#### COMMENTARIES

## Why appealing to the virtues of scientific theory (and method) is necessary but insufficient for effecting systemic change: Commentary on Fergnani & Chermack, 2021

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### 1 | INTRODUCTION

I welcome the publication of Alessandro Fergnani and Thomas J. Chermack's article: "The resistance to scientific theory in futures and foresight, and what to do about it". A discussion of the central importance of theory for advancing the science and practice of futures and foresight is long overdue, as is an appreciation of how a lack of reflexivity on the nature and role of theory and theorizing is potentially undermining attempts to establish the scientific credibility of futures and foresight practices and processes in organizations and, indeed, the credibility of the field as a legitimate focus of social scientific inquiry.

Theorizing generative mechanisms that enable futures and foresight processes and tools to deliver their intended effects, and enriching understanding of the mechanisms that detract from this endeavor, surely has to be a sensible way forward, to the benefit of science and practice alike. Addressing these fundamental issues, however, demands attention to a wider-ranging assortment of mechanisms than the ones identified by Fergnani and Chermack; for the remedies they propose will only partially bridge the academicpractitioner divides at the heart of their analysis, which are unfortunately as apparent in the field of futures and foresight as they are in applied psychology and business and management studies (among many other fields), as has been documented extensively elsewhere (see, e.g., Anderson, Herriot, & Hodgkinson, 2001; Bartunek & Rynes, 2014; Healey & Hodgkinson, 2008; Hodgkinson, 2002; Hodgkinson & Starkey, 2011; Huff, 2000; Kieser, Nicolai, & Seidl, 2015; Starkey & Madan, 2001; Tranfield & Starkey, 1998).

Fergnani and Chermack's account of what constitutes bona fide scientific theory, and what such theory is not, is expertly crafted, as is their analysis of how scientific theory typically progresses in traditional fields of study, and I agree with their assessment that critical realist philosophers (e.g., Bhaskar, 1998, 2008, 2011) have laid the essential ontological and epistemological foundations for theorizing futures and foresight practices and processes. However, it should also be noted that they are by no means the first futures and foresight scholars to have advocated critical realism for this purpose (see, e.g Derbyshire, 2019; Frith & Tapinos, 2020; Hodgkinson & Healey, 2018; Patomäki, 2006).

I particularly welcome the fact that the central problems identified by Fergnani and Chermack are analyzed systemically, and that the attendant remedies they propose are targeted similarly at the level of the wider social systems in which futures and foresight practices, academic researchers, and practitioners are variously embedded, entirely in keeping with the critical realist position they espouse. Their analysis of the causes of resistance to scientific theory and their suggestions for the authors of scientific papers, journal editors, and practitioners are all potentially helpful mechanisms for helping to address the problems identified. Unfortunately, however, Fergnani and Chermack's analysis and suggested remedies do not go nearly far enough, as I hope to demonstrate through the following remarks, which build on their analysis, and set out additional measures for addressing the more pressing of the issues raised in their article.

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## 2 | WHY PRACTITIONERS ULTIMATELY RESIST SCIENTIFIC THEORY (AND METHOD): LESSONS FROM THE SOCIAL, BEHAVIORAL, AND MANAGEMENT SCIENCES

Given the obvious benefits of scientific theory to the futures and foresight field, why are practitioners so resistant to the notion of scientifically evaluating and improving their processes and practices, informed by such theory? I first encountered the psychological realities of this fundamental problem almost two decades ago, when I was invited to deliver a keynote speech at a futures and foresight conference convened at Strathclyde University (Hodgkinson, 2002). The attendees comprised several hundred of the world's leading practitioners and academic researchers and the primary aim of my speech, delivered in a plenary session at the end of the first day of this three-day event, was rather similar to the primary aim of Fergnani and Chermack's (2021) article, namely, to fuel a conversation with the aim of nudging practitioners to incorporate social and behavioral science insights into the design and implementation of their practices and processes, an issue that continues to occupy much of my scholarly attention (see, e.g Healey & Hodgkinson, 2008, 2017; Healey et al., 2015; Hodgkinson & Healey, 2008, 2011, 2018).

Judging from the audience's general demeanor, my speech seemed to have been well received, a perception that was strongly reinforced during the early stages of the questions and answers session immediately following its delivery. Imagine, therefore, the sense of shock felt by large sections of the audience and myself when a well-known and highly accomplished participant suddenly announced from the back of the room that they, like a number of other colleagues also present, had found the contents of my speech to be both deeply upsetting and highly offensive! Fortunately, I was able to recover the situation through a process of tactful dialogue, in which I reiterated my opening remarks to the effect that I recognized that many of the world's most proficient futures and foresight practitioners were present, that I felt deeply privileged to be addressing them, and that the primary intention of my speech had not been to criticize in anyway the invaluable contribution they were making to organizations and institutions across the globe. Rather, I had wanted them to consider how embracing the rigors of scientific theory and method would enable them to understand better which of their assortment of tools and processes were variously more and less effective, across varied contexts of application, and in so doing, gain much-needed insights into the reasons for their (in)effectiveness.

