Panacea or Dangerous Practice: A Counterpoint to Hanisch's Argument for Prescriptive Theorizing

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ABSTRACT   In this paper we provide a counterpoint to the view that prescriptive theorizing reflects a viable means for enhancing the practical impact of management theorizing towards addressing some of the most pressing societal concerns and grand challenges of our times. To do so, we first contextualize the roots of prescriptive theorizing in management research, arguing that the approach developed by Hanisch is reflective of the wider 'positive' prescriptive turn in social science theorizing. Second, we problematize the presumptive basis upon which much prescriptive theorizing as well as related ideas around utopian thinking are based. In doing so, our broader aim is to draw attention to the bases upon which prescriptive claims are made and we specifically highlight the dangers of implementing decontextualized, overly simple and stylized prescriptions in the face of complex grand challenges. In contrast to prescriptive theorizing, we propose that the practical impact of management theory may rather be enhanced through a tempering of instrumental rationality with a deep(er) concern for phenomena and experience. We conclude the paper by offering a number of ways in which this can be done.

Keywords: prescriptive theory, causal complexity, epistemic humility, conjunctive theorizing, instrumental rationality

INTRODUCTION

> … *in social manipulation, the tools are not hammers and screwdrivers*. (Bateson, 1972, p. 170).

[H]ow is science, with all its new power, to be related to our political purposes and values, and to our economic and constitutional system? (Price, 1965, p. 3). When Price asked this question, it was against the backdrop of the Manhattan project and a post-war

flourishing of government and privately funded science in American universities which led to a surfacing of new kinds of questions and problems: to which degree should scientists have a voice in policy decisions and, reversely, how far should government and private institutions control the direction and use of scientific research? Some 60 years on, Price's question remains important. Now it is no longer mainly governments but private organizations that drive scientific developments, often partnering with universities, whose purposes and values are increasingly tied into commercial projects. This raises many questions: Should science relate differently to political and economic purposes? And, more generally, does the flourishing of science, when it is geared towards such ends, always produce the equal flourishing of societal and environmental wellbeing? If not, then what is the role of science in a political climate demanding immediate impact and utility? Can science be content to do *its* business: accumulate insights and facts, as well as having the freedom, time and patience to work through all the bases around a phenomenon so that it can be understood in more nuanced, pluralistic and – perhaps – better ways?

The matter is particularly pressing now with new scientific and technological developments following each other in quick succession. Even if these are for a common good, such as private businesses developing vaccines, administrating social services, or providing satellite based communication and geo-targeting for governments in war-zones, these very technologies – and at times the same organizations – are also involved in dangerous efforts to re-programme human biology; the emergence of post-truth echo-chambers and digital surveillance; the creation of financial bubbles and crashes; and more generally in the provision of 'fixes' that continue or further intensify existing practices of resource exploitation and energy consumption. It is not just that every one of these scientific and technological developments has a pharmacological double function of being both remedy and poison (Stiegler, 2011); it is also that these effects are unevenly shared out among divides of wealthy and poor; North and South; human and non-human.

It is against this background that management research has been cultivating a growing interest in the ways in which its theoretical and methodological approaches do, can, or ought to contribute to the way in which our future is shaped. Is our scholarly community satisfied with developing ways of manipulating single variables, such as efficiency, profit, or control, when we know all too well that, without context, their benign or malign effects cannot be determined? Or, similarly, are we content to spend our time developing accounts of the status quo by refining ever-more elaborate theoretical models; sustained by our own quest for truth or, at least, rigour, when around us the world is quite literally burning? All these considerations makes us bound to ask whether management research, like the other sciences, should be restricted to being one functional element of a flourishing society or whether its function is to help change society for the better.

