Rigor and diversity in the futures field: A commentary on Fergnani and Chermack 2021

Matti Minkkinen

University of Turku, Turku, Finland

Correspondence: Matti Minkkinen, University of Turku, 20014 Turku, Finland. Email: matti.minkkinen@utu.fi

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1 | INTRODUCTION

The focal paper “The resistance to scientific theory in futures and foresight, and what to do about it” by Fergnani and Chermack is a welcome challenge to introduce more rigor into the futures field. The paper raises numerous issues that hinder incremental theory development in the futures and foresight field together with proposed solutions, and it provides an excellent starting point for discussion.

In this commentary, I would like to raise two general questions: the choice of reference fields and levels of theory. The first question concerns the use of the management and organization sciences as a reference point for considering theory in the futures and foresight field. I would like to discuss whether other reference points may lead to different lines of theorizing. Historical institutionalism and science and technology studies (STS) are presented as complementary reference fields. This discussion is intended as a reminder about the interdisciplinary nature of the futures field without succumbing to what the authors of the focal paper call “the enjoyment of being outliers.”

The second question is the consideration of different levels of theory and how this can contribute to discussions in the futures field. This issue is raised as a reminder that studies in the futures and foresight field may concern different kinds of phenomena at different levels of complexity.

2 | THE CHOICE OF REFERENCE FIELDS

Fergnani and Chermack take management and organization sciences as natural reference points for considering theory in the futures field. While this choice is valid, other reference points may illuminate equally important aspects of the interdisciplinary futures field. Several fields could be used, but two social scientific areas are chosen here: historical institutionalism and STS. These fields are selected because they are broad and relatively well-established, and because they are expected to complement the management and organization perspective.

Fergnani and Chermack focus on theory of foresight (cf. Piirainen & Gonzalez, 2015), that is, “scientific theories about futures and foresight interventions,” rather than theory within futures work. Without delving into the long-standing debate whether futures studies is art, science, or something else (Bell, 1997, Chapter 4), I claim that rigorous scholarly work can be pursued also beyond organizational theorizing.

Historical institutionalism is a social science approach within so-called new institutionalism in sociology, political science, and economics. This is an interesting parallel because Ossip Flechtheim, who coined “futurology,” likened the new field to historical sociology (quoted in Masini, 2010). Historical institutionalists emphasize historical path dependencies, the openness of outcomes, and critical junctures in historical development (e.g., Capoccia & Kelemen, 2007; Hall & Taylor, 1996; Thelen, 1999). Comparative approaches and methods such as process tracing tend to be used to develop theory on why and how particular developments occurred (George & Bennett, 2005).

A historical social science lens enables studying path-dependent developments such as multi-stakeholder negotiation on institutional rules (e.g., Cartwright, 2018; Minkkinen, 2019). In the futures field, researchers investigating systemic issues such as energy transitions...
(e.g., Veenman et al., 2019) can utilize a historically grounded approach to theorize about factors that led to past developments and that condition future developments. How historical analysis can enrich future-oriented inquiry was discussed in a previous focal paper in this journal (Schoemaker, 2020).

In a bibliometric study, one of the authors of the focal paper found six thematic clusters in futures studies scholarship (Fergnani, 2019). Two of the clusters (“past & futures” and “humanity at the limen”) are taken together to represent “core futures research,” which is found to be falling out of fashion (Fergnani, 2019). The historical institutionalist perspective could reinvigorate this strand of futures work and increase its rigor.

Science and technology studies in turn, is an interdisciplinary field that concerns itself with the empirical study of science and technology development in the messy and complex real-world context. Recent scholarship in STS has highlighted the importance of future-oriented phenomena such as sociotechnical imaginaries (Jasanoff & Kim, 2015) and the dynamics of expectations (Borup et al., 2006). The STS approach directs attention to complex phenomena beyond organizational boundaries and often adopts a dynamic temporal perspective. For instance, the work on dominant sociotechnical imaginaries (e.g., Jasanoff & Kim, 2013) and the organizing power of expectations (e.g., van Merkerk & Robinson, 2006) suggest new lines of theorizing that could enrich particularly the understanding of contextual and historical boundary conditions of theoretical claims.

