Imagination and alternative organization: thinking organization through the Seven Beauties of Science Fiction

Calvard, Thomas; Baird, Christopher

Imagination and Alternative Organizing: Thinking Organization through the Seven Beauties of Science Fiction

Abstract

In this article we build on and extend work on the mutually beneficial relationships between organization studies and fiction. We focus on science fiction as a genre with relevance to organizational innovation and change. Drawing on science fiction studies and Istvan Csicsery-Ronay's *Seven Beauties of Science Fiction*, we outline how science fiction is cognitively attractive to authors, scholars and organizational actors in supporting the imaginative construction of alternative futures. We consider the 'seven beauties' of science fiction as underpinning potential and existing inspirational relationships between science-fiction and organizational topics, showing how they involve imagining organizational and societal futures in different, alternative ways. We conclude with critical reflections for an organization studies research agenda on the more nuanced aspects of attempts to pragmatically make sense of and give sense to future innovations and organizational visions via utopian and dystopian discourses, science fiction, and logics of late capitalism.

Authors:

Thomas Calvard (thomas.calvard@ed.ac.uk), University of Edinburgh Business School

Christopher Baird (C.Baird@ed.ac.uk), University of Edinburgh Business School

Introduction

In recent decades, organization studies as a field has continued to reflect on the reciprocal relationships between fiction, organizational research, practice, discourse, and organizing (e.g. De Cock and Land, 2006; Rhodes and Brown, 2005; Savage et al., 2018). Theorizations of the organization-fiction relationship have moved beyond a simplistic separation of fiction and organizational reality to increasingly acknowledge the ontological and epistemological entanglements of the two. Organizations are imaginatively constituted, mediated and speculated upon by acts and modes of narration and representation closely related to the authoring and structuring of fictional genres and texts (De Cock, 2000; De Cock and Land, 2006).

As a result of these emerging meditations, there continue to be a variety of contributions to be made in understanding how specific literary fictional genres, modes of narration, writing and practices can inform organizational theory, discourse, method and practice. Some fiction, for example, insightfully co-articulates the methodological dilemmas and techniques of organizational ethnography in mapping anthropological and institutional minutiae of organizational life (Dunne, 2018; Styhre, 2016, 2017). Fiction has also been used pedagogically in studies of organization and management; such as the use of women's literary fiction to develop more gender-aware leadership learners (Martin et al., 2018).

In the current article we wish to focus on the genre of science fiction, and how related fields of inquiry, such as science fiction studies, can enrich and relate to areas of organization studies. Science fiction has rarely been explicitly linked with organization studies (although for notable exceptions see Parker, 1998; Parker et al., 1999; Smith et al., 2003). However, the relatively small, marginal level of organizational work that has appeared does speak eloquently and persuasively to the potential of this fictional genre to speculate on critical issues regarding organizational and economic pasts, presents, and futures (Davies, 2018; Smith et al., 2003).

More specifically, De Cock (2009) makes some crucial links between organization studies and science fiction by way of critical literary thinkers like Walter Benjamin and Fredric Jameson, as well as the science fiction of Philip K Dick. The key argument here is that science fiction opens up future possibilities of radical change by de-familiarizing or making strange the present and showing 'breaks' with it towards new futures where organizations and capitalism look very different (and yet strangely familiar). These conceptual arguments stem largely from the work

of Fredric Jameson, but also the work of science fiction scholar Darko Suvin, where the links between science fiction, utopia, Bertolt Brecht and Marxist dialectics and praxis are recurrently explored (Jameson, 1998, 2005; Suvin, 1972).

These arguments are important to organization studies given that human societies and cultures experience a powerful 'utopian impulse' to imagine a better collective future (Bloch, 1988). At the same time, however, and in marked contrast, today's organizations and many variations of managerial capitalism struggle with overcoming short-termism or temporal myopia (Laverty 2004), and to adopt longer-term, future-oriented 'temporal attunements', or make wiser 'intertemporal choices' (Barton, 2011; Berg Johansen and De Cock 2017; Laverty 1996; Meyer and Kirby, 2012). In summarizing these relations, science fiction studies scholar Csicsery-Ronay (2008, p.1) has noted that

> As the world undergoes daily transformations via the development of technoscience in every imaginable aspect of life, (and, more important, as people become aware of these transformations) sf [science fiction] has come to be seen as an essential mode of imagining the horizons of possibility. However much sf texts vary in artistic quality, intellectual sophistication, and their capacity to give pleasure, they share a mass social energy, a desire to imagine a collective future for the human species and the world.

In the current article we seek to contribute to and extend these understandings of the relationships between (science) fiction, organization studies, and imagining the future. We do so by drawing more deeply on science fiction studies with the work of Istvan Csicsery-Ronay (1996, 2008) and his 'Seven Beauties of Science Fiction'. The Seven Beauties are named after a medieval Persian poem, featuring seven beautiful princesses and a fantastic palace with seven halls. They can be defined as

> cognitive attractions, intellectual gravitational fields that draw our attention…mental schemes, through which we organize our thinking…tools for thought, so well made that we admire their design at the very moment we are using them. Whatever else they are, they compose a constellation of thoughts that sf helps us to become conscious of (Csicsery-Ronay, 2008, p.x).

