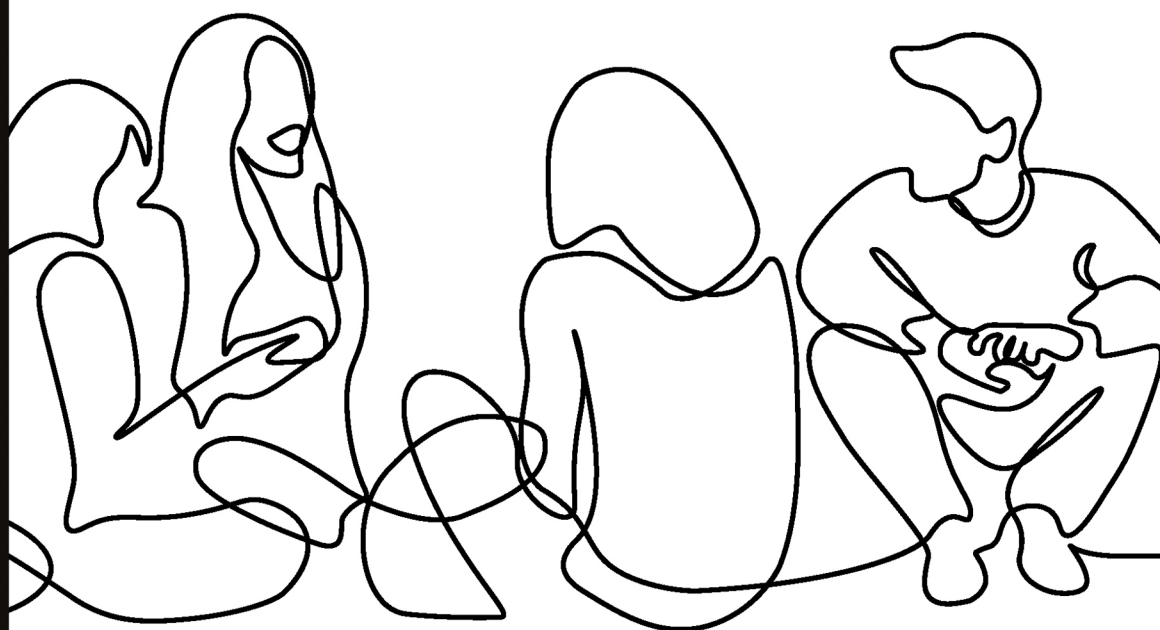


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HANDBOOKS



# Routledge Handbook of Social Futures

Edited by Carlos López Galviz and Emily Spiers

“Thinking intelligently about the future has never been more important. Too often, however, it is dominated by the failed futurisms of prediction and probability. This book brings together in one place a host of new insights into how social futures are being made today – from the relationship between pasts and futures and conflicting temporalities, to the role of narratives, new technologies, migration and planetary change. It is essential reading for anyone interested in the study of social futures and, in particular, for all of those interested in creating better futures. The book has the potential to set out a new, practice based, contextual and situated approach to the study of futures that locates ‘the social’ at the heart of futures studies, creating a new interdisciplinary dialogue that will enrich the field.”

— *Keri Facer, Professor of Educational and Social Futures,  
University of Bristol, Editor in Chief Futures*

“We are experiencing the end of a certain type of epoch. And with that end comes a broad range of alternative options. This *Handbook* makes an important contribution to the need for re-assessing diverse aspects of our social, built and natural environments and of the logics we use to understand what needs to be done. With this collection, the editors Carlos López Galviz and Emily Spiers give us one of the most distinctive analytics for an alternative set of options. The originality and the daring set of issues here proposed make this *Handbook* a must read”.

— *Saskia Sassen, the Robert S. Lynd Professor of Sociology, Columbia University*



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# Routledge Handbook of Social Futures

Featuring chapters from an international range of leading and emerging scholars, this *Handbook* provides a collection of cutting-edge, interdisciplinary research that sheds new light on contemporary futures studies. Engaging with key defining questions of the early twenty-first century such as climate change, big data, AI, the future of economics, education, mental health, cities and more, the *Handbook* provides a review and synthesis of futures scholarship, highlighting the role that societies can and should play in their making. While the various chapters demonstrate how futures emerge and take shape in particular places at particular times, the distinctive insight provided by the volume overall is that futures thinking today must be social and contextual.

By presenting a range of futures work from contexts around the globe, the *Handbook* contextualizes techniques – forecasting, backcasting, scenario planning, collaboration and co-production – to ask how different dimensions of the social are created and circulated in the process. Through its thirty chapters, the volume explores and interrogates narratives, anticipations, enactments, ecologies, collaborations, prospectations and so on to highlight which versions of the social are legitimized and which are encouraged and foreclosed.

This *Handbook* opens an important conversation about the centrality of the social in futures thinking. By bringing arts, humanities and social sciences scholars and practitioners into conversation with biologists and environmental, climate and computer scientists, this volume seeks to encourage new pathways across, between and within multiple disciplines to interrogate the futures we need and want. The social must be our starting point if we are to steer our planet in a direction that supports good lives for the many, everywhere.

**Carlos López Galviz**, PhD, is Senior Lecturer in the Theories and Methods of Social Futures at Lancaster University, UK. His books include *Global Undergrounds* (2016) and *Cities, Railways, Modernities: London, Paris and the Nineteenth Century* (2019).

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# Routledge Handbook of Social Futures

*Edited by Carlos López Galviz and Emily Spiers*

WITH MONIKA BÜSCHER AND ASTRID NORDIN

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# Contributors

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## Contributors

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*In memoriam* John Urry



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# Introduction

## Why social futures?

*Carlos López Galviz and Emily Spiers*

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### **Social futures: A manifesto**

What does it mean for futures to be social? How does social-futures thinking complement the dominant paradigm of futures thinking prevailing in the west, especially in the Anglo-American tradition, since the end of the Second World War? In the arena of corporate futures, involved with ‘future-proofing’ businesses, markets and governments, economic and technological trends constitute the main drivers of futures, and they are often viewed as both the singular guide for and the telos of ‘the future’. While economics and technology are important, social futures makes the case for attending to a wider range of social considerations necessary for humanity, other species and the planet to flourish, and adopting a broader, more creative, set of approaches and methods in order to do so.