Hanisch's *Point* engages in this debate by elaborating a mode of prescriptive theorizing for management research. Distinguishing 'descriptive' and 'prescriptive' theorizing, he advocates the latter, focusing scientific concern on 'how things should be and how they can be achieved, as opposed to… why or how things are (interrelated)' (p. XX). The aims of such a prescriptive approach are, he suggests, to 'advance, challenge, and extend current thinking in the field' and to 'envision alternate states and provide actionable solutions to complex issues' in society (p. XX). Instead of accepting

the world as a given subject for science to explore objectively and dispassionately, normative and prescriptive accounts seek to guide choice or conduct (Donaldson, 1994, p. 158). We find much that is laudable in Hanisch's *Point*, as well as in the wider concern for a mode of social science that helps create a better world and addresses some of the most pressing societal concerns such as climate change, accessible healthcare, digital transformation and societal equity and inclusion. Management studies can be a fertile field for such an approach because, as an applied discipline its knowledge products have often being readily consumed in practice, for better or worse. This realization, as Hanisch (2023) points out, therefore rightly begs the question of whether we can 'retool' ourselves to achieve better ends for contemporary grand challenges in society; all the while asking who is permitted to decide on these ends as well as how they may be realized.

Despite our appreciation of Hanisch's motivation, in our *Counterpoint* we suggest that attempts at scientifically designing or modifying complex social relations need to be carefully thought through, not least as they may quickly turn out to be ill suited to the entangled complexities, reciprocal and emergent effects, and long-term repercussions that characterize social life, including relations between humans and the natural world. Moreover, as indicated by Bateson's introductory quote, the 'materials' in such forms of social engineering and the instrumental thinking on which it is based are not lifeless objects but beings who feel and suffer, and they have but one life which is, in each case, an end in itself. They are also agents capable of resistance, of pursuing vastly differing (and changing) demands, of learning, and at times of capricious action, cheating, and subterfuge.

In our *Counterpoint*, we try to do two things. First, we take up Hanisch's critique of the descriptive nature of theorizing in management research and his promotion of a more prescriptive variant. We engage with his text by questioning the very distinction between description and prescription and we argue that his proposal is another instrumental instance of what is now frequently referred to as 'positive science': the belief that on the basis of a few rigorous (thought) experiments, scholars can directly intervene into the causal dynamics governing much of social life. We problematise this model both in terms of the presumption of knowledge on which it is based, as well as its inability to deal with complex social phenomena. Building on this problematisation, we then, secondly, offer three suggestions for the role of management research in pursuit of its aim of being relevant and speak to contemporary societal challenges. We suggest that management research is more likely to be successful in this when its ethos is one of epistemic humility; when its claims and interventions are formulated with an awareness of the inherent limits of the knowledge it produces, and the exclusions that it involves and thus creates. Epistemic humility prizes small steps, reversible interventions, the involvement of local experts in the assessment and use of scientific results, and it takes seriously the experiences of those being studied and experimented on. Social scientists have to engage in dialogue with those affected by the interventions and decisions that that are made about them. Finally, an ethos of epistemic humility is also an acknowledgment of the situatedness of knowledge in epistemic communities, scientific practices and apparatuses, and an awareness of the difficulties of generalizing or translating these beyond such domains.

DESCRIPTION AND PRESCRIPTION

Hanisch's (2023) argument is based on the identification of description as the dominant mode of theorizing in management research, but one that is insufficiently apt to change society for the better. He sees descriptive theorizing as an approach to defining, explaining, and predicting phenomena, aimed at demonstrating the causal mechanisms among constructs (A and B). Hanisch in turn offers prescriptive theorizing as a mode of theorizing of its own, based on discovering facts about any given phenomenon and by identifying a valuable end or ideal for how this phenomenon might be changed. Researchers can then start their work with this end point in mind and, drawing on different forms of normative and instrumental reasoning, formulate prescriptions and develop interventions that help realize them. A useful starting point for our debate is therefore this contrast between descriptive and prescriptive theorizing. Hanisch's account of descriptive theorizing is grounded in the classic covering law model of explanation and prediction (Cornelissen, 2023). The covering law model explains a phenomenon by showing that it was to be expected on the basis of some basic theorized premises together with some well-defined rules of logical inference (what Hanisch identifies as 'propositional reasoning' – see Table 1 of the *Point* paper) such that observed phenomena are deducible 'from a theory's assumptions and propositions' (Makadok et al., 2018, p. 1583). When management researchers follow this model, they thus effectively make verbal statements of a claimed relationship between constructs or variables representing a phenomenon, and, through accumulating evidence over time, aim to *predict* the occurrence of the phenomenon.[1]

