno-developmentalism (e.g. Kim, 2018), nationalist high modernism (Yang, Szerszynski, & Wynne, 2018), technofixes (Cherry et al., 2017), techno-optimism (Quinlan, 2021), algorithmic rationality (Williamson, 2018) or corporate data (Vestergaard, 2021). While the former are linked to the demonstration of sovereign state power, the latter are more dispersed in terms of collectives and often linked to the performances of power by technology companies.

The persistence of modernist and techno-optimist imaginaries raises questions about why they endure (e.g. Oomen, Hoffman, & Hajer, 2021). Rather than simply documenting alternatives, scholars have begun examining the specific mechanisms through which certain imaginaries achieve and maintain dominance. For example, Levidow & Raman (2020) demonstrate how dominant techno-market imaginaries systematically displace public accountability through institutional processes, while Delina (2021) reveals how competing energy futures navigate existing power structures. This work shows how marginalized groups not only construct alternative visions but develop strategies to maintain them against institutional pressures. Further, research by Longhurst and Chilvers (2019) offers a promising model, revealing through document analysis how community-based initiatives can develop and maintain alternative technological visions despite institutional pressures.

These reflections on comparison and the persistence of dominant imaginaries underscore the need for further exploration of why certain imaginaries prevail and how they are sustained over time. While comparative analysis has been a valuable tool for identifying differences between competing imaginaries, it is equally important to understand how dominant imaginaries, such as modernist and techno-optimist visions, persist. This calls for a deeper investigation into the resilience of these imaginaries. An avenue for further development would be to actively seek to not only demonstrate the existence of modernist and techno-optimist imaginaries, but rather explain why these dominant imaginaries persist; what factors contribute to their resilience; and what are the consequences of their persistence on policy-making, technological development, and societal attitudes, together with explorations of *how* alternatives challenge these dominant imaginaries.

5.4. The spatio-material emphasis

The integration of spatial and material dimensions represents one of the most significant conceptual advancements of the concept. This extends beyond the original framework's focus on social and political dimensions to theorize how physical spaces and material conditions shape and constrain imaginaries. The studies in our corpus show that the concept of an imaginary is always associated with an imaginary of *something*. Since the coining of the term by Jasanoff and Kim (2009, 2015), this *something* has mainly been linked to technological phenomena, such as the paradigmatic case of nuclear energy (Jasanoff & Kim, 2009; 2013). However, our corpus reveals a broader scope, as reflected in the diversity of empirical topics discussed in Section 3. A distinct dimension emerged through those cases that explicitly integrate spatial and material concepts, such as land (Schoenberger & Beban, 2021; Sippel & Visser, 2021), islands (Gugganig, 2021; Gugganig & Klimburg-Witjes, 2021), deserts (Koch, 2021), or climate (Davoudi & Brooks, 2021). These explorations often, though not always, draw on the earlier notion of environmental imaginaries (Peet & Watts, 1996). In earlier work, the implications of engaging with the spatial dimension were less emphasized (Jasanoff & Kim, 2015), making this an important enrichment to how the concept of imaginaries can be used in future studies.

The emphasis on the spatial and the material should not be misunderstood as ignoring the socio-technical character of imaginaries, which has always been central to analysis. Rather, research from fields like geography and political ecology has advanced the concept by highlighting the spatial aspects of imaginaries. This development goes beyond simple comparisons or thematic additions; it redefines the analytical object by showing how spatiality fundamentally shapes the construction of imaginaries.

In other words, spatiality and materiality add a layer of complexity and conceptual depth to the analysis (Chateau, Devine-Wright, & Wills, 2021). They draw attention to specific objects of analysis, each with its own social construction and material attributes, thereby enhancing sociotechnical perspectives. In the case of deserts and islands, for example, an understanding of how these landscapes have been historically constructed in scientific thought is essential to grasping their respective imaginaries, adding depth and longevity to the analysis (e.g. Gugganig & Klimburg-Witjes, (2021); Koch, (2021). Similarly, Kuchler and Bridge (2018) explicitly emphasize materiality, by focusing on how resources are created. Like spatial entities, resources and infrastructures are always products of human construction, and they, too, must be imagined. As such, these authors delve into a deeper level of reflection on the processes of construction.

The incorporation of spatial and material dimensions into the examination of sociotechnical imaginaries enriches the horizon of analysis. It uncovers hidden layers of complexity and offers a more holistic understanding of the interplay between societal construction, materiality, and the imaginative realms of technology and society. This interdisciplinary approach advances an understanding of how sociotechnical imaginaries are shaped and how they, in turn, shape the world.

6. Conclusion

This conceptual review has explored the evolution, engagement, and development of the concept of sociotechnical imaginaries in research articles spanning over a decade. Our review is based on the categorization, overview, and analysis of a corpus of over 300 articles. We aimed not only to highlight elements that may have changed in the application of the concept (e.g., Jasanoff & Simmet, 2021), but also to emphasize the conceptual development that occurs during these scholarly engagements. We have observed that the concept has, to some extent, evolved beyond its initial roots in STS. The extent of its adoption is remarkable, with citations in over 150 journals covering disciplines such as history, anthropology, sociology, public policy, and media studies. This demonstrates how scholars from different fields are actively utilizing the concept and enriching it through their engagement.

In this article, we have elaborated on four key areas through which sociotechnical imaginaries are developed: engaging with the future, using the concept to trace changes over time, undertaking comparison, and a spatio-material emphasis. Traversing all of these approaches, one of the key contributions of sociotechnical imaginaries lies in the examination of stability and change and the intricate relationship between the two (as already assessed by Jasanoff 2015a). Understanding the strategies used by different actors to advance their narratives and influence policy decisions is paramount to understanding both how the future is engaged with as well as how imaginaries change over time. In addition, it can shed light on the complexities and paradoxes within imaginaries, as imaginaries do not represent a unified set of values and ideas (Karhunmaa, 2019). Multiple imaginaries can coexist in society, and the relationship between discursive ideas and material practices is complex and open to multiple interpretations and contestations.

The emphasis in the corpus on spatio-material aspects invites further exploration of how past, current, and future material circumstances influence the scope of imaginaries. As Davoudi and Machen (2021) argue, gaining a more comprehensive understanding of imaginaries requires consideration of the various mediums, or the amalgam of material, infrastructural, discursive, and practice-based influences that mediate the construction and representation of imaginaries. Attention to mediums and the infrastructures associated with imaginaries is also a promising way to investigate the stability and malleability of imaginaries.

Our analysis has demonstrated that although the role of the future in research has expanded significantly in recent decades, much work remains to be done. This brings us back to the question: How does engaging with sociotechnical imaginaries help to study the future? Our review has shown that the increased focus on imaginaries has not appeared out of nowhere. It responds to a call to understand the future not only as that what explains (explanans) but also as something that needs to be explained (explanandum) in order to grasp what is at stake (Beck et al., 2021; Hajer & Pelzer, 2018). The articles in the corpus show that the future is not closed, but a source of both hope and despair, with its own complex dynamics. In the present, things may seem fixed and resistant to change, while in future visions, elements such as governance goals, intervention methods, and the capabilities of political actors, as well as technological designs, are not yet established.

However, coupled with the idea that the future is not closed, it is crucial to understand imaginaries analytically not as fixed entities but rather as descriptive tools. The study of sociotechnical imaginaries requires that no actor, collective, process, idea, scale, or discourse is presupposed, but that researchers remain open to analysing how such categories are constructed, become fixed, are challenged, or eventually fall out of place. A first step is to acknowledge the existence of a multiplicity of alternatives, dimensions, and temporalities (Delina, 2018; Stirling et al., 2023), as well as the plurality of progress (Stirling, 2011). This allows for reflection on, and engagement with, the power dynamics that exist. This in turn feeds into consideration about which paths to pursue and which to avoid, both individually and collectively. The interconnectedness between perceptions of the future and interactions with the future represents a significant potential offered by sociotechnical imaginaries. In order to make the future explicitly political (e.g. Chilvers & Longhurst, 2015), the starting point must be to understand how different actors and collectives conceptualise and approach the future. This in turn feeds into debates about what change could look like and what change is considered to be desirable (Stirling et al., 2023).