Fergnani and Chermack make fair points that “theory” should not be used loosely, and scholars should develop specific propositions and arguments. This applies also to the historical institutionalist and STS approaches. However, the conception of theory centered on variables and hypothesis testing should itself be tested against numerous reference fields before being universally adopted.

3 | LEVELS OF THEORY IN THE FUTURES FIELD

The authors of the focal paper make a valuable point that “theory” needs to be clearly defined. They present a definition of theory as interrelated constructs, definitions, and propositions which aim to explain and predict phenomena. When the intention is to explain organizational phenomena such as foresight processes, this definition is clearly useful. Considering the futures field more broadly, I would like to raise the question of different levels of theory. The Finnish sociologist Noro (2000) has divided theories into three categories: research theories, general theories, and diagnoses of the times (Zeitdiagnose in German). Research theories relate to the explicitly delimited domain of a particular research project. General theories are more generic but they nevertheless make specific claims about associations and mechanisms. “Diagnosis of the times” means essayistic cultural critique such as Ulrich Beck’s Risk Society (Noro, 2000). A similar distinction of levels of generality is expressed in the notion of “middle-range theory,” which sits between highly specific explanations and broad-ranging generalizations (Hedström & Udehn, 2009).

In futures studies, broadly understood, there seems to be a strong representation of general diagnoses, which reflects the holistic nature of the field (cf. Fergnani, 2019). Noro (2000) states that in everyday life, we can be enchanted by Zeitdiagnose but not in scholarly work. Such diagnoses are not suitable for interpreting empirical data, and they cannot be corroborated or falsified by empirical data.

Looking through Arto Noro’s typology, the authors of the focal paper emphasize the development of research theory and they shun Zeitdiagnose-style theorizing. What about the level of “general theory,” or the spaces between research theory and general theory? There is significant scope for developing middle-range theories that are between connections of measurable constructs and the level of grand theory. Theories should have a clearly delimited scope and they should make explicit claims which may be falsified by contrary findings (George & Bennett, 2005). As an example, particular patterns of scenario archetypes (Boschetti et al., 2016; Fergnani & Jackson, 2019) could be found in particular contexts, and their connections to other phenomena, such as agenda-setting, could be explored at various levels.

The relationship between the level of theory and the complexity of the studied phenomenon cannot be discussed at length here, but it is plausible that certain complex phenomena, such as energy transitions, are difficult to model as specific relationships between discrete variables. While vague grand theory should be avoided, finding a suitable level of theorizing on complex issues is important because consideration of systemic issues has long been a defining element of futures studies (cf. Ahvenharju et al., 2018).

4 | CONCLUSION

In the focal article, Fergnani and Chermack provide valuable tools to develop the futures and foresight field further. It is easy to agree with the paper’s call to pay more attention to systematic definitions and to developments within mainstream disciplines. There is no inherent value in being an outlier field, and there is a lot to win by becoming more credible within academia and among practitioners.

However, we must be careful about what the search for scientific rigor entails. In addition to taking reference points from established fields, such as management and organization sciences, it is important to remember that an interdisciplinary field such as futures and foresight can draw on multiple scholarly cultures. This should not mean falling back to vague definitions and lack of rigor. It does mean being cautious about prematurely delimiting the scope of the futures field from the perspective of particular disciplines.

Systemic perspectives are a key part of the futures field, and this means that we should leave space for theorizing on a higher level of generality than specific connections between discrete variables. There may be a trade-off between rigor and generality, but the futures field can contribute to theory development on phenomena such as institutional change beyond the organizational level.

The challenges of combining interdisciplinary diversity with rigor remain important, and hopefully the debate on scientific theorizing
in the futures and foresight field will continue. In order for the field to develop, we need both sharper theoretical rigor and acceptance of the heterogeneity and interdisciplinarity of the futures field.

DATA AVAILABILITY STATEMENT
The commentary paper does not have any relevant data.

ORCID
Matti Minkkinen https://orcid.org/0000-0002-6406-8093

ENDNOTE
1 For the sake of simplicity, "interdisciplinary" is used in this paper to describe the futures field, although we could go further and argue for the transdisciplinary nature of the field.

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