Although the covering law model is perhaps still the most prevalent approach in management research (Antonakis et al., 2010; Makadok et al., 2018), it is far from the only model in use (Cornelissen et al., 2021). Partly in response to these kinds of criticisms of the covering law model, a 'positive' prescriptive approach to theorizing emerged across the social sciences in the 1960s (Friedman, 1966) – and it is this approach that we argue Hanisch (2024) principally follows. Rather than focusing on building a formal theoretical system of propositions, mechanisms and covering laws (Cornelissen, 2023), the 'positive science' approach tries to veer a pragmatic course between offering a good enough theoretical description on the one hand and offering prescriptive interventions into reality that have sufficient practical currency on the other. The focus is essentially on the correspondence between recorded empirical manifestations or 'facts' about a phenomenon and making interventions towards 'positive' outcomes into such recorded observations – rather than the primary focus being as with the CL model on the logical consistency of theoretical reasoning. The main focus of theorizing in this 'positive' sense rather lies in instrumentally and pragmatically identifying cause-and-effect behavioural relationships in ways that allow researchers to make to the point theoretical predictions about probable and sought after outcomes. The key motivation driving this focus is in essence the ability of offering precise enough predictions about behavioural interventions and their presumed efficacy.

There are different variants of this 'positive' approach across the social sciences, including branches that stake their interventions on explicitly championing positive

psychology and behaviours – as important ends to be pursued, and as supported by the kinds of consequential and consensual reasoning that Hanisch proposes. Other approaches are more methodological in nature and focus more on the 'facts' and on ways in which cause-effect relationships about phenomena can be properly identified. Positive economics and econometrics, for example, have developed a range of intervention-based tools (Imbens, 2022; Imbens and Rubin, 2015) that support researchers in drawing causal inferences from instrumental interventions on such relationships and to practically decipher their consequences. The overall guiding idea of these positive theorizing approaches is that researchers can, as Friedman (1966) argued, offer predictions about 'the consequences of changes in circumstances' (Friedman, 1966, p. 39) in ways that 'are immediately relevant to important normative problems, to questions of what ought to be done and how any given goal can be attained' (Friedman, 1966, p. 4). In other words, normative prescriptions can be anchored on such intervention-based predictions to model when desirable states would obtain, which is a point that is acknowledged by Hanisch when he states that 'being able to credibly project consequences is vital for robust normative theorizing' (Hanisch, 2024, p. XX).

This 'positive' prescriptive approach is now commonplace across the social sciences, and increasingly so within management research. It is a style of scholarship that has found a broad uptake in society as well; for example, in the behavioural nudging units (inspired by behavioural economics) that have been set up by governments and health authorities, and in the widespread incorporation of behavioural ethics and behavioural psychology into legislation and interventions around health, consumption and human interactions online (Zuboff, 2022). As mentioned, we see Hanisch' proposal as another example of this 'positive' prescriptive theorizing approach; with all of the strengths, but also crucially limits and downsides that such an approach entails.