Finally, as highlighted throughout the corpus, the study of imaginaries is not an easy task. In conducting our conceptual review, we have encountered the need for further analysis on the methodological approaches used to research sociotechnical imaginaries. Examining sociotechnical imaginaries requires hard work and often involves a rethinking of the basic assumptions upon which contemporary society is built. Because imaginaries may seem somewhat elusive, it is crucial that an ongoing conversation is maintained on how to study them. As researchers, we need to consider what are the implications of the chosen approaches and how they contribute to the aim of grasping imaginaries and sociotechnical change. This ongoing exploration is significant due to its political dimensions. It reveals which actors and institutions possess the power to shape visions of the future while marginalizing others and their alternative visions. As such, it highlights the role of research in reflecting on the way we think about and deal with the future for bringing about new ways of seeing the future.

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CRediT authorship contribution statement

Hendriks Abe: Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Karhunmaa Kamilla:** Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Delvenne Pierre:** Writing – review & editing, Methodology, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A

List of key words used to describe the empirical topics

4th Industrial Revolution	digitalization	nuclear
activism	education	participation
agri&aquaculture	energy	policy
artificial intelligence	environment	publics
bioeconomy	food	renewable energy
bioenergy	genetics	reproductive health
biomedical innovation	geoengineering	research
blockchain	health	resource management
carbon neutrality	hydraulic fracturing	security
CCS	identity	smart
circular economy	infrastructure	social media
cities	innovation	solar
climate change	internet	space
communication	land	sustainability
craft&design	legal	technology
data	medicine	wind energy
development	mobility	

Appendix B

List of Reviewed papers

Year	Author(s)	Title	Journal
2011	Rommetveit, Kjetil	Genetic enhancement, futures tense	*Futures*
2011	Pickersgill, Martyn	Connecting neuroscience and law: anticipatory discourse and the role of sociotechnical imaginaries	*New Genetics and Society*
2013	Gjefsen, Mads Dahl	Limits to prediction: Europeanizing technology in an expert forum	*European Journal of Futures Research*
2013	Levidow, Les	EU criteria for sustainable biofuels: Accounting for carbon, depoliticising plunder	*Geoforum*
2013	Stephens, Neil; Atkinson, Paul; Glasner, Peter	Institutional Imaginaries of Publics in Stem Cell Banking: The Cases of the UK and Spain	*Science as Culture*
2013	Levidow, Les; Papaioannou, Theo	State imaginaries of the public good: shaping UK innovation priorities for bioenergy	*Environmental Science & Policy*
2013	Taylor-Alexander, Samuel	Bioethics in the Making: "Ideal Patients" and the Beginnings of Face Transplant Surgery in Mexico	*Science as Culture*
2013	Kim, Sang-Hyun	The Politics of Human Embryonic Stem Cell Research in South Korea: Contesting National Sociotechnical Imaginaries	*Science as Culture*
2013	Eaton, Weston M.; Gasteyer, Stephen P.; Busch, Lawrence	Bioenergy Futures: Framing Sociotechnical Imaginaries in Local Places	*Rural Sociology*

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Year	Author(s)	Title	Journal
2013	Jasanoff, Sheila; Kim, Sang-Hyun	Sociotechnical Imaginaries and National Energy Policies	*Science as Culture*
2014	Levidow, Les; Papaioannou, Theo	UK Biofuel Policy: Envisaging Sustainable Biofuels, Shaping Institutions and Futures	*Environment and Planning A: Economy and Space*
2014	Mikami, Koichi	State-Supported Science and Imaginary Lock-in: The Case of Regenerative Medicine in Japan	*Science as Culture*
2014	Fonseca, Paulo F.C.; Pereira, Tiago Santos	The governance of nanotechnology in the Brazilian context: Entangling approaches	*Technology in Society*
2014	Kuchler, Magdalena	Sweet dreams (are made of cellulose): Sociotechnical imaginaries of second-generation bioenergy in the global debate	*Ecological Economics*
2014	de Saille, Stevienna	Dis-inviting the Unruly Public	*Science as Culture*
2014	Yamaguchi, Tomiko	Social imaginary and dilemmas of policy practice: The food safety arena in Japan	*Food Policy*
2015	Williamson, Ben	Educating the smart city: Schooling smart citizens through computational urbanism	*Big Data & Society*
2015	Kasperski, Tatiana	Nuclear dreams and realities in contemporary Russia and Ukraine	*History and Technology*
2015	Bellamy, Rob	A Sociotechnical Framework for Governing Climate Engineering	*Science Technology & Human Values*
2015	Levidow, Les; Papaioannou, Theo	Policy-driven, narrative-based evidence gathering: UK priorities for decarbonisation through biomass	*Science and Public Policy*
2015	Tidwell, Abraham S. D.; Smith, Jessica M.	Morals, Materials, and Technoscience: The Energy Security Imaginary in the United States	*Science Technology & Human Values*
2015	Jiang, Lijing	IVF the Chinese Way: Zhang Lizhu and Post-Mao Human in Vitro Fertilization Research	*East Asian Science Technology and Society*
2015	Ballo, Ingrid Foss	Imagining energy futures: Sociotechnical imaginaries of the future Smart Grid in Norway	*Energy Research & Social Science*
2015	Stilgoe, Jack	Geoengineering as Collective Experimentation	*Science and Engineering Ethics*
2016	Williamson, Ben	Silicon startup schools: technocracy, algorithmic imaginaries and venture philanthropy in corporate education reform	*Critical Studies in Education*
2016	Felt, Ulrike; Igelsböck, Judith; Schikowitz, Andrea; Völker, Thomas	Transdisciplinary Sustainability Research in Practice: Between Imaginaries of Collective Experimentation and Entrenched Academic Value Orders	*Science Technology & Human Values*
2016	Vesnic-Alujevic, Lucia; Breitegger, Melina; Pereira, Ângela Guimarães	What smart grids tell about innovation narratives in the European Union: Hopes, imaginaries and policy	*Energy Research & Social Science*
2016	Korsnes, Marius	Ambition and ambiguity: Expectations and imaginaries developing offshore wind in China	*Technological Forecasting and Social Change*
2016	Wentland, Alexander	Imagining and enacting the future of the German energy transition: electric vehicles as grid infrastructure	*Innovation: The European Journal of Social Science Research*
2016	Richter, Jennifer A.; Tidwell, Abraham S.D.; Fisher, Erik; Miller, Thaddeus R.	STIRring the grid: engaging energy systems design and planning in the context of urban sociotechnical imaginaries	*Innovation: The European Journal of Social Science Research*
2016	Williamson, Ben	Computing brains: learning algorithms and neurocomputation in the smart city	*Information, Communication & Society*
2016	Chiapperino, Luca; Testa, Giuseppe	The Epigenomic Self in Personalized Medicine: Between Responsibility and Empowerment	*The Sociological Review*
2016	Hooge, Sophie; Le Du, Laura	Collaborative Organizations for Innovation: A Focus on the Management of Sociotechnical Imaginaries to Stimulate Industrial Ecosystems	*Creativity and Innovation Management*
2016	Smith, Jessica M; Tidwell, Abraham SD	The everyday lives of energy transitions: Contested sociotechnical imaginaries in the American West	*Social Studies of Science*
2016	Mager, Astrid	Search engine imaginary: Visions and values in the co-production of search technology and Europe	*Social Studies of Science*
2016	Pereira, Tiago Santos; Carvalho, António; Fonseca, Paulo F.C.	Imaginaries of nuclear energy in the Portuguese parliament: Between promise, risk, and democracy	*Public Understanding of Science*
2016	Sengers, Frans	Cycling the city, re-imagining the city: Envisioning urban sustainability transitions in Thailand	*Urban Studies*
2016	Benjamin, Ruha	Catching our breath: critical race STS and the carceral imagination	*Engaging Science, Technology, and Society*
2017	Asayama, Shinichiro; Ishii, Atsushi	Selling stories of techno-optimism? The role of narratives on discursive construction of carbon capture and storage in the Japanese media	*Energy Research & Social Science*
2017	Urhammer, Emil	Celestial bodies and satellites – Energy issues, models, and imaginaries in Denmark since 1973	*Ecological Economics*
2017	Milkoreit, Manjana	Imaginary politics: Climate change and making the future	*Elementa: Science of the Anthropocene*
2017	Weiner, Kate; Martin, Paul; Richards, Martin; Tutton, Richard	Have we seen the geneticisation of society? Expectations and evidence	*Sociology of Health & Illness*
2017	Bergman, Noam; Schwanen, Tim; Sovacool, Benjamin K.	Imagined people, behaviour and future mobility: Insights from visions of electric vehicles and car clubs in the United Kingdom	*Transport Policy*
2017	Williamson, Ben	Who owns educational theory? Big data, algorithms and the expert power of education data science	*E-learning and Digital Media*