Foregrounding social futures reveals a shift to the embodied and embedded ways that humans anticipate, imagine and live futures in their messy, socially imbricated lives. We encourage, in this way, a resistance to the deracinated macro impetus of much futures work today and a shift in gaze to matters of difference, to specific *times, places and people*, from which intersections futures emerge. This is futures thinking as localized and lived, not putatively generalized (indeed, generalizable) and abstract.<sup>1</sup> Futures, like identities, emerge out of repetitive, lived practices, which themselves arise from a complex nexus of conditions, and are performed in a pluralistic, incoherent process within a regulatory social system (Spiers, 2018). As this analogy shows, insights from feminist and gender studies, among other fields, can serve to develop our critical thinking vis-à-vis the future. Just as the concept of a pre-discursive, coherent and *predictable* selfhood sustains essentialist notions of a ‘natural’ or ‘universal’ gender identity (Spiers, 2018, p. 25), contemporary modes of prediction, forecasting, extrapolation and ‘future-proofing’ run the risk of naturalizing or universalizing some futures, while foreclosing others. The futures we shape are neither ‘natural’ nor ‘universal’, nor are they pre-ordained. Futures, we argue, are contextual.

Futures have histories and geographies that differ according to where we position ourselves across space and over time. Charting the different modes, means, capabilities, approaches and practices involved in the localized act of entertaining the question of what the future holds is a challenge this Handbook tackles head on. By assembling a range of futures,



each with its own geography and history, we give context to techniques – forecasting, back-casting, scenario planning, co-production and more – with which specific versions and trajectories of the social are made.

In the third decade of the twenty-first century, futures studies have turned a weather eye to the conditions of the past and present that inform the capacities of individuals and societies to access their futures (see Sand, 2019; Groves, in this volume; Spiers, in this volume). Whether one adopts a ‘capabilities’ or ‘futures literacy’ approach (see Sen, 1985; Nussbaum, 2011; Miller, 2006a, 2015), or a focus on the intricate processes of human anticipation (Poli, 2017, 2018), the distinctive insight of this volume is that futures thinking today must be social.

Taken together, the chapters included in this Handbook interrogate the different versions of the social that futures methods create as well as those that they foreclose, related to which is the reality of growing social inequalities facing governments, societies and families in the climate emergency. The question is no longer one of ‘how the other half lives’, but in what meaningful ways we can comprehend what connects the wealth of the 1% to the worries of the remaining 99%, as highlighted, among others, by the Occupy Movement in the early years of the twenty-first century.

Values are central to thinking the future from the social, that is, the values we wish the societies and social worlds of which we are part to hold. Equality, closing the gap between rich and poor, is one such value, so are fairness, individual freedom, self-development, conservation and ecological restoration. The values and the methods that shape the future do not always match. Put differently, certain techniques – projecting trends by extrapolating from observed patterns in the past – have implicit values underpinning them: Markets should be free; growth is good; and more is better. Futures defined by other values – equality, fairness, justice and inclusivity – require techniques that differ from those used in crafting the futures we learn about through newspapers, newsrooms and reports by think tanks and governments. Those tend to be limited to short-term political cycles and the trends that the next year will bring, the ever-newer gadgets, new variations on the theme of the smart phone, tablet, clean energy, or the driverless car. More importantly, highlighting values invites us to devise new ways of thinking the social in a manner that enables us to articulate those values in the future tense.

In 2016, for example, residents of Lancaster in the United Kingdom responded to a question about life in 2051 by stating how important it was for nature, parks and greenery to be part of their future lives (see also Spiers, this volume).<sup>2</sup> Responses varied across generations, ranging from the over-70s, who could not imagine themselves playing a part 35 years into the future, through to the schoolchildren, whose drawings captured the wildest visions of what life in their forties might mean. The narratives underpinning how they made the future present in their everyday lives determined the kind of futures they considered possible and, by extension, the futures that appeared foreclosed.

Ways of understanding and developing techniques to envision and shape the future are contingent upon where and when these emerge and evolve. Visions, stories, enactments of the future differ in the qualities that frame each projection, themselves subject to conditions determining, for example, the possible, probable and preferable futures (Amara, 1978; Urry 2016) that we wish to bring to life. This Handbook is an invitation to open an important conversation about the futures we wish to shape and the extent to which they can and should be social. It springs from a particular place and a particular time, namely, Lancaster, in particular the Institute for Social Futures (ISF), founded in 2015 at Lancaster University. In their original manifesto, founding directors Linda Woodhead and John Urry placed the

future at the centre of research in the social sciences and urged us to consider what theories and methods might aid us in interrogating and better understanding the future (see Urry, 2016). Grounded in an ongoing interdisciplinary conversation spanning across the arts, humanities and the social, environmental, materials, health and computational sciences, the ISF encourages future-forming research collaborations across disciplines with the aim of helping understand and better shape futures where the social is key.

After six years of engaging in this work at the ISF, we have assembled a collection of contributions to this Handbook that capture three important ways in which futures thinking can be made social: (1) Sustaining an open and critical understanding of the relationship between the past and the future, enabling, among other things, a move beyond probabilistic techniques such as forecasts; (2) Entertaining a range of timescales, human and otherwise, in the process of shaping the futures we want and need; and (3) Paying attention to the narrative impulse at the heart of all futures thinking and the links between questions of voice and agency. In what follows we turn to each in order to delineate our social futures manifesto.

### *The past into the future and back*

The possibility, probability or preferability of certain futures relates directly to the kinds of claims made about how we can know, anticipate and shape the future. Implicit in these claims is a very specific, often instrumental, understanding of the relationship between the past, the present and the future. By the 1970s, Wendell Bell would state that ‘there are no past possibilities and no future facts’ (quoted in Adam, 2011, p. 591). This is closely related to whether or not we assign to different temporalities the status of being real and the status of things or phenomena we can sense as actual, recognize as tangible and qualify as factual. The debate around future facts is both varied and extensive (see, for example, Adam and Groves, 2007; Appadurai, 2013; Poli, 2017) and one there is no need to rehearse here. More closely aligned with the aims of our discussion is the question of what past possibilities mean. There have been and there are at any time in history competing visions of the future, which means possibilities in the past abound; things could have been different, and agencies and structures might have interacted in other ways to produce outcomes that differ significantly from what we may call our present (López Galviz, 2019). A present, we should add, that shifts constantly over time. Stating that there are not possibilities in the past is closing it, giving it a definite status neither the past nor the present has. It creates an artificial narrative shaping the versions of history we learn from and the manner of learning. Importantly, it shapes imaginaries of the past by delineating the options of what can be remembered (Hurlbut, 2015; Jasanoff, 2015; see also Jedlowski, 2017).