SIMPLE LOCATION IN DESCRIPTION AND PRESCRIPTION

We focus our *Counterpoint* on one important methodological limitation of Hanisch' proposal. Whilst he distinguishes descriptive from prescriptive theorizing, both are still premised on instrumental reasoning; on the identification of causes and effects which take primacy over the experiences of any such effects. Both descriptive and prescriptive theorizing share the idea that the presumed strength of scientific approaches is the double movement of a means-ends ordering of complex, fluid, messy, and interconnected phenomena and subjecting them in that way to explanatory relations that can be described as well as prescribed. The prescriptive positive science approach that Hanisch follows shifts, as already mentioned, the focus away from description per se and towards a focus on projecting antecedent conditions (as means) to predict and bring about a targeted and desired (future) state (as ends) through what he describes as consequential and consensual reasoning. The guiding idea here is that through such forms of reasoning and controlled (thought) experimentation we can obtain enough of a sense of how phenomena 'behave' under differently modelled conditions, such that we can predict how they may be altered or changed, given the

right set of (controlled for) conditions. The kinds of predictions that we thus make about alternative conditions producing desired outcomes or states can then in turn, as Hanisch suggests, form the basis for the prescriptions that we, as management researchers, offer to society.

But the risk here, of course, is that our predictions about how we might bring about future states are always based on limited sets of variables which have been abstracted from the whole situation. As researchers, we may be focused on familiar and ready to hand antecedent conditions that we can model and which we assume to be consequential (Cornelissen, 2023). But the larger question that this raises is how we can be sure in each case (i.e., for each phenomenon) what we have sufficiently captured all or even the right set of antecedent conditions so that, based on our reasoning and modelling, a particular set of events will likely ensue. It is worth pausing here for a moment to consider this presumptive base and thus also the grounds on which Hanisch' proposal rests. First of all, we readily accept that the kinds of predictions on which 'positive' prescription rests require the simplification of necessarily complex, vastly interconnected, and messy phenomena – such as is the case for many of the grand challenges (Ferraro et al., 2015) that Hanisch targets with his proposal. We also readily accept the limitations to the generalizability and reproducibility of intervention-based work, for example in cognitive psychology (Open Science Collaboration, 2015) and in behavioural economics (Camerer et al., 2016), which often constitute the 'evidence base' on which positive interventions (e.g. risk narratives, sin taxes) are prescribed. Perhaps more troublingly, the replication crisis that afflicts many of the behavioural disciplines that already practice the kinds of positive prescriptions that Hanisch proposes seems to extend to the field of strategic management, where it is estimated that up to 30 per cent of empirical results may not be reproducible (Goldfarb and King, 2016). It is for this reason that none of us, we assume, expect our graduate students to fully function in the workplace by solely applying a limited set of predictive behavioural models we have taught them in class.

We find a similar presumptive basis in the recent enthusiastic uptake of 'real utopias' and the advocacy of utopian thinking in organizational theorizing (Gümüsay and Reinecke, 2022). This emerging body of work aims to leverage the performativity of social theory so as to influence social reality in ways that are assumed to be positive (i.e., more equitable, just, sustainable). Unlike the prescriptive approach advanced by Hanisch, which begins by enlisting existing theoretical concepts and evidence to develop optimal responses to general organizational problems (e.g., what is our primary goal, how can tensions between sustainability and profitability be reconciled), the utopian approach rather begins with action. Real utopias typically begin with concrete, often small-scale, yet functional, political, social, and economic arrangements, including communes or temporary gatherings, that deviate from standard (often neoliberal) modes of organizing, thereby functioning as blueprints whose key elements can be scaled up to society at large.

But one thing that this neo-utopian thinking shares with positive science approaches to prescription is that it not only reorders the relationship between description and prediction (following the traditional covering law model), but replaces the firmness of their footing altogether; effectively creating a topsy turvy world in which the complexity, messiness and interrelatedness of grand challenges is to be constructed from a simplified set of relations or small-scale arrangements. To assume that this is easily possible is, to

slightly adapt a well-known quip by Gregory Bateson, akin to eating the recipe book instead of the meal. The difference between scientific facts and intervention-based insights (in the lab or otherwise heavily controlled field settings), including those generated by business and management scholars, and broader political, economic, and moral complexities which defy or exceed simple and linear interventions, is well established (see Latour, 2004, p. 4). For example. Law (2004) has shown how science inherently illuminates as well as veils, thereby 'othering' peripheral concerns that matter and are in many instances consequential when rolled out in society. Tsoukas (2017), too, has for a long time warned against the limits of purely analytical approaches. The de-contextualization and simplification that comes with such purely analytical accounts, including in their prescriptive variant, runs the danger of propagating behavioural maxims and stylized assumptions that may be normatively suspect, and do not adequately reflect the full set of moral bases, experiences, and goals that people pursue in their daily lives.