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Year	Author(s)	Title	Journal
2017	Burnham, Morey; Eaton, Weston; Selfa, Therese; Hinrichs, Clare; Feldpauser-Parker, Andrea	The politics of imaginaries and bioenergy sub-niches in the emerging Northeast US bioenergy economy	*Geoforum*
2017	Kim, Sang-Hyun	Science, technology, and the imaginaries of development in South Korea	*Development and Society*
2017	Faulkner, Alex	Bioinformatics imaginaries in the engine-room of genomic health policy: integration and heterogeneity in India and the UK	*Science & Technology Studies*
2017	Hitchner, Sarah; Schelhas, John; Brosius, J. Peter	"Even our Dairy Queen shut down": Risk and resilience in bioenergy development in forest-dependent communities in the US South	*Economic Anthropology*
2017	Cherry, C.; Hopfe, C.; MacGillivray, B.; Pidgeon, N.	Homes as machines: Exploring expert and public imaginaries of low carbon housing futures in the United Kingdom	*Energy Research & Social Science*
2017	Kuchler, Magdalena	Post-conventional energy futures: Rendering Europe's shale gas resources governable	*Energy Research & Social Science*
2017	Cloke, Jonathan; Mohr, Alison; Brown, Ed	Imagining renewable energy: Towards a Social Energy Systems approach to community renewable energy projects in the Global South	*Energy Research & Social Science*
2017	Lupton, Deborah	'Download to delicious': Promissory themes and sociotechnical imaginaries in coverage of 3D printed food in online news sources	*Futures*
2017	Sample, Matthew	Silent performances: Are "repertoires" really post-Kuhnian?	*Studies in History and Philosophy of Science Part A*
2017	Ramiel, Hemy	User or student: constructing the subject in Edtech incubator	*Discourse Studies in the Cultural Politics of Education*
2017	Molden, Olivia C.; Meehan, Katie	Sociotechnical imaginaries of urban development: social movements around "traditional" water infrastructure in the Kathmandu Valley	*Urban Geography*
2017	Kim, Eun-Sung	Sociotechnical Imaginaries and the Globalization of Converging Technology Policy: Technological Developmentalism in South Korea	*Science as Culture*
2017	Aarden, Erik	Projecting and producing 'usefulness' of biomedical research infrastructures; or why the Singapore Tissue Network closed	*Science and Public Policy*
2017	Gardner, John; Webster, Andrew	Accelerating Innovation in the Creation of Biovalue: The Cell and Gene Therapy Catapult	*Science Technology & Human Values*
2017	Frow, Emma	From "Experiments of Concern" to "Groups of Concern": Constructing and Containing Citizens in Synthetic Biology	*Science Technology & Human Values*
2017	Tutton, Richard	Multiplanetary Imaginaries and Utopia: The Case of Mars One	*Science Technology & Human Values*
2017	Meehan, Katie; Klenk, Nicole L.; Mendez, Fabián	The Geopolitics of Climate Knowledge Mobilization: Transdisciplinary Research at the Science–Policy Interface(s) in the Americas	*Science Technology & Human Values*
2017	Pfotenhauer, Sebastian; Jasanoff, Sheila	Panacea or diagnosis? Imaginaries of innovation and the 'MIT model' in three political cultures	*Social Studies of Science*
2017	Smallman, Melanie	Science to the rescue or contingent progress? Comparing 10 years of public, expert and policy discourses on new and emerging science and technology in the United Kingdom	*Public Understanding of Science*
2017	Mertia, Sandeep	FCJ−217 Socio-Technical Imaginaries of a Data-Driven City: Ethnographic Vignettes from Delhi	*The Fibreculture Journal*
2017	Hurlbut, J Benjamin	A science that knows no country: Pandemic preparedness, global risk, sovereign science	*Big Data & Society*
2017	Hansen, Mette Halskov; Liu, Zhaohui	Air Pollution and Grassroots Echoes of "Ecological Civilization" in Rural China	*The China Quarterly*
2017	Flegal, Jane A.; Gupta, Aarti	Evoking equity as a rationale for solar geoengineering research? Scrutinizing emerging expert visions of equity	*International Environmental Agreements: Politics, Law and Economics*
2018	Ruuskanen, Esa	The emergence of Baltic Moorkultur: visions of scientific-technological mastery of peatlands in the age of great social change, 1850–1914	*History and Technology*
2018	Yang, Chih-yuan; Szerszynski, Bronislaw; Wynne, Brian	The Making of Power Shortage: The Sociotechnical Imaginary of Nationalist High Modernism and Its Pragmatic Rationality in Electricity Planning in Taiwan	*East Asian Science Technology and Society*
2018	Juhl, Joakim; Buch, Anders	Transforming academia: The role of education	*Educational Philosophy and Theory*
2018	Baker, Zeke; Ekstrom, Julia; Bedsworth, Louise	Climate information? Embedding climate futures within temporalities of California water management	*Environmental Sociology*
2018	Kroløkke, Charlotte	Frosties: Feminist cultural analysis of frozen cells and seeds documentaries	*European Journal of Cultural Studies*
2018	Burri, Regula Valérie	Envisioning futures: imagining technoscientific worlds in film	*European Journal of Futures Research*