To this day, I remain troubled by this salutary experience, which I have reflected on many times, incorporating the insights it has given me into my broader theoretical contributions to the literature on why organizational decision makers resist evidence-based approaches to informing their practices and what to do about it (Hodgkinson, 2011, 2012). On the basis of the now considerable literature amassed comprising similar scholarly reflections on the academic-practitioner divide, it is clear that precious little has changed as a result of the efforts of numerous researchers, who, in similar vein to Fergnani

and Chermack (2021), have sought to persuade practitioners to embrace the traditional scientist-practitioner model (for reviews see Bartunek & Rynes, 2014; Hodgkinson & Starkey, 2011; Kieser et al., 2015). A case in point is the voluminous evidence demonstrating that the frequency of usage of personnel selection and assessment techniques is inversely proportional to their known reliability, validity, and utility, a finding which generalizes to many different types of organizations, applicant groups, and countries (see, e.g., Hodgkinson & Payne, 1998; Shackleton & Newell, 1994; Zibarras & Woods, 2010). What this case illustrates more generally is that, however well intentioned, efforts to persuade practitioners to adapt their processes and practices on the basis of scientifically sound theory and research, without first addressing more directly the inherently cognitive-affective, social, cultural, and political dimensions of their work, will ultimately fail to achieve the desired outcomes, to the mutual detriment of science and practice (cf. Herriot, 1992a, 1992b; Hodgkinson, 2011, 2012).

### 3 | WHAT MORE NEEDS TO BE DONE?

Viewed against this backdrop, the most fundamental mechanism of all that needs to be addressed, I suggest, is the "cult of personalities" identified by Fergnani and Chermack (2021: 9), "wherein futures and foresight experts are considered gurus whose practice is seldom questioned." Unfortunately, however, it is the one mechanism that their proposed packages of measures ultimately fails to address.

Futures and foresight practitioners have long drawn on the insights of the social and behavioral sciences as a scientific foundation for scenario planning and related practices, in an effort to stretch and challenge organizational decision makers' assumptions and beliefs (see, e.g., Cairns & Wright, 2018; Day & Schoemaker, 2006; Hodgkinson & Sparrow, 2002; Schoemaker, 1993; van der Heijden et al., 2002). Rarely, however, have they used those same insights to reflect self-critically on their own future possibilities. On the contrary, as illustrated by my own experience of trying to foster such reflexivity, when presented with opportunities for self-development and change, they often display the very same defensive tendencies that they witness all-too-frequently on the part of their clients. This is not surprising, because, like their clients, their own identities as skilled and accomplished practitioners are fundamental to their sense of professional selfhood. Any proposal that threatens these professional identities will be actively resisted, through a variety of mechanisms: biological, psychological, sociocultural, and ultimately, political (cf. Healey & Hodgkinson, 2014, 2017; Hodgkinson & Healey, 2011; Hodgkinson & Wright, 2002). Although the proposed remedies identified by Fergnani and Chermack (2021) are all necessary ones, they are insufficient in and of themselves for addressing this fundamental reality, which is ultimately driving the resistance to scientific theory (and I would add scientific method) on the part of practitioners that they are seeking to rectify.

Addressing this deeper problem demands alternative conceptions of scientific method and progress, ones that foster joint ownership of the problems investigated and, indeed, of the entire research process (cf. Hodgkinson & Herriot, 2002; Huff, 2000; Starkey & Mandan, 2001; Tranfield & Starkey, 1998). In our own work, my colleagues and I have found it helpful to approach this problem as a general (engineering) problem of design-how to create foresight tools, practices, and processes that are a better fit for purpose than the ones currently available (see, e.g Healey & Hodgkinson, 2008, 2017; Healey et al., 2015; Hodgkinson & Healey, 2008). This design science ethos, which builds on the foundation of Herbert Simon's classic treatise, The Sciences of the Artificial (Simon, 1969), seeks to foster closer cooperation between academics, policy makers, and practitioners in identifying research problems, methods, and solutions (see also Hodgkinson & Starkey, 2011). Generally speaking, the approach we advocate demands well developed translational skills on the part of researchers and a rich ecology of interactions among the producers of knowledge, knowledge intermediaries, and knowledge end-users (Keleman & Bansal, 2002), the overriding aim being to generate design artifacts that communicate meaning and facilitate coproduction across diverse stakeholder groups.

#### 4 | CONCLUSION

Preaching the virtues of scientific theory to the futures and foresight practitioner community will not yield the positive outcome desired, as is clear from the continuing and ever-widening academicpractitioner divides are all-too evident in so many adjacent fields of research, where, in the absence of a receptive context, similar appeals to embrace scientific method and theory have changed precious little. Effecting the changes envisaged by Fergnani and Chermack (2021) ultimately requires actors on both sides of the futures and foresight academic-practitioner divide to embrace the coproduction of knowledge, while carefully attending to the attendant dangers of insider inquiry (cf. Evered & Louis, 1981; Hodgkinson & Healey, 2008; Hodgkinson & Herriot, 2002; Huff, 2000; Rowland & Spaniol, 2020).

#### DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study

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