We seek to link the Seven Beauties with ideas of *imagination* and *alternatives* in organization theory, (re)thinking organization via science fiction authors and evolved aspects of the genre. We conclude with further implications, reflections and critical areas of connection with related topics and agendas in organization studies and management research. Ultimately, we pursue a critical organizational perspective again in line with Csicsery-Ronay's (2008, p.x) view that

> science fiction is more than a literary genre or a social passion. It is a way of organizing the mind to include the contemporary world. There is much to criticize in a genre that is dominated by entertainment industries and popular tastes. But there is also much to care about. SF is an art that delights in vision, intelligence, and the infinite possibilities of change. It calls into question all verities, except curiosity and play.

The rest of the article proceeds as follows. First, we review and develop general links between studies of science fiction and organization studies, particularly in terms of how science fiction can inspire actors to imagine, make sense of, and produce knowledge about possible futures and alternative realities involving innovation and change. Second, we consider Csicsery-Ronay's (2008) 'seven beauties' framework in more detail, relating the seven cognitive attractions of the science fiction genre identified to distinct areas of organizational research and practice. Finally, we draw further implications on the critical relationships between science fiction and organization studies, particularly concerning the power and diversity of its representations.

Science Fiction and Organizational Imagination

Rather than a close reading of an individual text, our aim in this article is to theorize the potential of the science fiction genre more broadly to affect the imagination and cognitive operations of organizational actors. We take *imagination* and *alternatives* (to a present status quo) as two focal theoretical constructs for developing this contribution, dealing first here with the former before turning toward the latter.

In an overview of the science fiction genre and the field of science fiction studies, Baker (2014, pp.160-161) concludes that as a genre science fiction retains:

> its potential power as a means by which to articulate not only a critique of contemporary life but also to offer a way of imagining a (better) future...SF seems to be transmissible

across genres, forms and media, a resource to work with and through...its tropes, its forms, its possibility of 'imagining the future' have become available to a wide range of different peoples...writers, readers and scholars can come together to share our different imaginings of who we are, where we live and what we might be.

Just as the detective genre of fiction has been argued to have useful narrative parallels and analogies with the development of management and organization theory (Czarniawska, 1999), science fiction offers distinctive epistemological and ontological imaginings with respect to representing and explaining organizational phenomena (Corbett, 1995; Parker et al., 1999). As a genre, science fiction's porous boundaries, protean qualities and evolution through tensions and contestation make it particularly insightful for interrogating critical modernist and postmodernist realities of organizations and their analysis (Baker, 2014; Chia, 1995; Csicsery-Ronay, 1991; Luckhurst, 1991; McHale, 2003). Science fiction involves particular longstanding generic tensions between the realistic versus the fantastic qualities of the worlds it builds, represents and organizes (Brooke-Rose, 1983; Lem and Abernathy, 1974; Roberts, 2016). Organizational scholars and practitioners wrestle with similar ontological and epistemological tensions around the 'organizationality' of the entities they participate in across time and space (Czarniawska, 2004; Dobusch and Schoeneborn, 2015), and the ideological qualities of the knowledge they produce (Kilduff et al., 2011).

In terms of imagination and organization then, an important question we aim to address here involves better theorizing *how* science fiction stimulates the organizational imagination - critically, ethically, and creatively. The imaginative act of creating fiction can be thought of as a seam interfacing closely with the ongoing imaginative acts of creating and communicating organization (De Cock and Land, 2006; Savage et al., 2018). In the case of science fiction, the genre concerns a distinctive and particularly ambitious set of imaginative operations around technology, science, the fantastic, and the nature and limits of time and space (Csicsery-Ronay, 2008). Science fiction has philosophical roots in *thought experiments* and *world building* that use strange worlds and inventions to meditate and critique the organization of our present world from necessarily oblique but illuminating perspectives (Anders, 2012).

Similarly, the concept of imagination has wide-ranging philosophical roots, concerning a distinct mental state that considers and represents possibilities other than how things actually, presently and subjectively are (Liao and Gendler, 2019). Unlike perception, imagination

concerns unseen and absent images, but imagination is also a faculty that reflects a compelling psychological intention to create something out of nothing (Sartre, 1972). Unsurprisingly then, there are many ways of imagining the concept of imagination itself. From an organization studies perspective, perhaps most pertinent are its creative, social, moral, pragmatic and collective aspects - how it cognitively and organizationally represents and shifts collective perspectives and experiences, with the potential to catalyze social practices and reforms. While imagination inevitably involves individuals, it:

> is not based on a single individual's experiences. We imagine the future as told to us by our leaders. We imagine the wonders and terrors promised by campaigns. We demonize the other and rally to restore humanity. There is a systemic structure—a political, social, cultural, historical system of prior imaginations that inform our current and future imaginations. We imagine not merely as single units living in side-by-side realities, but a collective whole that engages, challenges, and develops alongside millions of other imaginations (Carriere, 2018, p.41).