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Year	Author(s)	Title	Journal
2018	Metze, Tamara	Framing the future of fracking: Discursive lock-in or energy degrowth in the Netherlands?	*Journal of Cleaner Production*
2018	Burri, Regula Valérie	Models of Public Engagement: Nanoscientists' Understandings of Science–Society Interactions	*NanoEthics*
2018	Panikkar, Bindu; Tollefson, Jonathan	Land as material, knowledge and relationships: Resource extraction and subsistence imaginaries in Bristol Bay, Alaska	*Social Studies of Science*
2018	Sneltvedt, Ole	Experience the future in full-scale: Technological background relations and visions of the good society at the World's Columbian Exposition	*Technology in Society*
2018	Grubert, Emily	The Eagle Ford and Bakken shale regions of the United States: A comparative case study	*The Extractive Industries and Society*
2018	Simmet, Hilton R.	"Lighting a dark continent": Imaginaries of energy transition in Senegal	*Energy Research & Social Science*
2018	Sigl, Lisa; Leišytė, Liudvika	Imaginaries of Invention Management: Comparing Path Dependencies in East and West Germany	*Minerva*
2018	Santos Pereira, Tiago; Fonseca, Paulo F. C.; Carvalho, António	Carnation Atoms? A History of Nuclear Energy in Portugal	*Minerva*
2018	Kovacic, Zora	Governing informality through representation: Examples from slum policies in Brazil and South Africa	*Cities*
2018	Tozer, Laura; Klenk, Nicole	Discourses of carbon neutrality and imaginaries of urban futures	*Energy Research & Social Science*
2018	Schelhas, John; Hitchner, Sarah; Brosius, J. Peter	Envisioning and implementing wood-based bioenergy systems in the southern United States: Imaginaries in everyday talk	*Energy Research & Social Science*
2018	Delina, Laurence L.	Whose and what futures? Navigating the contested coproduction of Thailand's energy sociotechnical imaginaries	*Energy Research & Social Science*
2018	Tidwell, Jacqueline Hettel; Tidwell, Abraham S.D.	Energy ideals, visions, narratives, and rhetoric: Examining sociotechnical imaginaries theory and methodology in energy research	*Energy Research & Social Science*
2018	Kuchler, Magdalena; Bridge, Gavin	Down the black hole: Sustaining national socio-technical imaginaries of coal in Poland	*Energy Research & Social Science*
2018	Hansen, Mette Halskov; Li, Hongtao; Svarverud, Rune	Ecological civilization: Interpreting the Chinese past, projecting the global future	*Global Environmental Change*
2018	Chang, Ethan	Beyond workforce preparation: contested visions of 'twenty-first century' education reform	*Discourse Studies in the Cultural Politics of Education*
2018	Herrmann, Janne Rothmar; Kroløkke, Charlotte	Eggs on Ice: Imaginaries of Eggs and Cryopreservation in Denmark	*NORA - Nordic Journal of Feminist and Gender Research*
2018	Sadowski, Jathan; Bendor, Roy	Selling Smartness: Corporate Narratives and the Smart City as a Sociotechnical Imaginary	*Science Technology & Human Values*
2018	Tozer, Laura; Klenk, Nicole	Urban configurations of carbon neutrality: Insights from the Carbon Neutral Cities Alliance	*Environment and Planning C: Politics and Space*
2018	Rahm, Lina	The Ironies of Digital Citizenship: Educational Imaginaries and Digital Losers Across Three Decades	*Digital Culture & Society*
2018	Vu, Truong-Minh; Mayer, Maximilian	Hydropower infrastructure and regional order making in the Sub-Mekong region	*Revista Brasileira de Política Internacional*
2018	Burke, Matthew J.	Shared Yet Contested: Energy Democracy Counter-Narratives	*Frontiers in Communication*
2018	Avis, James	Socio-technical imaginary of the fourth industrial revolution and its implications for vocational education and training: a literature review	*Journal of Vocational Education and Training*
2018	Beck, Silke; Mahony, Martin	The politics of anticipation: the IPCC and the negative emissions technologies experience	*Global Sustainability*
2018	Chiapperino, Luca; Panese, Francesco	Gendered imaginaries: situating knowledge of epigenetic programming of health	*Sociology of Health & Illness*
2018	Valdez, Alan-Miguel; Cook, Matthew; Potter, Stephen	Roadmaps to utopia: Tales of the smart city	*Urban Studies*
2018	Lim, Merlyna	Dis/Connection: The co-evolution of sociocultural and material infrastructures of the Internet in Indonesia	*Indonesia*
2018	Zilliox, Skylar; Smith, Jessica M.	Colorado's Fracking Debates: Citizen Science, Conflict and Collaboration	*Science as Culture*
2019	Lehtiniemi, Tuukka; Ruckenstein, Minna	The social imaginaries of data activism	*Big Data & Society*
2019	Metzler, Ingrid	Imaginaries as infrastructures? The emergence of non-invasive prenatal testing in Austria	*BioSocieties*
2019	Willems, Thijs; Graham, Connor	The Imagination of Singapore's Smart Nation as Digital Infrastructure: Rendering (Digital) Work Invisible	*East Asian Science Technology and Society*
2019	Egbert, Simon; Paul, Bettina	Preemptive „Screening for Malintent": The Future Attribute Screening Technology (FAST) as a Double Future Device	*Futures*
2019	Mahony, Martin	Historical Geographies of the Future: Airships and the Making of Imperial Atmospheres	*Annals of the American Association of Geographers*
2019	Fratini, Chiara Farné; Georg, Susse; Jørgensen, Michael Søgaard	Exploring circular economy imaginaries in European cities: A research agenda for the governance of urban sustainability transitions	*Journal of Cleaner Production*

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Year	Author(s)	Title	Journal
2019	Rommetveit, Kjetil; van Dijk, Niels; Gunnarsdóttir, Kristrún	Make Way for the Robots! Human- and Machine-Centricity in Constituting a European Public–Private Partnership	*Minerva*
2019	Williams, Rhys	This Shining Confluence of Magic and Technology': Solarpunk, Energy Imaginaries and the Infrastructures of Solarity	*Open Library of Humanities*
2019	Neresini, Federico; Giardullo, Paolo; Di Buccio, Emanuele; Cammozzo, Alberto	Exploring socio-technical future scenarios in the media: the energy transition case in Italian daily newspapers	*Quality & Quantity*
2019	Bowman, Warigia M.	Technological Distribution in Uganda: Information and Communications Technology and the State in an Eastern African Nation	*Review of Policy Research*
2019	Felt, Ulrike; Öchsner, Susanne	Reordering the "World of Things": the Sociotechnical Imaginary of RFID Tagging and New Geographies of Responsibility	*Science and Engineering Ethics*
2019	Bach, Anna Sofie; Kroløkke, Charlotte	Hope and Happy Futurity in the Cryotank: Biomedical Imaginaries of Ovarian Tissue Freezing	*Science as Culture*
2019	Froese, Anna; Mevissen, Natalie	Failure through Success: Co-construction Processes of Imaginaries (of Participation) and Group Development	*Science Technology & Human Values*
2019	Bocci, Paolo	Utopian Conservation: Scientific Humanism, Evolution, and Island Imaginaries on the Galápagos Islands	*Science Technology & Human Values*
2019	Chua Hui Ching, Emily	Survival by Technopreneurialism: Innovation, Imaginaries and the New Narrative of Nationhood in Singapore	*Science Technology and Society*
2019	Polleri, Maxime	Post-political uncertainties: Governing nuclear controversies in post-Fukushima Japan	*Social Studies of Science*
2019	Lackerbauer, Simone Ines	The Hacker Imaginaire: Recoding Futures? Technoscientific Promises from the Inventors of the Internet.	*Sociální Studia/Social Studies*
2019	Saner, Philippe	Envisioning Higher Education: How Imagining the Future Shapes the Implementation of a New Field in Higher Education	*Swiss Journal of Sociology*
2019	Blair, James J. A.	South Atlantic universals: science, sovereignty and self-determination in the Falkland Islands (Malvinas)	*Tapuya: Latin American Science Technology and Society*
2019	Corsini, Filipo; Certomà, Chiara; Dyer, Mark; Frey, Marco	Participatory energy: Research, imaginaries and practices on people'contribute to energy systems in the smart city	*Technological Forecasting and Social Change*
2019	Chenou, Jean-Marie; Cepeda-Másmela, Carolina	#NiUnaMenos: Data Activism From the Global South	*Television & New Media*
2019	Gesing, Friedrike	The politics of artificial dunes: Sustainable coastal protection measures and contested socio-natural objects	*DIE ERDE–Journal of the Geographical Society of Berlin*
2019	Chakraborty, Anwesha; Giuffredi, Rita	Science and technology for the people? On the framing of innovation in policy discourses in India and in EU	*Journal of Science Communication*
2019	Haddad, Christian; Binder, Clemens	Governing through cybersecurity: national policy strategies, globalized (in-) security and sociotechnical visions of the digital society	*Österreichische Zeitschrift Für Soziologie*
2019	Mutter, Amelia	Mobilizing sociotechnical imaginaries of fossil-free futures–electricity and biogas in public transport in Linköping, Sweden	*Energy Research & Social Science*
2019	Bayer, Florian; Felt, Ulrike	Embracing the" Atomic Future" in Post–World War II Austria	*Technology and Culture*
2019	Mossfeldt Nickelsen, Niels	Imagining and tinkering with assistive robotics in care for the disabled	*Paladyn, Journal of Behavioral Robotics*
2019	Matos, Sara	Privacy and data protection in the surveillance society: The case of the Prüm system	*Journal of Forensic and Legal Medicine*
2019	Bain, Carmen; Lindberg, Sonja; Selfa, Theresa	Emerging sociotechnical imaginaries for gene edited crops for foods in the United States: implications for governance	*Agriculture and Human Values*
2019	Longhurst, Noel; Chilvers, Jason	Mapping diverse visions of energy transitions: co-producing sociotechnical imaginaries	*Sustainability Science*
2019	Strengers, Yolande; Pink, Sarah; Nicholls, Larissa	Smart energy futures and social practice imaginaries: Forecasting scenarios for pet care in Australian homes	*Energy Research & Social Science*
2019	Gross, Patrick Léon; Buchanan, Nicholas; Sané, Sabine	Blue skies in the making: Air quality action plans and urban imaginaries in London, Hong Kong, and San Francisco	*Energy Research & Social Science*
2019	Trencher, Gregory; van der Heijden, Jeroen	Contradictory but also complementary: National and local imaginaries in Japan and Fukushima around transitions to hydrogen and renewables	*Energy Research & Social Science*
2019	Marquardt, Jens; Delina, Laurence L.	Reimagining energy futures: Contributions from community sustainable energy transitions in Thailand and the Philippines	*Energy Research & Social Science*
2019	Levenda, Anthony M.; Richter, Jennifer; Miller, Thaddeus; Fisher, Erik	Regional sociotechnical imaginaries and the governance of energy innovations	*Futures*
2019	Tarkkala, Heta; Helén, Ilpo; Snell, Karoliina	From health to wealth: The future of personalized medicine in the making	*Futures*
2019	Karhunmaa, Kamilla	Attaining carbon neutrality in Finnish parliamentary and city council debates	*Futures*
2019	Meyer, Uli	The emergence of an envisioned future: Sensemaking in the case of "Industrie 4.0" in Germany	*Futures*
2019	Shortall, Orla	Cows eat grass, don't they? Contrasting sociotechnical imaginaries of the role of grazing in the UK and Irish dairy sectors	*Journal of Rural Studies*