Denying the past, its possibilities, also fixes events to positions from which we can extrapolate safely, if inaccurately, in the form of, for example, trends. One important tradition to which trends are key is forecasting. By the early twenty-first century, as Jens Beckert has shown, ‘macroeconomic forecasting has become a veritable industry’, connected to national governments; central and regional banks; institutions such as the Organisation for Economic Co-operation and Development, the International Monetary Fund and the European Commission; and ‘private banks, rating agencies and investments funds’ (2016, p. 219). This ubiquity continues despite the fact that forecasts are well known for their failure to predict, for example, financial crises. The Harvard Economic Society in 1929, the US Federal Reserve in December 2007 and the German forecast institutes in the prelude to the financial crash of 2008, all had a different future linked to the horizons their models showed. An important

part of what forecasts do is to establish the authority with which fictions can be turned into policy:

Forecasting should be considered as an instrument for the construction of fictional expectations. Forecasts are imaginaries of a future state of the world [that] do not need to be correct to set actors' minds at ease or to help them make decisions – they merely need to be convincing. The credible claim for correctness is a substitute for actual accuracy.

(Beckert, 2016, p. 231)

The very significant resources, including money, spent by governments, companies and institutions in inaccurate predictions of what the economic and technological future will bring should give us pause for thought. 'A century of econometric forecasting of macroeconomic indicators and the development of many quantitative and qualitative techniques to predict technological progress', Beckert goes on to argue, 'has not brought us any closer to predicting the future' (2016, pp. 241–242). Yet 'the failure of prediction is rarely taken as an opportunity to reflect upon whether or not it is actually possible [to predict the future], but instead as a justification for building even more sophisticated models' (2016, p. 244).

Much of the thinking underpinning forecasting and similar probabilistic techniques is based on a key fictive character, *homo economicus*, a 'solitary, calculating, competing and insatiable' individual, almost always male, moving in an unrealistic world where the main vehicle resembles a plane in which we, society, take off. Never to land. This is the compelling way in which Kate Raworth (2018) characterizes the main actors, plots and storylines central to the doctrines of twentieth-century economics. Her alternative is for an embedded economy, regenerative by design, supporting flourishing lives and interlocking the earth, society and the economy, one that pays equal attention to the state, the market, the commons and the household. Context, values and purpose are central to imagining the kind of economies we need in the early part of the twenty-first century:

Rethinking economics is not about finding the correct one (because it doesn't exist), it's about choosing or creating one that best serves our purpose – reflecting the context we face, the values we hold, and the aims we have. As humanity's context, values, and aims continually evolve, so too should the way that we envision the economy.

(Raworth, 2018, pp. 22–23)

The encouraging news is that alternatives are already in the making. As Stewart Wallis outlines in his chapter ('Economics', this volume), the Wellbeing Economy Alliance (WEAll), founded in 2017, has gathered (by the end of 2020) 160 movements, alliances and organizations as well as the willingness of governments in Scotland, New Zealand, Wales, Iceland, Canada and California to test multi-sector, multilevel hubs where new economies can be brought into existence. One of WEAll's aims is to reverse the concentration of wealth (concerning income and lobbying power) and the social inequalities that it engenders. As Wallis reminds us, 'the world's 2,153 billionaires [had in 2020] more wealth than the 4.6 billion people who make up 60% of the planet's population'. Dignity, living within our natural planetary limits, a sense of belonging, fairness and participation are the five key needs, or 'non-negotiables', on the basis of which WEAll seeks to create a different social future.

Sound alternatives like Raworth's and WEAll, placing the social at their core, are both timely and urgent. They remind us of the multiple past ways of thinking about time across different cultures and religions, which see things, for example, in a cyclical way – we progress

and regress, we can repeat and re-enact in meaningful ways, returning to the wealth of what has come before, in imitation of the natural world and even the cosmos itself. Thinking of social futures with the tools of a distinctively modern belief in endless progress and growth and twentieth-century economics runs into the risks of cognitive bias.<sup>3</sup> It also reproduces the kind of doctrinal thinking that with similar insistence and tone places faith in free markets, or in particular readings of the nature of God's presence in the world (Guyer, 2007). Engaging with the process of understanding and helping shape the social futures we seek to create requires a bigger, richer and more varied set of approaches than that which has become dominant since at least the second half of the twentieth century. One way of enhancing the repertoire of techniques is by considering a range of timescales.

### *The scales, scapes and spans of time*

Considering the interdependence of different timescales is central to devising how we can resist overly parsimonious understandings of how individuals and societies envision, shape and enact their futures. In every rendering and rendition of the future, we can find overlapping timescales, timelines and time frames being reproduced. Barbara Adam (2021, pp. 120–121) cites at least five 'irreducible features of time', namely, timeframes, temporality, tempo, timing and 'the temporal modalities of past, present and future', that is, the multiple ways in which the three modes of time familiar to most of us interact with and shape one another. The openness of these interactions is key. By contrast, one way of characterizing our contemporaneous consumer and services society, as Marc Augé (2015, pp. 63–64) has remarked, is as a 'society that would still care about its immediate future, but would no longer need to look further ahead'. This is a stark reminder of the risks of an overriding presentism.

The relationship between immediate needs and how far into the future we place ourselves is contingent upon time and place and is determined in large part by the politics of the aspirations foregrounded on our behalf by governments, companies, institutions and individuals. Foregrounding aspirations implies, by extension, ignoring and side-lining those aspirations that do not match the picture that is celebrated. Ideas such as progress and innovation underpin the immediacy and framing of our needs in relation to consumption rather than, say, citizenship or the environment. Building on the work of Bertrand de Jouvenel, Adam and Groves (2007, p. 33) argue that

our knowledge of the future is inversely proportional to the rate of progress [...] in contexts of accelerating innovation, knowledge of the future is moved progressively closer to the present and knowledgeable extension into the long-term future recedes ever further out of reach.

Is this inverse relation between immediate progress and distant futures an inevitable conundrum? What does it take for our imaginations to span decades, centuries and millennia; to delve into the past with those timelines so that we position ourselves to help shape better social futures? How long is long ago? How soon is the here and now?

In the mid-nineteenth century, William Thomson, later Lord Kelvin, estimated that the age of the earth was finite and close to 20 million years. Over 150 years later, geologists posit that the earth is around 4.5 billion years old (England, Monar and Richter, 2007). Between four and five billion years from now, the sun will begin to cease being the supporting bright star holding together the solar system of which the earth is part. The cluster of islands that make up Tuvalu in Polynesia has been submerging as sea levels in the Pacific continue to rise.