More conventional and realist forms of fiction and literary genre, while highly meaningful, are both committed and limited to faithfully representing and reproducing ontologies of that which already exists, or appears to be the case. In contrast, science fiction typically frees itself up more to experimental and empirical shifts in ontological and epistemological perspective - temporal, spatial, material, cultural, discursive and so on (De Cock, 2009; Jameson, 2005). Assuming that these science fictional imaginaries and experiments sit along a rich and influential seam that interfaces with social scientific fields of research and practice (De Cock and Land, 2006), critically engaging with the question of how organizational imaginations and science fictional imaginations are entangled takes on considerable significance.

Like literary texts, genres and other cultural productions, organizations and organization studies can be viewed in terms of its aesthetics, appearances made possible by organizational imagination(s) (Strati, 1999). However, organization studies has been accused of lacking in imagination in its research (Alvesson and Sandberg, 2013). Organizations have been described as exhibiting 'failures of the imagination' when they fail to avert disaster by not reorganizing knowledge and associations in ways novel enough to anticipate impending complexity and ambiguity (Weick, 2005). Qualitative organizational research and theory-building have been

argued to involve imagination as a major criterion for convincing, persuasive, and plausible knowledge production (Jonsen et al., 2018).

This can be attributed to the notion that imagination is a challenging prospect for organizations (March, 1995). The more romantic and fanciful aspects of imagining exist in tension with the realism, rationality, pragmatism and discipline needed in much organizing and scholarly activity (Weick, 1989). At the same time, it can be argued that imaginative leaps and creative combinations are also attractive and necessary to learn, solve puzzles, build theories, reflect on mysteries, improvise solutions and transform understandings through metaphors (Cornelissen, 2006; Weick, 2002).

More recent theorizations of imagination and creativity have developed a *relational* ontology more explicitly, conceiving of creative action as emerging from shared imagining that is highly contingent and unpredictable (Thompson, 2018). As a prominent writer of science fiction, Philip K Dick described seeing his work as a serious attempt to show how our shared worlds organize around powerful 'pseudo-realities' that threaten human autonomy and authenticity unless resisted (Dick, 1995). In this sense, there is a lot at stake for organizing in the present and the prospect of imaginatively changing our realities, because without the kind of reflexivity that 'good' science fiction seems to demand, we risk permitting the forces of other futures to bleed into our own present sense of reality and consciousness undeterred (De Cock, 2001).

Imagination can be perilous and dangerous or glorious and visionary (for the winners in the marketplace of ideas at least) – but overall it is highly fragile, uncertain, and can lead to a proliferation of disposable realities or frozen delusions (Fernández-Armesto, 2019; March, 1995). Therefore how we imagine together and what we imagine is an important shared practice. In some ways, the science fictional imagination seems to look back or askance at us from various alternating future perspectives, challenging us to shift our present perspective for making sense of our economies, ourselves and the changes we feel stirred to creatively pursue and endorse (De Cock, 2009). To the extent that science fiction has the potential to stimulate and inspire organizational imaginations, it seems to prompt questions about human histories and futures – could things be organized differently, and how?

Science Fiction and Alternative Organizing

In addition to identifying science fiction as an imaginative mode for thinking differently about organizational research and practice, we also seek to develop its links with the idea of *alternatives*.

Science fiction as a genre is particularly committed to imagining alternatives and reorganizing concepts and phenomena to show how things could be other to how they are (Baker, 2014). This leads fairly directly to an affective and evaluative dimension to the imagined alternative, often with spatial and temporal aspects as well, in terms of whether a future might be utopian or dystopian, whether it will happen (or is happening) and how we might hope for or against it (Levitas, 1990). From a moral and pragmatic perspective, imagination involves thinking about how we might actively intervene and participate in an alternative future according to our values and the needs and interests of others (Fesmire, 1999).

In reference to organization studies, we acknowledge and develop the link between science fiction and *alternative organization* that resides in the work of Martin Parker and colleagues (Parker, 2003; Parker et al., 2007). Here science fiction is connected to the imagination of organizational alternatives through the:

> great many choices for imagining organizations that are not based on a market managerial model…experiments in organizational size, ownership and structure…[where] the clarity of the boundaries between work and leisure, the public and the private, production and consumption and so on, begins to look increasingly vague (Parker, 2002, pp.220-221).