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2019	Valdez, A.M.; Potter, S.; Cook, M.	The imagined electric vehicle user: Insights from pioneering and prospective buyers in Milton Keynes, United Kingdom	*Transportation Research Part D: Transport and Environment*
2019	Barandiarán, Javiera	Lithium and development imaginaries in Chile, Argentina and Bolivia	*World Development*
2019	Wittock, Nathan; Hustinx, Lesley	Negotiating risk-group categorization and the co-production of blood safety: the evolution of sociotechnical imaginaries mobilized in the public debate on the deferral of men who have sex with men as blood donors in Belgium	*BioSocieties*
2019	Spektor, Michelle	Imagining the Biometric Future: Debates Over National Biometric Identification in Israel	*Science as Culture*
2019	Miller, Thaddeus R.	Imaginaries of Sustainability: The Techno-Politics of Smart Cities	*Science as Culture*
2019	Higham, Ruchi	Imagining the future of cell therapies: clinical trials, innovation and the intersection of clinical-academic and commercial visions	*New Genetics and Society*
2019	Papasozomenou, Ourania; Moss, Timothy; Soler, Natàlia García	Raindrops keep falling on my roof: imaginaries, infrastructures and institutions shaping rainwater harvesting in Berlin	*Journal of Environmental Policy & Planning*
2019	Gibbings, Sheri L; Taylor, Jessica	A Desirable Future: Uber as Image-Making in Winnipeg	*Communication, Culture and Critique*
2019	Kenney, Martha; Mamo, Laura	The imaginary of precision public health	*Medical Humanities*
2019	Schiølin, Kasper	Revolutionary dreams: Future essentialism and the sociotechnical imaginary of the fourth industrial revolution in Denmark	*Social Studies of Science*
2019	Smallman, Melanie	'Nothing to do with the science': How an elite sociotechnical imaginary cements policy resistance to public perspectives on science and technology through the machinery of government	*Social Studies of Science*
2019	Graf, Antonia; Sonnberger, Marco	Responsibility, rationality, and acceptance: How future users of autonomous driving are constructed in stakeholders' sociotechnical imaginaries	*Public Understanding of Science*
2019	Mittra, James; Mastroeni, Michele; Haddow, Gill; Wield, David; Barlow, Elisabeth	Re-Imagining Healthcare and Medical Research Systems in Post-Devolution Scotland	*Sociological Research Online*
2019	Jewitt, Carey; Mackley, Kerstin Leder; Price, Sara	Digital touch for remote personal communication: An emergent sociotechnical imaginary	*New Media & Society*
2019	Hirsch, Shana L.	Anticipatory practices: Shifting baselines and environmental imaginaries of ecological restoration in the Columbia River Basin	*Environment and Planning E: Nature and Space*
2019	Cousins, Joshua J	Malleable infrastructures: Crisis and the engineering of political ecologies in Southern California	*Environment and Planning E: Nature and Space*
2019	Kapoor, N.	"Who Has Seen the Wind": Imagining Wind Power for the Generation of Electricity in Victorian Britain	*Technology and Culture*
2019	Otto, Laura; Nimführ, Sarah; Bieler, Patrick	Preserving Maltese Identity in Refugee Management: On the Emergence and Absence of a Prison Spatiality	*Shima: The International Journal of Research into Island Cultures*
2019	Mutter, Amelia	Obduracy and Change in Urban Transport—Understanding Competition Between Sustainable Fuels in Swedish Municipalities	*Sustainability*
2019	Forlano, Laura	Cars and contemporary communications| Stabilizing/ destabilizing the driverless city: Speculative futures and autonomous vehicles	*International Journal of Communication*
2019	Ahmann, Chloe	Waste to energy: Garbage prospects and subjunctive politics in late-industrial Baltimore	*American Ethnologist*
2019	Cinnamon, Jonathan	Attack the Data: Agency, Power, and Technopolitics in South African Data Activism	*Annals of the American Association of Geographers*
2019	Cohen, Scott A.; Hopkins, Debbie	Autonomous vehicles and the future of urban tourism	*Annals of Tourism Research*
2019	Becker, Sören; Angel, James; Naumann, Matthias	Energy democracy as the right to the city: Urban energy struggles in Berlin and London	*Environment and Planning A: Economy and Space*
2019	Ferris, Lindsay; Duguay, Stefanie	Tinder's lesbian digital imaginary: Investigating (im)permeable boundaries of sexual identity on a popular dating app	*New Media & Society*
2019	Schwennesen, Nete	Algorithmic assemblages of care: imaginaries, epistemologies and repair work	*Sociology of Health & Illness*
2019	Ruppert, Evelyn	Different data futures: An experiment in citizen data	*Statistical Journal of the IAOS*
2019	Koch, Natalie	AgTech in Arabia: 'spectacular forgetting' and the technopolitics of greening the desert	*Journal of Political Ecology*
2020	Ionescu, Tudor B.	From Containing the Atom to Mitigating Residual Risk: The German Imaginary of Nuclear Emergency Preparedness	*Atmosphere*
2020	Robinson, Sam	Scientific imaginaries and science diplomacy: The case of ocean exploitation	*Centaurus*
2020	Flear, Mark L.	Epistemic Injustice as a Basis for Failure? Health Research Regulation, Technological Risk and the Foundations of Harm and Its Prevention	*European Journal of Risk Regulation*