Recent estimates predict that most of the archipelago will have disappeared by 2050, a trend also affecting large cities such as Shanghai, Jakarta, Bangkok, Kolkata and Dhaka (Kulp and Strauss, 2019). Global warming has intensified since the 1960s with a rapidity the existing historical and geological record suggests is unprecedented. Since 1960, the trend of increasing greenhouse emissions dating back to the beginnings of the industrial revolution (circa 1750) has been called the Great Acceleration (Steffen et al., 2015). That acceleration is the speeding up of a human-made process centuries in the making, prompting reactions from the earth and its ecosystems that have taken over millennia, millions of years to be what they are in the early part of the twenty-first century.

The longevity of the earth, the life expectancy of the solar system, the immediacy of flash floods and islands or coastlines gradually submerged by rising sea levels, as well as the relatively new yet significant rise in global temperatures, might at first seem unrelated to our capacity to envision different worlds. They all operate at different timescales. Each, in turn, has a model, including the assumptions on which that model is based, allowing scientists, experts and others to calculate if the consequences to humans, societies and the environment are observable and by what point the crossing of a certain threshold becomes irreversible.<sup>4</sup>

What the contrast between different timescales suggests is twofold. It highlights the significant dissonance between timescales and measurements that we struggle to grasp and which, frankly, play little or no part in the everyday decision-making concerning our future, however distant or near that future might be. This, of course, is not the case for the 11,000 or so inhabitants of Tuvalu for whom favourite spots in their homeland have disappeared in recent years (Roy, 2019). The contrast is also a means of recovering what deep time, time measured in millions or billions of years, has to offer to the human imagination. This is an exercise in unthinking the thinkable, in other words, relearning the process of what times and which timescales we consider when imagining new social futures, which complements calls by Herman Kahn, Amitav Ghosh and others to think the unthinkable and, in the process, reconfigure the rules of how we normally think the future. Moreover, the contrast of timescales allows us to explore the extent to which our ideas and visions of a collective future might connect the immediacy of urgent change (relocating one's home) to timescales beyond the human (the earth drifting out of the solar system). The contrast is also a means 'to accompany our actions to their eventual destinations', a way of inserting responsibility, ethics and care into the making and unmaking of the worlds around us. As Adam says, 'we could take responsibility not only for actions that extend over space—our footprints—but also for actions that extend over time', actions that Adam calls 'timeprints' (2021, p. 128).

### *Storytelling and storyknowing*

From the times of oracles and prophets (which are always and now), futures thinking has revolved around the attempt to mitigate against uncertainty, and it has manifested in the human attempt to build jetties of knowledge, predictions and forecasts across a sea of intrinsic uncertainty about the future. Scrying, divination (Woodhead, 2021), palm-reading, tarot, seeing, forecasting, prediction (Andersson, 2021), scenarios (Curry, 2012, this volume), foresight (Slaughter, 1995), horizon scanning, prospection (Fuller, 2017; Bok and Fuller, this volume), anticipation (Poli, 2017, 2018; Groves, this volume), futures literacy (Miller, 2006a, 2015; Spiers, this volume), visioning (Schultz, 1995, 1996), alternative futures and the Manoa method (Dator, 2009), 'futuring' (Smith and Ashby, 2020) and 'defuturing' (Fry, 2020): The list of terms could continue, but serves here to gesture towards the plethora of methods that have been developed over time to do the fundamentally impossible.

The variety of methods attests to the pressing need for imagination when it comes to futures thinking. To think the unthinkable, *qua* ‘future presents’ (Adam and Groves, 2007), requires our brains, hardwired for storytelling as they are (see Turner, 1998; Wolf, 2008; Zak, 2015), and our intersubjective cultural practices. As Miller (2006a) points out: ‘it is crucial to recognize that the elaboration of exploratory situations (for human society) is largely a storytelling task’ (p. 7). Indeed, as Genevieve Liveley et al. (2021) observe: ‘When we speculate about the probabilities, possibilities, and desirabilities of any futures, we are dealing with present imaginaries of future possible worlds – that is, with fictional *story* worlds’ (p. 1). Narrative and storytelling have a long tradition of playing with and bringing to life new worlds where the relationship between, for example, past, present and future remains open. The catalogue is extensive, from the mythical Cassandra, who carried the gendered burden of not being believed, to Dante’s exchange with the shadows in the Tenth Canto of the *Divine Comedy*, to the White Queen who remembers future events in *Through the Looking Glass* and Victor Hugo’s understanding of history as ‘an echo of the past’ reverberating ‘in the future’ (*l’avenir*) as well as ‘a reflection of the future over the past’ in *L’Homme Qui Rit*.

However, the value of narrative to social-futures thinking is not merely as a representational repository of futures imaginaries. Certainly, engaging with literature like speculative fiction, or SF, can help us understand that ‘speculation always occurs *from* somewhere and someone’ (Liveley et al., 2021, p. 7). As such, SF narratives can provide ‘new perspectives on how we set about dealing with the challenge of contextual bias when imagining possible futures’ (p. 7). Yet, as Liveley et al. (2021) observe, narrative is vital in ‘(1) framing, (2) shaping and (3) critiquing the world-building techniques that form the foundation of futures thinking’ (p. 1). From this, we can see that an understanding of narratology helps us, first, to explore the heuristics that inform the ways in which we think about possible futures, including moments when we remain stuck in our own cognitive biases, contexts or jump to conclusions. Second, engaging in collaborative storytelling as a practice of futures thinking can ‘activate an agentic relationship with an uncertain and complex future on the part of those participating in performative anticipatory practice’ like storytelling. (p. 7) Finally,

embodied and situated modes of ‘storyknowing’ can provide possible futures that illuminate messy but important ontological perspectives, and reveal [] how narrative identification or dis-identification not only echoes the difficulty of encountering the future’s alterity but also provides a tool for overcoming that challenge.

(p. 7)

Engaging with the narrative impulse at the heart of futures thinking allows us, therefore, to understand futures in and as part of their context; to illuminate the ways in which narrative frames open (or) foreclose particular futures; and to rehearse, through the creation of storyworlds, encounters with alterity, ranging from fictional characters and their worlds to the otherness of the future itself.