Science fiction itself is an alternative cultural way of viewing the world and organizations, and an imaginative and disruptive influence that collides with "the grey functionality of management science" (Parker et al., 1999, p.579). However, one way to imaginatively and critically reconcile science fiction's colourful excesses with more immanent organizational realities is by dovetailing it with the related organization studies manifesto for organized alternatives to market managerialism (Parker et al., 2014a). This manifesto encompasses a lot of burgeoning and ambitiously progressive and anarchistic ideas, but tends to revolve around cooperatives and social movements, and organizations willing to work through the tensions of

openness, autonomy, inclusion, solidarity and responsibility to achieve alternative political and ethical aims (Bryer, 2019; Parker et al., 2014b).

Just like Darko Suvin's conception of science fiction's imaginative and political effectiveness as operating through 'cognitive estrangement' (Renault, 1980), alternative organizations in management learning decentre learners, inducing critical reflexivity and performativity by breaking with the failings of traditional for-profit organizations (Parker et al., 2018). Alternative organizations pursue very different ends to the individualistic, instrumental, and competitive trappings implicit in much business education and research, and much of contemporary western society (Reedy and Learmonth, 2009).

Science fiction offers another way of advancing these agendas, often adding scientific and technological emphasis to the simulation of alternative social worlds and (Oatley, 2016). As a genre it also seeks in many instances to strike a fruitful balance between the 'hard' objectivity of science and the 'softer' subjectivity of reflexive immersions in different versions of reality, constituting a far-reaching 'science of the social' in this regard (Linstead, 1994). Sociologists have argued that science fiction is 'needed' to understand complex socio-technical phenomena in a cyborg present where the online and offline worlds are more entwined than ever (Hirschman et al., 2018). If organization studies and critical management studies 'need' to explore alternative organizations, the crux of our argument is that the alternative worlds and realities imagined in science fiction can help provide imaginaries for guiding collective practice (Roux-Rosier et al., 2018). The political value of science fiction lies in its enabling learning about 'other worlds' (Parrinder, 2000). The production and consumption of science fiction can be evaluated in terms of how it relates the epistemological with the ethical (Baird and Calvard, 2018) – considering the nature of scientific and technological phenomena, along with the plausibility and morality of their being put to various utopian or dystopian uses.

We therefore draw together the twin concerns of imagination and alternatives (or alternative futures) in organization studies around a fertile core of science fiction studies. In particular, we turn to Csicsery-Ronay's (2008) 'seven beauties' framework as a powerful summary of seven specific ways in which the genre of science fiction, broadly defined, can open up imaginative and compelling spaces of alternative representation and interpretation (De Cock, 2000). In a postmodern sense, science fiction serves to deconstruct organizations and reassemble them, pushing them to their limits, working through their tensions (Csicsery-Ronay, 1991; Kilduff,

1993). Our contribution rests on the notion of (science) fiction's constitutive and imaginative power in changing organizational conversations and producing alternative futures and theories for the genre of organization studies (Cornelissen, 2019; Reed and Burrell, 2019; Savage et al., 2018).

The Seven Beauties of Science Fiction

The seven beauties of science fiction are *neology*, *novums, future history, imaginary science, the sublime, the grotesque,* and *the Technologiade* (narrative plots and character driven-adventures) (Csicsery-Ronay, 2008).

Neology

First, the neology of science fiction relates to organizational speculation through the genre's linguistic inventiveness, and its use of slang and naming to call forth radical ideas of change, devices and innovations. Examples might include things as various as Asimov's language of robotics, the development of alien languages such as *Star Trek's* Klingon, the rebellious cultural vocabularies of cyberpunk, and eye-catching new product names from figures like Elon Musk. The fictionalizing power of neology lies partly in its ability to pre-date and presage the naming for things yet unnamed, which relates to theoretical developments regarding the communicative constitution of organizations, where organizations are regarded as an ontological outcome of meanings co-produced through local communicative interactions (Cooren et al., 2011).

Novums

Second, novums are one of science fiction's most influential tropes, concerning logically and scientifically plausible developments that confer a sense of newness through innovations, discoveries and social relations (Csicsery-Ronay, 2008). These could be dystopian wake-up calls or immanent explorations of horizons of possibility relating to our organizations, societies and sense of collective human consciousness. The critical force of these possibilities paradoxically intrudes upon, and is contained within, our past and present while showing a developed version of a future, utopian or dystopian. Examples might include time travel, space travel, sophisticated genetic engineering, multiple realities, artificial intelligence and alien cultures. Philip K Dick, television series like *Black Mirror's* emphasis on immanence and plausibility, and many other science fiction writers of short stories and episodes are masters of

the novum – a cognitive, historical and philosophical challenge to human representations and rationalities. Organizationally, the scope and complexity of science fiction novums relate to debates around the grand challenges, wicked problems and alternative economic futures organizations might be required to shape, anticipate and speculate upon (Adler, 2016; George et al., 2016; McMillan and Overall, 2016).