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2020	Manski, Sarah	Distributed Ledger Technologies, Value Accounting, and the Self Sovereign Identity	*Frontiers in Blockchain*
2020	Müller-Mahn, Detlef	Envisioning African Futures: Development corridors as dreamscapes of modernity	*Geoforum*
2020	Wahome, Michel; Graham, M.	Spatially shaped imaginaries of the digital economy	*Information, Communication & Society*
2020	Egliston, Ben; Carter, Marcus	Oculus imaginaries: The promises and perils of Facebook's virtual reality	*New Media & Society*
2020	Wong, Richmond Y.; Khovanskaya, Vera; Fox, Sarah E.; Merrill, Nick; Sengers, Phoebe	Infrastructural Speculations: Tactics for Designing and Interrogating Lifeworlds	*Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*
2020	Hurlbut, J. Benjamin; Metzler, Ingrid; Marelli, Luca; Jasanoff, Sheila	Bioconstitutional Imaginaries and the Comparative Politics of Genetic Self-knowledge	*Science Technology & Human Values*
2020	Tafdrup, Oliver	Mediating Imaginaries: Educational robots and collective visions of the future	*Nordic Journal of Science and Technology Studies*
2020	Oviatt, Peter; Rillig, Matthias C.	Mycorrhizal technologies for an agriculture of the middle	*Plants People Planet*
2020	Skjølsvold, Tomas Moe; Ryghaug, Marianne; Throndsen, William	European island imaginaries: Examining the actors, innovations, and renewable energy transitions of 8 islands	*Energy Research & Social Science*
2020	Wagner, Aleksandra; Gałuszka, Damian	Let's play the future: Sociotechnical imaginaries, and energy transitions in serious digital games	*Energy Research & Social Science*
2020	Hecht, Susanna; Rajão, Raoni	From "Green Hell" to "Amazonia Legal": Land use models and the re-imagination of the rainforest as a new development frontier	*Land Use Policy*
2020	Jain, Sanjay	Fumbling to the future? Socio-technical regime change in the recorded music industry	*Technological Forecasting and Social Change*
2020	Certomà, Chiara; Corsini, Filippo; Frey, Marco	Hyperconnected, receptive and do-it-yourself city. An investigation into the European "imaginary" of crowdsourcing for urban governance	*Technology in Society*
2020	De Bont, Raf	Eating game: proteins, international conservation and the rebranding of African wildlife, 1955–1965	*The British Journal for the History of Science*
2020	Au, Larry	Imagining the public: anticipatory discourses in China's push for precision medicine	*BioSocieties*
2020	Braun, Robert; Randell, Richard	Futuramas of the present: the "driver problem" in the autonomous vehicle sociotechnical imaginary	*Humanities and Social Sciences Communications*
2020	Haugland, Bård Torvetjønn	Changing oil: self-driving vehicles and the Norwegian state	*Humanities and Social Sciences Communications*
2020	Eriksson, Camilla; Petitt, Andrea	Designing Cattle: The Social Practice of Constructing Breeds	*Anthrozoös*
2020	Tutton, Richard	Sociotechnical Imaginaries and Techno-Optimism: Examining Outer Space Utopias of Silicon Valley	*Science as Culture*
2020	Quinlan, Andrea	The Rape Kit's Promise: Techno-optimism in the Fight Against the Backlog	*Science as Culture*
2020	Völker, Thomas; Kovacic, Zora; Strand, Roger	Indicator development as a site of collective imagination? The case of European Commission policies on the circular economy	*Culture and Organization*
2020	Levidow, Les; Raman, Sujatha	Sociotechnical imaginaries of low-carbon waste-energy futures: UK techno-market fixes displacing public accountability	*Social Studies of Science*
2020	Lawless, Christopher	Assembling airspace: The Single European Sky and contested transnationalities of European air traffic management	*Social Studies of Science*
2020	Goulet, Frédéric	Family Farming and The Emergence of an Alternative Sociotechnical Imaginary in Argentina	*Science Technology and Society*
2020	Eriksson, Camilla; Fischer, Klara; Ulfbecker, Ebba	Technovisions for Food Security as Sweden Restores Its Civil Defence	*Science Technology and Society*
2020	Micheli, Marina; Ponti, Marisa; Craglia, Max; Suman, Anna Berti	Emerging models of data governance in the age of datafication	*Big Data & Society*
2020	Ramos, Stephen J	Biomass logistics: Mythistory and sociotechnical imaginary in trans-Atlantic wood pellet assemblage	*Environment and Planning E: Nature and Space*
2020	Wu, Chia-Ling; Ha, Jung-Ok; Tsuge, Azumi	Data Reporting as Care Infrastructure: Assembling ART Registries in Japan, Taiwan, and South Korea	*East Asian Science Technology and Society*
2020	Hagbert, Pernilla; Wangel, Josefin; Broms, Loove	Exploring the potential for just urban transformations in light of eco-modernist imaginaries of sustainability	*Urban Planning*
2020	Yousif Hassan	The politics of sharing: Sociotechnical imaginaries of digital platforms	*Information Polity*
2020	Marquardt, Jens	Fridays for Future's Disruptive Potential: An Inconvenient Youth Between Moderate and Radical Ideas	*Frontiers in Communication*
2020	Bach, Anna Sofie	Not of women born: Sociotechnical imaginaries of gender and kinship in the regulation of transmasculine reproductive citizenship in Denmark	*Kvinder Køn & Forskning*
2020	Rensfeldt, Annika Bergviken; Player-Koro, Catarina	"Back to the future": Socio-technical imaginaries in 50 years of school digitalization curriculum reforms	*Seminar.net*
2020	Sippel, Sarah Ruth; Visser, Oane	Introduction to symposium 'Reimagining land: materiality, affect and the uneven trajectories of land transformation'	*Agriculture and Human Values*