## Outline of chapters

The second part of this Introduction is organized around six thematic clusters. This constitutes an invitation to reflect on common themes emerging out of the chapters, which appear in alphabetical order according to their keyword. The commissioning, development and curating of the volume, in collaboration with the authors, thus resonate with the contrasts that Andersson and Kemp (2021, p. 7) advocate, namely, ‘ways of knowing the past and the

present, often straddling the scientific and the religious, the verifiable and the imagined, the objective and the emotional'. To these phenomena, we add agency and worlding, the means and purposes of knowledge and learning, futures that are social and material, urban and rural, on the move and at a standstill.

### *Methods, or ways of worlding futures*

This group of chapters explores the landscape of contemporary methods for thinking and shaping futures, including their advantages and limitations, beginning with a pivotal period in the mid-twentieth century. Andrew Curry's opening chapter unfolds the ways in which 'modern' futures thinking, embedded as it was, in the west, in the post-Second World War context, emerged as part of the military-industrial complex in North America, seeking out methods for futures thinking that drew on a positivist tradition of trends analysis and extrapolation. Pitted against the promises of positivism lies the insight, explored by these chapters, that every forecast or prediction is only, ultimately, a guess – however educated – at what will unfold in the future.<sup>5</sup> As our contributors show, the human desire to mitigate against uncertainty is so great that we invest deeply, on a cognitive and emotional level, in the plausible futures we construct. However, this often means that, when a chain of events unfolds in an unpredictable or unanticipated way, we are not prepared for the experience of disorientation, or estrangement, from our expectations. Rebecca Braun's chapter on 'Literary Futures' posits that 'literature can itself be seen as a tool with practical application for work in social futures' precisely because 'narrative plots routinely upend any straightforward chronological understanding of causality'. Braun thus makes the case for literature as a resilience-building tool in tackling our over-reliance on causal extrapolation and in coming to terms with ontological uncertainty.

Barbara Bok and Ted Fuller's chapter on 'Prospection' performs a synthesis of current social science methodologies for futures thinking that explores the status of claims to knowledge about the future as a methodological issue. The chapter thus goes to the heart of the divergent trends, noted above, that inaugurated futures thinking in the contemporary era: How can we legitimize any claims about the future? How can we evidence that knowledge? Alternatively, are these the right questions to be asking? As Bok and Fuller argue, central to these questions about prospection is the distinction between the 'phenomena being predicted' and the 'prospection enterprise itself'.

In contrast, and as Genevieve Liveley and Rebecca Braun explore in their chapters on 'Narrative' and 'Literary futures', we should consider all claims about the future as components of a narrative, a performative act of storytelling. Are futures, in fact, shaped by the stories that we tell about them? Moreover, if this is so, then the question of who speaks, who has a voice to tell a story, becomes a more pressing issue than the legitimacy of any one claim to knowledge. As Spiers notes in their chapter on 'Agency',

for the field of social futures research to be truly social, it must ask difficult questions about how [...] diverse and multiple forms of everyday, embodied agency intersect with the seemingly invisible ways in which broader material-discursive and institutional technologies become licensed to exert power over how futures unfold.

In 'Anticipation' (this volume), Groves, in turn, avers that anticipation should be treated as a kind of 'meta-capability, essential to any notion of a flourishing life'. Access to or prevention from the means of anticipation illuminates the question of ethics and politics that lies at the heart of social-futures thinking.



For Kristina Lindström, Per-Anders Hillgren, Ann Light, Michael Strange and Li Jönsson ('Collaboration', this volume), the dual methods of critical imagination and collaborative future making represent an 'ethos of democratizing processes of change, that is, to acknowledge people's skills and rights to influence their everyday environments'. What matters for Lindström et al., indeed for the many contributors of this Handbook, is the 'shift from engaging with the future through forecasting to a concern with how critical imagination can challenge basic assumptions, norms and structures to widen the perspectives on what constitutes socially, culturally, ecologically and economically sustainable futures'.

### *Data, learning, intelligence: Different claims to knowledge*

What is intelligence? How do we 'know' what we 'know'? Moreover, to what uses should we put our knowledge? These are the fundamental questions asked by this group of chapters. The ways in which humans have historically sought to understand their own epistemological claims about the past and the present extend into territory that is still more fraught when the future is concerned. Many of the chapters in this Handbook tackle the issues at the heart of our current modes of learning and knowing – whether that be in the accrual of knowledge for education and training, or in the process of seeking to 'avoid the mistakes of the past' – and how these issues prove problematic for the ways in which futures unfold.

Ashley Jay Brockwell and Carl Gombrich explore the future of the university in terms of our current and potential understandings of the uses of higher education. Their chapter considers whether, if we shift our thinking in terms of how universities respond to or inform the social, we can imagine future universities that 'remain radically open to, informed by and integrated with wider society, whilst offering visions of and practical steps towards a better future'. Dawn Goodwin and Richard Tutton's chapter on 'Inquiries' explores how the use that is made of the work of public inquiries in the National Health Service in the United Kingdom is limited by the ways in which the future is conceptualized. Goodwin and Tutton show how inquiries, through the painstaking process of pinning down events of the past, tend to characterize futures as 'identifiable', controllable and avertable. Thus, all too often mistakes are repeated as the future unfolds in slightly but significantly different contexts.

Richard Harper's chapter on artificial intelligence demonstrates the ways in which dominant narratives surrounding artificial intelligence as a mechanism fail to do justice to the variety of forms and uses of (human) intelligence and so, in turn, are limiting the futures of AI in the process. Deborah Lupton's chapter on the futures of personal data illuminates the relationships that individuals have with their own data. Lupton's empirical research reveals the ways in which individuals may resist future imaginaries that rest upon the two dominant, normative, if opposing, narratives of data futures: Those of a utopian vision of ubiquitous datafication, on the one hand, and their dystopian counterparts, on the other. Lupton shows how, in practice, individuals retain a sense of their own agency vis-à-vis their future imaginaries of personal data and their uses. In a similar vein, Earvin Charles Cabalquinto provides a case study of migrant Filipino workers in Australia who, by engaging with digital news media from and about the Philippines, use their digital connective practices to imagine and navigate a potential possible future for themselves and their families.

### *Social and material futures: Accessing the future*

This group of chapters asks important questions about the relationship between the social and the material. How does biology intersect with social structures to impact upon people's lived



experiences and, in turn, their futures? How can the histories and lived experiences of marginalization and oppression transform our understandings of the future? How can normative and exclusionary futures practices be productively queered in order to galvanize new modes of thinking, anticipation and liberation? How can infrastructural disruptions be harnessed to produce different futures through the development of new social practices? These chapters show us how existing social inequalities impact upon how people approach the future, but also how the experiences of marginalization, if we attend carefully to them, may reveal new forms of resilience and imaginaries for the future.