Future history

Third, science fiction is often inherently futuristic, developing pre-histories that lead up to envisioned futures, potentially involving epic events, cycles, crises and stages of historical change. Star Wars, space operas, alternate histories and (r)evolutionary developments come under this category of science fiction trope, as well as many other meditations on views of space, time and history. Nowhere is this influence more evident in the corporate world than with the hiring of corporate futurists, such as Google's Ray Kurzweil, to paint science-fiction infused portraits of possible futures organizations might harness for positive change opportunities, a kind of accelerated form of scenario planning (e.g. Hines and Gold, 2015). These developments speak to an entire series of debates in organization studies concerning temporalities, change perspectives, historiography, and long-term futures (Berg Johansen and De Cock, 2018; Langley et al., 2013; Suddaby and Foster, 2017; Van de Ven and Poole, 1995).

Imaginary science

The fourth beauty of imaginary science concerns the 'science' of science fiction, in terms of its preoccupation with scientific ideas, disciplines, and practices (Csicsery-Ronay, 2008). Here we can consider the creative, scientific and research and development relationships between science fiction authors and science organizations and institutions, such as Neal Stephenson's role working with the secretive augmented reality start-up Magic Leap (Lewis, 2017). Thought-experiments, scientific hoaxes, hypotheses, paradigms, and public engagements with science are all areas where science fictionalizing can play a variety of speculative roles in relation to science per se. It is perhaps unsurprising therefore that leading science and technology magazines such as *New Scientist* frequently organize their articles and web pages according to the genre (New Scientist, 2019). In terms of organization studies, the links between philosophy of science values and different organizations' strategic and cultural orientations are crucial to understanding the implications of the different modes of knowledge production they adopt and espouse (Calvard, 2016; Kilduff et al., 2011).

The sublime

Fifth, science fiction engenders more emotional forms of experience through its expression of the *sublime*, and Burkean and Kantian states of imaginative expansion and incomprehensible fascination in individual subjects (Csicsery-Ronay, 2008). From the scientific romance of Shelley's Frankenstein to the unknowability of an artificial mind portrayed in the technologically sublime form of the beautiful robot Ava in the film *Ex Machina*, science fiction is well-placed to create a playful, ambiguous, fascinating reorientation of subjectivities (Constable, 2018). Organizationally, this relates to themes of organizational sensemaking, imagination, mystery and ambiguity, as organizational actors must confront the limits of their own knowledge when peeling back the surface of confusing situations and appearances encountered (Alvesson and Kärreman, 2007; Weick, 2005, 2015).

The grotesque

Sixth, and in opposition to the sublime to an extent, science fiction can have powerful effects on subjectivities through its means of expressing highly concrete particularities in material, carnal and corporeal form in the literary tradition of the grotesque (Csicsery-Ronay, 2008). Cyborgs, aliens and other viscerally represented beings and monsters transfigure our sense of bodies and 'others' in ways both wondrous and terrifying. The *Alien* films and the films of David Cronenberg, as well as the science fiction of Philip K Dick and HP Lovecraft, are obvious examples – among many more. In organization studies, this beauty of science fiction relates to the turn towards the body in understanding work and organization, its gendering, and a sense of disgust or exclusion surrounding its abject or destabilized nature (Styhre, 2004; Thanem, 2006). Contemporary concerns over technological implants to the body and sexualized robot bodies come to mind too as provocative examples of grotesque products and services in our organizational present.

The Technologiade

Finally, Csicsery-Ronay (2008) uses the term 'technologiade' to describe some of the distinctive plotting structures and adventurous, crusading character types of science fiction. Stories and character types have occasionally featured in organization studies as a way of understanding the more unmanageable or unconscious aspects of organization (Gabriel, 1995; Moxnes and Moxnes, 2016). Science fiction's quests and heroes reproduce many types of figure and journey – priests, detectives, handymen, slaves, and saviours, to name but a few – and transform and upgrade them in novel, technoscientific forms. Organizationally, science

fiction provides a critical lens for evaluating the narratives and identities of stakeholders and change agents occupying more 'futuristic' job roles (data scientists, hacktivists, and new forms of government technocrat and entrepreneur) and spectacles (product launches/demos, viral campaigns, and technologically-infused crises or 'normal accidents').

Discussion and conclusion

In drawing implications and conclusions from our presentation of the 'seven beauties' framework from science fiction studies and its links with fictionality and organization studies, we critically reflect on three additional, inter-related areas of importance for future research and practice at the intersections of these areas. In particular, we apply critical reflexivity to the relationships between critical management studies and science fiction studies, and consider some of the ongoing challenges and opportunities in how both imagine and represent alternative organizations and futures.

First, the links between science fiction, late capitalism, and wider political projects of intervention and reform revolve around the aspiration of an engaged critical management studies (CMS) (Adler et al., 2007). One particular risk is that futurism and science fiction become ever-more corporatized and appropriated to serve destructive capitalist ends, in spite of the irony of science fictional cautionary tales of dystopian capitalist futures.