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2020	Schoenberger, Laura; Beban, Alice	Rupturing violent land imaginaries: finding hope through a land titling campaign in Cambodia	*Agriculture and Human Values*
2020	Holmgren, Sara; D'Amato, Dalia; Giurca, Alexandru	Bioeconomy imaginaries: A review of forest-related social science literature	*Ambio*
2020	Koch, Natalie	The Political Lives of Deserts	*Annals of the American Association of Geographers*
2020	Argüelles, Lucía	Growing Farming Heroes? Politics of Imaginaries within Farmer Training Programs in California	*Annals of the American Association of Geographers*
2020	Kohtala, Cindy; Hyysalo, Sampsa; Whalen, Jack	A taxonomy of users' active design engagement in the 21st century	*Design Studies*
2020	Renner, Ansel; Giampietro, Mario	Socio-technical discourses of European electricity decarbonization: Contesting narrative credibility and legitimacy with quantitative story-telling	*Energy Research & Social Science*
2020	Helliwell, Richard; Raman, Sujatha; Morris, Carol	Environmental imaginaries and the environmental sciences of antimicrobial resistance	*Environment and Planning E: Nature and Space*
2020	Duggal, Sandhya; Faulkner, Alex	Promissory and protective imaginaries of regenerative medicine: Expectations work and scenario maintenance of disease research charities in the United Kingdom	*Public Understanding of Science*
2020	Kuchler, Magdalena; Höök, Mikael	Fractured visions: Anticipating (un)conventional natural gas in Poland	*Resources Policy*
2020	Ginsburg, Faye; Rapp, Rayna	We are all in the image of God': reproductive imaginaries and prenatal genetic testing in American Jewish communities	*Reproductive Biomedicine & Society Online*
2020	Moore, Michele-Lee; Milkoreit, Manjana	Imagination and transformations to sustainable and just futures	*Elementa: Science of the Anthropocene*
2020	Davoudi, Simin; Brooks, Elizabeth	City-regional imaginaries and politics of rescaling	*Regional Studies*
2020	Visser, Oane	Persistent farmland imaginaries: celebration of fertile soil and the recurrent ignorance of climate	*Agriculture and Human Values*
2021	Vimal, Manoj; Devi, Wairokpam Premi; McGonigle, Ian	Generational Medicine in Singapore: A National Biobank for a Greying Nation	*East Asian Science, Technology and Society*
2021	Genus, Audley; Iskandarova, Marfuga; Goggins, Gary; Fahy, Frances; Laakso, Senja	Alternative energy imaginaries: Implications for energy research, policy integration and the transformation of energy systems	*Energy Research & Social Science*
2021	Mutter, Amelia	Embedding imaginaries-electric vehicles in Sweden's fossil fuel free future	*Futures*
2021	Raven, Paul Graham; Stripple, Johannes	Touring the carbon ruins: towards an ethics of speculative decarbonisation	*Global Discourse*
2021	Dylag, Matthew; Smith, Harrison	From cryptocurrencies to cryptocourts: blockchain and the financialization of dispute resolution platforms	*Information Communication & Society*
2021	Dahya, Negin; King, W. E.; Lee, Kung Jim; Lee, Jin Ha	Perceptions and experiences of virtual reality in public libraries	*Journal of Documentation*
2021	Fischer, Nele; Mehnert, WInzel	Building Possible Worlds: A Speculation Based Framework to Reflect on Images of the Future	*Journal of Futures Studies*
2021	Haupt, Joachim	Facebook futures: Mark Zuckerberg's discursive construction of a better world	*New Media & Society*
2021	Oever, Niels ten	"This is not how we imagined it": Technological affordances, economic drivers, and the Internet architecture imaginary	*New Media & Society*
2021	Mahfoud, Tara	Visions of unification and integration: Building brains and communities in the European Human Brain Project	*New Media & Society*
2021	Schmid, Sonja D.	From "Inherently Safe" to "Proliferation Resistant": New Perspectives on Reactor Designs	*Nuclear Technology*
2021	Bell, Emma; Dacin, M. Tina; Toraldo, Maria Laura	Craft Imaginaries – Past, Present and Future	*Organization Theory*
2021	Foley, Timothy J.	Waiting for waste: Nuclear imagination and the politics of distant futures in Finland	*Energy Research & Social Science*
2021	Beck, Silke; Jasanoff, Sheila; Stirling, Andy; Polzin, Christine	The governance of sociotechnical transformations to sustainability	*Current Opinion in Environmental Sustainability*
2021	Di Felice, Louisa Jane; Renner, Ansel; Giampietro, Mario	Why should the EU implement electric vehicles? Viewing the relationship between evidence and dominant policy solutions through the lens of complexity	*Environmental Science & Policy*
2021	Christiansen, Kirstine Lund; Carton, Wim	What 'climate positive future'? Emerging sociotechnical imaginaries of negative emissions in Sweden	*Energy Research & Social Science*
2021	Mutter, Amelia	Embedding imaginaries- electric vehicles in Sweden's fossil fuel free future	*Futures*
2021	Berling, Trine Villumsen; Surwillo, Izabela; Sørensen, Sandra	Norwegian and Ukrainian energy futures: exploring the role of national identity in sociotechnical imaginaries of energy security	*Journal of International Relations and Development*
2021	Molas, Anna; Whittaker, Andrea	Beyond the making of altruism: branding and identity in egg donation websites in Spain	*BioSocieties*
2021	Lawless, Christopher James	The evolution, devolution and distribution of UK Biometric Imaginaries	*BioSocieties*

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2021	Martin, Robert	AV futures or futures with AVs? Bridging sociotechnical imaginaries and a multi-level perspective of autonomous vehicle visualisations in praxis	*Humanities and Social Sciences Communications*
2021	Aarden, Erik; Marelli, Luca; Blasimme, Alessandro	The translational lag narrative in policy discourse in the United States and the European Union: a comparative study	*Humanities and Social Sciences Communications*
2021	Gugganig, Mascha	Hawai'i as a Laboratory Paradise: Divergent Sociotechnical Island Imaginaries	*Science as Culture*
2021	Webb, Claire Isabel	Gaze-scaling: Planets as Islands in Exobiologists' Imaginaries	*Science as Culture*
2021	McCarthy, Daniel R.	Imposing evenness, preventing combination: charting the international dynamics of socio-technical imaginaries of innovation in American foreign policy	*Cambridge Review of International Affairs*
2021	Jensen, Lotte Groth; Svendsen, Mette N.	Personalised medicine in the Danish welfare state: political visions for the public good	*Critical Public Health*
2021	Kaun, Anne	Suing the algorithm: the mundanization of automated decision-making in public services through litigation	*Information, Communication & Society*
2021	Forsyth, Tim	Time to change? Technologies of futuring and transformative change in Nepal's climate change policy	*Globalizations*
2021	Peoples, Columba	Global uncertainties, geoengineering and the technopolitics of planetary crisis management	*Globalizations*
2021	Wilde, Kerstin; Hermans, Frans	Deconstructing the attractiveness of biocluster imaginaries	*Journal of Environmental Policy & Planning*
2021	McCarthy, Daniel R.	Imagining the security of innovation: technological innovation, national security, and the American way of life	*Critical Studies on Security*
2021	Kaun, Anne; Stiernstedt, Fredrik	Prison Tech: Imagining the Prison as Lagging Behind and as a Test Bed for Technology Advancement	*Communication, Culture and Critique*
2021	Martins, Bruno Oliveira; Mawdsley, Jocelyn	Sociotechnical Imaginaries of EU Defence: The Past and the Future in the European Defence Fund	*JCMS Journal of Common Market Studies*
2021	Bidwell, Nicola J.; Cibin, Roberto; Linehan, Conor; Maye, Laura; Robinson, Sarah	Being Regulated: Licence to Imagine New Technology for Community Radio	*Proceedings of the ACM on Human-Computer Interaction*
2021	Haaften, Lourens van	Management science and nation building: The sociotechnical imaginary behind the making of the Indian Institute of Management in Ahmedabad	*The Indian Economic & Social History Review*
2021	Quitzow, Leslie; Rohde, Friederike	Imagining the smart city through smart grids? Urban energy futures between technological experimentation and the imagined low-carbon city	*Urban Studies*
2021	Mutter, Amelia; Rohracher, Harald	Competing Transport Futures: Tensions between Imaginaries of Electrification and Biogas Fuel in Sweden	*Science Technology & Human Values*
2021	Hodson, Mike; McMeekin, Andrew	Global technology companies and the politics of urban socio-technical imaginaries in the digital age: Processual proxies, Trojan horses and global beachheads	*Environment and Planning A: Economy and Space*
2021	Vicente, Paulo Nuno; Dias-Trindade, Sara	Reframing sociotechnical imaginaries: The case of the Fourth Industrial Revolution.	*Public Understanding of Science*
2021	Mützel, Sophie	Unlocking the payment experience: Future imaginaries in the case of digital payments	*New Media & Society*
2021	Hockenhull, Michael; Cohn, Marisa Leavitt	Hot air and corporate sociotechnical imaginaries: Performing and translating digital futures in the Danish tech scene	*New Media & Society*
2021	Saito, Hiro	The Sacred and Profane of Japan's Nuclear Safety Myth: On the Cultural Logic of Framing and Overflowing	*Cultural Sociology*
2021	Gerhold, Lars; Brandes, Edda	Sociotechnical imaginaries of a secure future	*European Journal of Futures Research*
2021	Lawrence, Mark	The Chinese and the chief's tree: framing narratives of socionature and development in Kibwezi, Kenya	*Geographica Helvetica*
2021	Groves, Christopher; Henwood, Karen; Pidgeon, Nick; Cherry, Catherine; Roberts, Erin; Shirani, Fiona; Thomas, Gareth	The future is flexible? Exploring expert visions of energy system decarbonisation	*Futures*
2021	Koch, Natalie	Whose apocalypse? Biosphere 2 and the spectacle of settler science in the desert	*Geoforum*
2021	Garcia, Antero; de Roock, Roberto Santiago	Civic dimensions of critical digital literacies: towards an abolitionist lens	*Pedagogies: An International Journal*
2021	Sengers, Phoebe; Williams, Kaiton; Khovanskaya, Vera	Speculation and the Design of Development	*Proceedings of the ACM on Human-Computer Interaction*
2021	Davoudi, Simin; Kallio, Kirsi Pauliina; Häkli, Jouni	Performing a neoliberal city-regional imaginary: the case of Tampere tramway project	*Space and Polity*
2021	Oomen, Jeroen; Hoffman, Jesse; Hajer, Maarten A.	Techniques of futuring: On how imagined futures become socially performative	*European Journal of Social Theory*
2021	Howell, Noura; Desjardins, Audrey; Fox, Sarah	Cracks in the Success Narrative: Rethinking Failure in Design Research through a Retrospective Trioethnography	*ACM Transactions on Computer-Human Interaction*
2021	Trauttmansdorff, Paul; Felt, Ulrike	Between Infrastructural Experimentation and Collective Imagination: The Digital Transformation of the EU Border Regime	*Science Technology & Human Values*