Derek Gatherer's chapter performs a retrospective of past biological thought that can be re-evaluated as protean futures thinking. Combing through biology's past, Gatherer discerns both utopian and dystopian futures and asks whether biology – reconceptualized as BioFutures – might have a larger role to play in current debates about social futures. Liz Brewster also casts an eye back over mental-health provision of the past and present in the United Kingdom. She explores the paradigm shift away from a biomedical model of health to a biopsychosocial one, which assesses not only biological factors, such as chemical imbalances and genetics, in mental health, but also the role of trauma, distress and structural inequalities.

Lonny Avi Brooks et al. examine the traumatic roots of queer and Afrofutures in order to move towards a radical rethinking of contemporary Western, Eurocentric futures thinking. The chapter makes the case for the potential of queer and Afrofutures perspectives to shatter complacent and normative hierarchies that have historically entitled some communities to 'have a future', while excluding others from the right to look ahead with dignity and agency. 'Radical empathy and visions of justice', Brooks et al. relate, 'often reside in a place of discomfort and vulnerability'. This uncomfortable place, indeed encounters with difference *per se*, requires from us the recognition of damaging legacies, as seen in the growing protests against institutional racism, and its murderous consequences, as well as the iconoclastic contestation of the many statues of slave owners and colonialists across the world, since 2020.

Georgia Newmarch, in turn, explores the ways in which communities in the UK have been re-forming in resilient new ways at moments of social and structural disruption to create what Newmarch calls 'proto-futures'. These proto-futures are moments when, in the face of local crises, such as power outages, new practices first emerge in a 'temporal choreography of participation' to prove themselves as possible new departure points, as the linchpins of new infrastructures, of new social futures.

### *Of submerged lives, drifting planets and future ecologies*

To what extent should societies flourish to the detriment of the environments with which they interact? What timescales should we consider when judging the effects of lifestyles on the places we live in and those we leave behind both immediate and remote? Does it matter that the timescales of the earth and the timescales of human life and other species are different? Do these timescales converge and, if so, how?

The chapters on 'Climate Change', 'Ecology', 'Multi-Planetary Futures' and 'Utopia' engage in their own ways with these questions less to resolve them than to show the value of different approaches. Climate vulnerability, as Riadadh Hossain, Shababa Haque and Saleemul Huq discuss in their chapter ('Climate Change'), involves 'a crisis of survival for the poorest and most vulnerable', especially in low-lying delta areas, of which Bangladesh provides but one example. Different timescales are already at work for communities to adapt effectively, equip themselves with the right tools and develop sufficient responses to the latent risks and hazards of environmental change. In Bangladesh, this includes technology-based

solutions such as hydroponic farming at household level; understanding and weighing the importance of intersectionality, more specifically, empowering women by securing their access through mobile phones to real-time meteorological data of value for tending their crops and farms; and taking the long view as per the development, policies and actions related to the Bangladesh Delta Plan 2100.

Reading ecological thinking through the lens of utopian modes of narrative ('if this continues then', 'what if' and 'if only') allows Lauren Rickards to highlight the kinds of relationships made in the forging of different ecologies both real and imagined. Rather than advocating specific kinds of relationships within closed systems, Rickards invites us to 'cultivate different orientations to and assumptions about the future'. Thinking ecologically, Rickards argues, involves reflecting on our 'uneasy and ever-shifting position within the world – a world that we are intentionally and unintentionally co-creating with highly uncertain results' ('Ecology', this volume). Orientation and relationships are also key aspects of utopias, as Lisa Garforth argues, in turn ('Utopia', this volume). The future is not a realm of 'telos, endpoints or blueprints', but the never-ending and never-final process of crafting an orientation to our everyday lives in ways that are better suited to dealing with the consequences of our actions, inactions, patterns of living and our insistence on retaining certain lifestyles. A key challenge is for that orientation to be equitable and just across generations, social and spatial units (the family, school, workplace, neighbourhood, country and world). One of the many insights that literary utopias provide is precisely the capacity to 'interrogate and expose the limits of what is imaginable' (Garforth, this volume). She observes that such limits prevent us from 'imagining changes in our own society and world', except, as Fredric Jameson adds, 'in the direction of dystopia and catastrophe' (Jameson, 2010, p. 23).

The common corollary of dystopia and catastrophe is escapism, leaving the island of utopia, or planet earth. Such is the thinking of a select few promoters of and players in the new space age, led not by nation states and cold war rivalries but instigated and funded in large part by private companies, with billionaires at their helm. As Katarina Damjanov shows, outer space has now, in the early twenty-first century, a presence in our lives in various guises that, nevertheless, reproduce tropes of the frontier and economies of colonization and extraction. Besides the alleged shared feeling of outer space as commons, through the dissemination of striking images, reports and memorabilia involving, for example, Mars rovers, there is also the realm where the security of nation states continues to be at stake and the firm interest of private companies making clear strides in securing returns for their investment. 'Assembling human societies around the bounty of [outer] space', Damjanov remarks, 'perpetuates and augments patterns of uneven access and unequal participation in shared resources'. To what extent is access to these resources distributed fairly, by whom and in whose interest, are questions we can both recognize in the past and temporalize into the future. We may all end up being colonizers, if we were to follow the Bransons, Musks and Bezoses of the new space age, or colonize the different times 'of an empty future ready to be occupied' (Adam and Groves, 2007, p. 140).

### *Social futures in an urbanizing world*

What does it mean for futures to be social in a world that, according to counts and estimates by the United Nations and others, appears to be urbanizing rapidly? Urbanization has long been linked to other processes such as industrialization and development. In its most hopeful incarnation, urbanization is seen as a means of raising the standards of living of a population, of 'lifting' people out of poverty. The first principle, out of four, of a recent UN-Habitat

III report, stated that: ‘In an urbanized world, in which global urban population will reach 70 per cent in 2050, urbanization becomes the key element of global development’ (UN-Habitat III, 2017, p. 42). Despite their limitations, and the instrumentalism that accompanies them (Kaika, 2017), institutions and governments see the UN Sustainable Development Goals as a force for good. To supplement and critique the kind of thinking that normalizes urbanization as a global trend, we must think of qualities like creativity; deploy critique to counter the onset of companies that see cities as the most profitable of markets; interrogate taxonomies of visual cities so that invisible yet important aspects of what makes a city are made apparent; and recognize the eventualities that are part of the different temporalities constantly unfolding in informal cities. This is, of course, only a start.