Second, there are diversity and inclusion issues relating to science fiction, and to a significant extent these mirror concerns over gender and ethnicity inclusion in organizations. To the extent that there is some troubling marginalization of women and minority writers in technology and science fiction, their activities also represent critical projects and opportunities for 'queering' associated role models and power relations of race, gender and sexuality accordingly (Garcia, 2017; Rumens et al., 2019).

Finally, we emphasize the opportunities for organizational scholars to engage in novel forms of critical, ethical and expressive writing, learning and pedagogy by building on the seven beauties explored in this paper (Rhodes, 2015). The popularity of science fiction in its various guises and its fruitful links with technology, science and organization seem likely to endure and inspire, and retain a critical force for reimagining our past, present and future.

References

Adler, P. S., Forbes, L. C., & Willmott, H. (2007). Critical management studies. *The Academy of Management Annals, 1*(1), 119-179.

Adler, P. S. (2016). Alternative economic futures: A research agenda for progressive management scholarship. *Academy of Management Perspectives, 30*(2), 123-128.

Alvesson, M., & Kärreman, D. (2007). Constructing mystery: Empirical matters in theory development. *Academy of Management Review, 32(*4), 1265-1281.

Alvesson, M., & Sandberg, J. (2013). Has management studies lost its way? Ideas for more imaginative and innovative research. *Journal of Management Studies, 50*(1), 128-152.

Anders, C.J. (2012). *The philosophical roots of science fiction.* Gizmodo. Online article, August 8. Available at:

https://io9.gizmodo.com/the-philosophical-roots-of-science-fiction-5932802

Baird, C., & Calvard, T. S. (2018). Epistemic vices in organizations: Knowledge, truth, and unethical conduct. *Journal of Business Ethics.* Early Online. Available at: https://link.springer.com/content/pdf/10.1007/s10551-018-3897-z.pdf

Baker, B. (2014). *Science fiction*. London: Palgrave Macmillan.

Barton, D. (2011). Capitalism for the long term. *Harvard Business Review, 89*(3), 84-91.

Berg Johansen, C., & De Cock, C. (2018). Ideologies of time: How elite corporate actors engage the future. *Organization, 25*(2), 186-204.

Bloch, E. (1988). *The utopian function of art and literature: Selected essays.* Cambridge, MA: MIT Press.

Brooke-Rose, C. (1983). *A Rhetoric of the Unreal: Studies in narrative and structure, especially of the fantastic*. Cambridge, UK: CUP Archive.

Bryer, A. (2019). Making Organizations More Inclusive: The Work of Belonging. *Organization Studies.* Online First. Available at: https://journals.sagepub.com/doi/full/10.1177/0170840618814576

Calvard, T. S. (2016). Big data, organizational learning, and sensemaking: Theorizing interpretive challenges under conditions of dynamic complexity. *Management Learning, 47(*1), 65-82.

Carriere, K. R. (2018b). Framing the issue: Literature, collective imagination, and fan activism. In C. de Saint-Laurent, S. Obradovic, & K. R. Carriere (Eds.), *Imagining collective futures: Perspectives from social, cultural, and political psychology*. London, UK: Palgrave MacMillian, pp.39–58.

Chia, R. (1995). From modern to postmodern organizational analysis. *Organization Studies*, *16*(4), 579-604.

Constable, C. (2018). Surfaces of science fiction: Enacting gender and "humanness" in ex machina. *Film-Philosophy, 22*(2), 281-301.

Cooren, F., Kuhn, T., Cornelissen, J. P., & Clark, T. (2011). Communication, organizing and organization: An overview and introduction to the special issue. *Organization Studies, 32(*9), 1149-1170.

Corbett, J. M. (1995). Celluloid projections: images of technology and organizational futures in contemporary science fiction film. *Organization*, *2*(3-4), 467-488.

Cornelissen, J. P. (2006). Making sense of theory construction: Metaphor and disciplined imagination. *Organization Studies, 27*(11), 1579-1597.

Cornelissen, J. (2019). Imagining futures for organization studies: The role of theory and of having productive conversations towards theory change. *Organization Studies, 40*(1), 55-58.

Csicsery-Ronay Jr, I. (1991). The SF of theory: Baudrillard and Haraway. *Science Fiction Studies*, *18*(3), 387-404.

Csicsery-Ronay Jr, I. (1996). The seven beauties of science fiction. *Science Fiction Studies, 23*(3), 385-388.

Csicsery-Ronay Jr, I. (2008). *The seven beauties of science fiction.* Middletown, CT: Wesleyan University Press.

Czarniawska, B. (1999). Management she wrote: Organization studies and detective stories. *Studies in Cultures, Organizations and Societies*, *5*(1), 13-41.

Czarniawska, B. (2004). On time, space, and action nets. *Organization*, *11*(6), 773-791.

Davies, W. (Ed.). (2018). *Economic science fictions.* Cambridge, MA: MIT Press.