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Year	Author(s)	Title	Journal
2021	Cirac-Claveras, Gemma	Re-imagining the space age: Early satellite development from Earthly fieldwork practice	*Science as Culture*
2021	Mwale, Shadreck; Farsides, Bobbie	Imagining genomic medicine futures in primary care: General practitioners' views on mainstreaming genomics in the National Health Service	*Sociology of Health & Illness*
2021	Di Felice, Louisa Jane; Cabello, Violeta; Ripa, Maddalena; Madrid-Lopez, Cristina	Quantitative Storytelling: Science, Narratives, and Uncertainty in Nexus Innovations	*Science Technology & Human Values*
2021	Davoudi, Simin; Machen, Ruth	Climate imaginaries and the mattering of the medium	*Geoforum*
2021	Huang, Ping; Westman, Linda	China's imaginary of ecological civilization: A resonance between the state-led discourse and sociocultural dynamics	*Energy Research & Social Science*
2021	Delina, Laurence L.	Committing to coal? Scripts, sociotechnical imaginaries, and the resurgence of a coal regime in the Philippines	*Energy Research & Social Science*
2021	Jasanoff, Sheila; Simmet, Hilton R.	Renewing the future: Excluded imaginaries in the global energy transition	*Energy Research & Social Science*
2021	Rothschild-Elyassi, Gil	The Datafication of Law: How Technology Encodes Carceral Power and Affects Judicial Practice in the United States	*Law & Social Inquiry*
2021	Bareis, Jascha; Katzenbach, Christian	Talking AI into Being: The Narratives and Imaginaries of National AI Strategies and Their Performative Politics	*Science Technology & Human Values*
2021	Friedrich, Jonathan; Bunker, Ingrid; Uthes, Sandra; Zscheischler, Jana	The Potential of Bioeconomic Innovations to Contribute to a Social-Ecological Transformation: A Case Study in the Livestock System	*Journal of Agricultural and Environmental Ethics*
2021	Marquardt, Jens; Nasiritousi, Naghmeh	Imaginary lock-ins in climate change politics: the challenge to envision a fossil-free future	*Environmental Politics*
2021	Ghosh, Bipashyee; Arora, Saurabh	Smart as (un)democratic? The making of a smart city imaginary in Kolkata, India	*Environment and Planning C: Politics and Space*
2021	Vestergaard, Mads	The Need for Speed – Technological Acceleration and Inevitabilism in Recent Danish Digitalization Policy Papers	*SATS*
2021	Lavorgna, Anita; Ugwudike, Pamela	The datafication revolution in criminal justice: An empirical exploration of frames portraying data-driven technologies for crime prevention and control	*Big Data & Society*
2021	Middelveld, Senna; Macnaghten, Phil	Gene editing of livestock: Sociotechnical imaginaries of scientists and breeding companies in the Netherlands	*Elementa: Science of the Anthropocene*
2021	Benediktsson, Karl	Conflicting imaginaries in the energy transition? Nature and renewable energy in Iceland	*Moravian Geographical Reports*
2021	Lei, Ya-Wen	Upgrading China through Automation: Manufacturers, Workers and the Techno-Developmental State	*Work, Employment and Society*
2021	Ergen, Timur; Umemura, Maki	Shifting patterns of expectations management in innovation policy: A comparative analysis of solar energy policy in the United States, Japan and Germany	*Energy Research & Social Science*
2021	Strand, R.; Gamboa, G.; Dankel, D.J.; Giampietro, M.	Insect feeds in salmon aquaculture: sociotechnical imagination and responsible story-telling	*Journal of Insects as Food and Feed*
2021	Paltieli, Guy	The political imaginary of National AI Strategies	*AI & SOCIETY*
2021	Wienroth, Matthias; Scully, Jackie Leach	Promissory ethical regimes: publics and public goods in genome editing for human health	*Science and Public Policy*
2021	Saito, Hiro	The imaginary and epistemology of disaster preparedness: The case of Japan's nuclear safety failure	*Poetics*
2021	Aagaard, Line Kryger	The meaning of convenience in smart home imaginaries: tech industry insights	*Buildings and Cities*
2021	Deitz, Shiloh; Lobben, Amy; Alferez, Arielle	Squeaky wheels: Missing data, disability, and power in the smart city	*Big Data & Society*
2021	Loconto, Allison Marie; Arnold, Nadine; Silva-Castañeda, Laura; Jimenez, Alejandra	Responsibilising the Fairtrade Premium: Imagining better decision-making	*Journal of Rural Studies*
2021	Schelly, Chelsea; Gagnon, Valoree; Arola, Kristin; Fiss, Andrew; Schaefer, Marie; Halvorsen, Kathleen E.	Cultural imaginaries or incommensurable ontologies? Relationality and sovereignty as worldviews in socio-technological system transitions	*Energy Research & Social Science*
2021	Shelby, Renee	Technology, Sexual Violence, and Power-Evasive Politics: Mapping the Anti-violence Sociotechnical Imaginary	*Science Technology & Human Values*
2021	Lafontaine, Céline; Wolfe, Maxime; Gagné, Janie; Abergel, Elisabeth	Bioprinting as a Sociotechnical Project: Imaginaries, Promises and Futures	*Science as Culture*
2021	Rahm, Lina	Education, automation and AI: a genealogy of alternative futures	*Learning Media and Technology*
2021	Stephens, Neil; Vrikki, Photini; Riesch, Hauke; Martin, Olwenn	Protesting Populist Knowledge Practices: Collective Effervescence at the March for Science London	*Cultural Sociology*
2021	Hendlin, Yogi Hale	Surveying the Chemical Anthropocene	*Environment and Society*
2021	Rahm, Lina	Educational imaginaries: governance at the intersection of technology and education	*Journal of Education Policy*
2021	Kim, Jongheon	Promoting the ICT Industry for the future with fears from the past	*Science and Public Policy*
2021	Liu, Jun; Zhao, Hui	Privacy lost: Appropriating surveillance technology in China's fight against COVID−19	*Business Horizons*

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Year	Author(s)	Title	Journal
2021	Eaton, Weston M.; Burnham, Morey; Kirchoff, Christine; Hinrichs, C. Clare	Expert habits of mind: Implications for knowledge co-production in energy transitions	*Energy Research & Social Science*
2021	Tennant, Chris; Howard, Susan; Stares, Sally	Building the UK vision of a driverless future: A Parliamentary Inquiry case study	*Humanities and Social Sciences Communications*

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