The chapters by Cecilia Dinardi, Paul Graham Raven, AbdouMaliq Simone and Nick Dunn invite us to reflect on what qualifying urbanization means and involves, particularly in the context of cities. Dinardi explores what artistic, cultural and creative interventions do in cities, including how they differ from policies based on the creative class as advocated by Richard Florida and others. Central to creative urbanism, Dinardi writes, is ‘the importance of culture, creativity and the arts for place-making, urban revitalization and social cohesion’. By contrast, policies encouraging creative clusters and hubs tend to reduce structural problems such as growing social inequalities and unaffordable housing to the solutionism of attracting investment and funding innovation, often ignoring the specific conditions of the contexts and communities where these new clusters are planned. These are also policies running the risks of reproducing what Saskia Sassen (2014) has called ‘geographies of extraction’ whereby shell companies seek, successfully, to maximize profits on their investments by sinking their capital into the ever more unaffordable and increasingly privatized centres of cities like London, Paris, New York, Tokyo or Hong Kong. The trend is also part of what Lees et al. call ‘planetary gentrification’, namely, the process through which cities in Europe, Asia, Latin America and beyond have grown if only to accommodate investment, often by policy and choice. Investment, by and large, targets the upper classes and a transnational elite while, at the same time, limiting the options and ignoring the needs of all other residents (Lees et al., 2016).

A distinct variant of the solutionist approach to urban change is encapsulated in the discourses and visions of the smart city, with which both Raven and Dunn engage with critically. The smart city, Raven argues, is a ‘solutionist utopia of policy without polity’, in other words, a city lacking friction; a city where problems are solvable through computing power; and a city consisting of data points rather than citizens and civic institutions. As Raven shows, the ‘smart’ of the cities by IBM, Cisco, Intel and others betrays a genre that can be deconstructed by recourse to the toolbox of the critical utopias of science fiction. Doing so reveals the smart city for what it is: ‘A city of (and for) cyphers, a rigid and over-quantified simulacrum, a hyperreal dystopia for all but those sat safely within its “nerve centres” and control rooms’. Importantly, this is a question of the power of data entangled with the erosion of the democratic spaces that cities have long accommodated and protected.

In his chapter, Dunn explores the value of creating taxonomies of cities envisioned since 1900 and assessing the extent to which, during specific periods, architects, planners, designers and others have contributed to the emergence of ‘echo chambers for novel visualization techniques’, on which, we must add, much of the training of future generations is based. Cities made visual have different temporalities in them: From the conservation of the distant past, say, the archaeology and ‘brecciation’ of a city like Rome (Bartolini, 2013) to the ‘now and next’ advocated by the smart-city promoters. What counts, Dunn argues, are the social, global and technological dimensions of the futures envisioned as well as recognizing

who engages with what kinds of future, what agendas these futures advocate and when, and which motivations we can reveal in them. Casting a net wide enough so that futures beyond the technological make it into the archive of visions that policymakers can see is a means of highlighting other important issues such as ecological concerns, nomadic lifestyles and the integration of urban and rural spaces.

A similar kind of visibility to which academic work can contribute is that of the plurality of eventualities and actors who make the informal cities of the so-called Global South. The futures that the residents of informal settlements can envision are significantly different from the visions filling the catalogues and books recording the work of well-known architects. The qualities their futures offer us are different. There is an orientation towards the future that is unsettled, informal, provisional, riddled with dispossessions, evictions and precarity. Residents of places like Tanah Tinggi in Jakarta, Indonesia, Simone tells us, have 'little conviction in any linear progression toward a better a future' and have instead a cornucopia of 'bluffing, coaxing, luring, and blustering' that may or may not translate into the money, resources and opportunities to make their lives more liveable. Recognizing that, through the distinctiveness of their lives, residents of informal settlements weave and make unique forms of infrastructure (Simone, 2015) is also a means of capturing the human labour, including the values underpinning it, that goes into shaping the lives and livelihoods of one in every four urban residents worldwide, or one billion people as recorded in 2016 (UN, 2020, pp. 119–120).

### *The rhythms and crossings of social futures*

The relationship between societies and their futures can be characterized as one of movement (Urry, 2000; Büscher et al., 2010; Sheller and Urry, 2016). This is so through both everyday acts by individuals moving along in life and constantly shifting iterations of the imagination. In de Jouvenel's evocative image, these movements are 'jetties' into the uncertain worlds ahead:

As a consequence, the future is known not through the guesswork of the mind, but through social efforts, more or less conscious, to cast 'jetties' out from an established order and into the uncertainty ahead. The network of reciprocal commitments traps the future and moderates its mobility. All this tends to reduce the uncertainty.

*(de Jouvenel, cited in Adam and Groves, 2007, p. 8)*

Uncertainty is a deterrent of movement to some but not all. Whether and how movement enters our everyday lives is determined by a variety of conditions, some external (the money and resources to travel, the existence of a pavement or not) and other internal (the limitations that we might experience through our own bodies). What do movement and stasis do to the rendering of certain futures desirable and other futures unthinkable? Do the questions of who moves where, why, how and under which circumstances help us reveal aspects of social futures that otherwise would go unnoticed? In what ways is the embodied experience of moving necessary to thinking different social futures?

The contributions by Michael Hieslmair and Michael Zinganel, Mimi Sheller, Nicola Spurling and Farzaneh Bahrami all engage with these questions in various ways. Nickelsdorf, a town in the border between Austria and Hungary, has witnessed migrations, forced and otherwise, dating back to at least the wars related to the breakup of former Yugoslavia (1991–2001). In 2015, border crossings at Nickelsdorf were by refugees, the majority fleeing conflict

in Syria, Afghanistan or Iraq. Through their use of a range of creative methods including maps and the making of a graphic novel, Hieslmair and Zinganel capture the significance of cultural memory in shaping the kinds of social futures open and foreclosed in moments of crisis. This includes the memory of residents who have witnessed similar crises before and recognize the value of human readiness to help those most in need. The population of forcibly displaced people worldwide doubled between 1990 and 2019 from circa 40 million to nearly 80 million as recorded by the UN Refugee Agency. Around 40% of them were children (UNHCR, 2019). As Büscher (2018, p. 189) has remarked data and its absence are a reminder of ‘how the privileges of the few [can be found] on the same map as the suffering of the many’.