De Cock, C. (2000). Essal: Reflections on fiction, representation, and organization studies: An essay with special reference to the work of Jorge Luis Borges. *Organization Studies, 21*(3), 589-609.

De Cock, C. (2001) 'Of Philip K. Dick, reflexivity, and shifting realities: Organising (writing) in our post-industrial society', in W. Smith, M. Higgins, G. Lightfoot and M. Parker (eds.) *Science Fiction and Organization.* London: Routledge.

De Cock, C. (2009). Jumpstarting the future with Fredric Jameson: Reflections on capitalism, science fiction and Utopia. *Journal of Organizational Change Management, 22*(4), 437-449.

De Cock, C., & Land, C. (2006). Organization/literature: Exploring the seam. *Organization Studies, 27(*4), 517-535.

Dick, P. K. (1995). *The shifting realities of Philip K. Dick.* London: Vintage.

Dobusch, L., & Schoeneborn, D. (2015). Fluidity, identity, and organizationality: The communicative constitution of Anonymous. *Journal of Management Studies*, *52*(8), 1005-1035.

Dunne, S. (2018). Book review: David Foster Wallace's speculative anthropology: An invitation. *Organization, 25*(1), 153-161.

Fernández-Armesto, F. (2019). *Out of our minds: What we think and how we came to think it.* Oakland, CA: University of California Press.

Fesmire, S. (1999). Morality as art: Dewey, metaphor, and moral imagination. *Transactions of the Charles S. Peirce Society, 35*(3), 527-550.

Gabriel, Y. (1995). The unmanaged organization: Stories, fantasies and subjectivity. *Organization Studies, 16*(3), 477-501.

Garcia, A. (2017). Worlds of inclusion: Challenging reading, writing, and publishing science fiction–and fantasy-based young adult literature. *Journal of Adolescent & Adult Literacy, 61*(2), 221-224.

George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal, 59*(6), 1880-1895.

Hines, A., & Gold, J. (2015). An organizational futurist role for integrating foresight into corporations. *Technological Forecasting and Social Change, 101,* 99-111.

Hirschman, D., Schwadel, P., Searle, R., Deadman, E., & Naqvi, I. (2018). Why Sociology Needs Science Fiction. *Contexts, 17*(3), 12-21.

Jameson, F. (1998). *Brecht and method.* London: Verso.

Jameson, F. (2005). *Archaeologies of the future: The desire called utopia and other science fictions.* London: Verso.

Jonsen, K., Fendt, J., & Point, S. (2018). Convincing qualitative research: what constitutes persuasive writing? *Organizational Research Methods, 21*(1), 30-67.

Kilduff, M. (1993). Deconstructing organizations. *Academy of Management Review, 18*(1), 13-31.

Kilduff, M., Mehra, A., & Dunn, M. B. (2011). From blue sky research to problem solving: A philosophy of science theory of new knowledge production. *Academy of Management Review, 36*(2), 297-317.

Langley, A. N. N., Smallman, C., Tsoukas, H., & Van de Ven, A. H. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal, 56*(1), 1-13.

Laverty, K.J., (1996). Economic "short-termism": The debate, the unresolved issues, and the implications for management practice and research. *Academy of Management Review, 21*(3), 825-860.

Laverty, K.J., (2004). Managerial myopia or systemic short-termism? The importance of managerial systems in valuing the long term. *Management Decision, 42*(8), 949-962.

Lem, S., & Abernathy, R. (1974). Todorov's fantastic theory of literature. *Science Fiction Studies*, *1*(4), 227-237.

Levitas, R. (1990). Educated hope: Ernst Bloch on abstract and concrete utopia. *Utopian Studies, 1*(2), 13-26.

Lewis, J. (2017). Confronting dystopia: The power of cognition in Neal Stephenson's Snow Crash and The Diamond Age. *Extrapolation, 58*(1), 45-75.

Liao, S., & Gendler, T. (2019). Imagination. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Spring 2019 Edition). Available at: https://plato.stanford.edu/entries/imagination/

Linstead, S. (1994). Objectivity, reflexivity, and fiction: Humanity, inhumanity, and the science of the social. *Human Relations, 47*(11), 1321-1346.

Luckhurst, R. (1991). Border Policing: Postmodernism and Science Fiction. *Science Fiction Studies*, *18*(3), 358-366.

McHale, B. (2003). *Postmodernist fiction*. London: Routledge.

McMillan, C., & Overall, J. (2016). Wicked problems: Turning strategic management upside down. *Journal of Business Strategy, 37*(1), 34-43.

March, J. G. (1995). The future, disposable organizations and the rigidities of imagination. *Organization, 2*(3-4), 427-440.

Martin, L. A., Edwards, M., & Sayers, J. G. (2018). A "novel" discovery: Exploring women's literary fiction for use in management and leadership education. *Academy of Management Learning & Education, 17*(1), 24-40.

Meyer, C., & Kirby, J. (2012). Runaway capitalism. *Harvard Business Review, 90*(1-2), 66-75.