The fragility, uncertainty, unpredictability and precarity of the futures that can be envisioned in moments of crisis are not limited to the large number of people forced to be on the move. As Sheller reminds us, these are also qualities that people can observe in the mobility systems available, for example, in cities. The uneven distribution of privileges concerning the means, frequency and conditions of mobility and transport is directly related to social inequalities, accessibility and the extent to which movement is a choice. The future of cities is often seen through the lens of future transport technologies, in a process that, Sheller argues, is political whether through favouring state regulation or by giving free rein to the market. Our very democracies are at stake in the making and unmaking of these techno-futures, including ambitious plans such as the Green New Deal in the United States: ‘We need to pay greater attention to the injustice of digital systems and the ways in which the concentration of digital power is in tension with democratic determination of mobility transitions’ (Sheller, this volume).

An important part of the restrictions to how and by which means people move is a function of legislation, the practices it encourages and prevents. Lines on pavements, roads and car parks may seem innocuous, serving a purpose we care not to question. Inspired by Tim Ingold’s ‘anthropology of the line’, Spurling invites us to think twice and ask whether the way our everyday practices are directed by, for example, traffic and other related lines provides any insights for envisioning decarbonized mobility futures. Her rendition of painted lines and the practices they make possible as the weft and the warp (the intersecting threads of fabric in cloth-making) of mobility practice is one way in which we may envision mobility futures differently, not least futures beyond the car. Equally central to Spurling’s argument is the recognition of the role that new fabrics and new patterns can and should play in shaping decarbonized cities and places. One potential illustration of the latter is, in turn, the focus of Bahrami’s chapter, namely, long-distance walking in London, Lausanne and Tehran. The irony, we might say, is that there is nothing new to walking; it is something of an old yet useful weft. Yet, some cities and the places where people live and work have been designed with the car, not the pedestrian, as the main character of the narratives instigating their change. The fact that CAVs, or connected autonomous vehicles, gather the interest of industry, authorities and citizens alike, and foster debate in the terms they do, is a clear sign of the specific directions along which cities should change. That is, change according to companies like IBM, Intel, Cisco or Google telling us that the future of mobility is already here (for critical treatments of this see the chapters ‘Smart Cities’ and ‘Visible Cities’) and all that is left for us pedestrians is to adapt or be left behind. Bahrami argues instead that the pedestrian should be seen as the transcalar character, that is, the character who moves across different scales, as the driver of the mobility futures where the social is key. COVID-19 restrictions on movements across the world have shown a different future, one where the suspension of past daily routines can engender alternatives many people did not consider possible let alone feasible before.

### *Coda futura*

Like the real, the social is produced in ‘dense and extended sets of relations’ (Law and Urry, 2004, pp. 395–396), as the chapters in this volume demonstrate. These relations have a history and change according to the specific places where they unfold. An important part of reflecting upon what social futures we want concerns recognizing emergent futures where the social matters in ways beyond the idea of what that social might be, as defined by governments, businesses, individuals and, indeed, academic disciplines. Our goal in making the social central to whatever futures we dare to think echoes Guyer’s ‘ethnography of the near future of the twenty-first century’, one that privileges ‘emergent socialities rather than ideational forms’ (2007, p. 410). True, the future requires ideas, which we ought to locate in time and space. Thinking about socialities, or the making of the social, allows us to resist the many and powerful attempts to turn the future into a closed domain, emptied of values, filled with versions of the social that serve only exclusionary interests. The social, coupled with futures in the plural, provides us with a heuristic with which we can nourish future worlds that are inclusive, fair, equitable, just and resilient.

Our Handbook makes the case for the social lying at the heart, not only of the arts, humanities and social sciences, but also at the core of all of our academic endeavours. Our call is for futures to be seen, heard and performed through the social. While individual chapters illuminate important corners of knowledge on their own, together, the performative impact of a collected volume like this one extends beyond their solitary insights. By bringing arts, humanities and social scientists into conversation with biologists, environmental, climate and computer scientists, this Handbook seeks to open new pathways across, between and with multiple disciplines that have something to say about the futures we need and want. The future, our futures, is too important to reside in one field or discipline alone (Urry, 2016). Indeed, they are too important to restrict the conversation to academia alone. As our contributors show, the conversation must thrive across disciplines, but also across the social, economic, cultural and political sectors that actively shape how futures unfold. The social must be our starting point if we are to steer our planet in a direction that supports good lives for the many, everywhere.

### Notes

- 1 On this point, readers will note that the subject pronoun ‘we’ is used throughout the Introduction. This mode of address does not assume a taken-for-granted, consistent and ‘generalizable’ experience applicable to all humans everywhere. Rather, we use it, first, in a direct manner, to refer to concrete choices we made as Editors. However, we also deploy it performatively, in order to implicate the authors (us) directly in the values, beliefs and endeavours of which we write. This decision underscores a belief that academic discourse, which often seeks to evidence objectivity with passive constructions and the avoidance of personal pronouns, nonetheless always stems from the values held by the authors. Our choice here is to speak as part of those communities seeking to forge social futures, not separate from them.
- 2 This was funded in part by a small AHRC grant towards Lancaster University’s contribution to the Utopia Fair in Somerset House, London, 24–26 June 2016, entitled ‘Mobile Utopias 1851–2051’. See López Galviz et al., 2020.
- 3 As expressed by, among others, Abraham Maslow (1966) and the well-known expression: ‘If all you have is a hammer everything looks like a nail’. One recent iteration occurs in the film *Arrival* (2016) when the main character Louise, a linguist, tries to explain to his military colleagues the meaning of ‘tool’ as drawn by the alien heptapods.
- 4 One variant of this is the theory of ‘eight thresholds’ and the extent to which macro-historical models, as articulated by advocates of Big History, can help inform global foresight (Voros, 2017).



- 5 Critiques of forecasting date back to the emergence of futures studies, in particular critiques by key authors such as Robert Jungk, Johan Galtung, Ossip Flechtheim and Bertrand de Jouvenel, for whom forecasts and related probabilistic techniques represented an approach that was 'belligerent, imperialist, and directly involved in reproducing the military and industrial interests of the US' (Andersson, 2012, p. 1426). As Curry (this volume) remarks: 'A second approach emerged in Europe [post World War II] as a way to reconstruct societies rather than to win wars'.

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