Moxnes, P., & Moxnes, A. (2016). are we sucked into fairy tale roles? Role archetypes in imagination and organization. *Organization Studies, 37*(10), 1519-1539.

New Scientist (2019). *Science-fiction.* Webpage. Available at: https://www.newscientist.com/article-type/science-fiction/

Oatley, K. (2016). Fiction: Simulation of social worlds. *Trends in Cognitive Sciences, 20*(8), 618-628.

Parker, M. (1998). Judgement day: Cyborganization, humanism and postmodern ethics. *Organization, 5*(4), 503-518.

Parker, M. (2002). Utopia and the organizational imagination: Eutopia. *The Sociological Review, 50*(1_suppl), 217-224.

Parker, M. (2003). *Utopia and organization.* Malden, MA: Blackwell.

Parker, M., G. Cheney, V. Fournier and C. Land (eds) (2014a) *The Companion to Alternative Organization.* London: Routledge.

Parker, M., Cheney, G., Fournier, V., & Land, C. (2014b). The question of organization: A manifesto for alternatives. *Ephemera: Theory & Politics in Organization, 14*(4), 623-638.

Parker, M., Fournier, V., & Reedy, P. (2007). *The dictionary of alternatives: Utopianism and organization.* London: Zed Books.

Parker, M., Higgins, M., Lightfoot, G., & Smith, W. (1999). Amazing Tales: Organization Studies as Science Fiction. *Organization*, *6*(4), 579-590.

Parker, S., Racz, M. M., & Palmer, P. W. (2018). Decentering the learner through alternative organizations. *Academy of Management Proceedings.* Available at: https://journals.aom.org/doi/abs/10.5465/AMBPP.2018.69

Parrinder, P. (Ed.). (2000). *Learning from other worlds: Estrangement, cognition, and the politics of science fiction and utopia*. Liverpool, UK: Liverpool University Press.

Reed, M., & Burrell, G. (2019). Theory and organization studies: The need for contestation. *Organization Studies, 40*(1), 39-54.

Reedy, P., & Learmonth, M. (2009). Other possibilities? The contribution to management education of alternative organizations. *Management Learning, 40*(3), 241-258.

Renault, G. (1980). Science fiction as cognitive estrangement: Darko Suvin and the Marxist critique of mass culture. *Discourse, 2*, 113-141.

Rhodes, C., & Brown, A. D. (2005). Writing responsibly: Narrative fiction and organization studies. *Organization, 12*(4), 467-491.

Rhodes, C. (2015). Writing organization/romancing fictocriticism. *Culture and Organization, 21*(4), 289-303.

Roberts, A. (2016). *The history of science fiction*. Basingstoke, UK: Palgrave Macmillan.

Roux-Rosier, A., Azambuja, R., & Islam, G. (2018). Alternative visions: Permaculture as imaginaries of the Anthropocene. *Organization, 25*(4), 550-572.

Rumens, N., De Souza, E. M., & Brewis, J. (2019). Queering queer theory in management and organization studies: notes toward queering heterosexuality. *Organization Studies, 40*(4), 593-612.

Sartre, J. P. (1972). (1940/1969). *The Psychology of Imagination.* London: Methuen

Savage, P., Cornelissen, J. P., & Franck, H. (2018). Fiction and organization studies. *Organization Studies, 39*(7), 975-994.

Smith, W., Higgins, M., Parker, M., & Lightfoot, G. (Eds.). (2003). *Science fiction and organization.* London: Routledge.

Strati, A. (1999). *Organization and aesthetics.* London: Sage.

Styhre, A. (2004). The (re) embodied organization: four perspectives on the body in organizations. *Human Resource Development International, 7*(1), 101-116.

Styhre, A. (2016). What David Foster Wallace can teach management scholars. *Academy of Management Review, 41*(1), 170-183.

Styhre, A. (2017). Raymond Carver and the voices of everyday life. *Qualitative Research in Organizations and Management: An International Journal, 12*(3), 174-189.

Suddaby, R., & Foster, W. M. (2017). History and organizational change. *Journal of Management, 43*(1), 19-38.

Suvin, D. (1972). On the poetics of the science fiction genre. *College English, 34*(3), 372-382.

Thanem, T. (2006). Living on the edge: Towards a monstrous organization theory. *Organization, 13*(2), 163-193.

Thompson, N. A. (2018). Imagination and creativity in organizations. *Organization Studies, 39*(2-3), 229-250.

Van de Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review, 20*(3), 510-540.

Weick, K. E. (2002). Puzzles in organizational learning: An exercise in disciplined imagination. *British Journal of Management, 13*(S2), S7-S15.

Weick, K. E. (2005). Organizing and failures of imagination. *International Public Management Journal, 8*(3), 425-438.

Weick, K. E. (2015). Ambiguity as grasp: The reworking of sense. *Journal of Contingencies and Crisis Management, 23*(2), 117-123.