At stake here is that both prescriptive as well as utopian theorizing approaches run into issues at the interface of the general and the particular. The theorizing on which both rest is inherently limited by the necessity of abstraction. The *general* models at the heart of theoretical prescription, necessarily entail the repression of contextual nuance. The ideographic and heterogenous experience of the *particular* situation is squeezed out in favour of conceptual reasoning about the typical features of the individual, organization and the environment. This conundrum presents challenges for theorizing that aims at any form of prescription, because it is precisely this contextual complexity that constitutes the core problem of management – and which instrumental and consensual reasoning of the form advocated by Hanisch cannot reach.

Conversely, utopian thinking encounters the same problem of generality, but in a different way. In beginning with the particular, these approaches are able to attend to the complexities of context, but struggle when it comes to establishing generalities. 'Real utopias' are by necessity provisional and situated, as they lack the capacity to sustain themselves when the context changes (e.g., when the population expands, placing strain on communal services in eco-communities). Thus, prescriptive theorizing, with its emphasis on scientific abstraction, is limited because it is too generic to accommodate the complexity of managerial experience whereas, in comparison, utopian theorizing, with its emphasis on the specific communities and practices, cannot accommodate for the regularities required to 'scale up' and establish general maxims that might work across complex situations and at scale. The simplifications and abstractions upon which both prescriptive theorizing as well as utopian theorizing are based, as well as the associated difficulties of scaling from the abstracted to the whole, therefore need to be more explicitly considered.

What is more, with many of these approaches being somewhat one-sided (because of their simplification) and methodologically unvetted, there is a real risk that any prescriptions that are derived from them are outright dangerous (Ghoshal, 2005). These dangers are even greater in the context of grand challenges, from climate change to migration, or the future of work, as the complexities of such issues require even more radical abstraction and simplification to yield any clear causal effects and decisive interventions. Simple prescriptive solutions to spatially and temporally expansive problems, even when they seem to work for a while, may harbour unforeseen or even

greater negative effects at the systems level once they are enacted (see Wickert, 2024).
Bateson's (1972) example of the use of pesticides as a solution to the challenge of how
to feed growing populations, or the recent embrace of vaping, even by health author-
ities and governments, to battle smoking, show how quickly a 'solution' turns into a
new and at times even larger problem. But even if we assumed that solutions would
match problems, over time, actors are likely to alter their preferences in response to
activities of others and as a result of their capacity to be reflective in the face of envi-
ronmental feedback (Ferraro et al., 2015). Even the very definition of problems, actors
and consequences are 'caught up in processes of continual reconfiguration, depend-
ing on whom and what becomes associated with them', making a simple evaluation
of an end or goal, and prescribing a solution in turn, is difficult to determine through
any form of consequential or consensual reasoning (Ferraro et al., 2015, p. 367). This
mismatch between the relatively linear and simple solutions offered in much prescrip-
tive theorizing and the complex causality characterizing grand challenges means that
interventions that are based on 'small world representations' and 'scenarios' (such as
the scenarios described by Hanisch) often fail to yield the desired outcomes and are
rather likely to play out in unforeseen – and at times unwanted – ways for the spe-
cific societal issue or grand challenge a whole. These issues can be readily observed
when, for example, considering recent policy interventions aimed at addressing the
climate crisis. The Paris Agreement established the goal of reducing the EU's green-
house gas emissions by 55 per cent by 2030, including reducing emissions from road
vehicles by nearly 40 per cent. In light of this goal, different EU member states have
implemented a range of policy interventions aimed at accelerating the transition from
petrol and diesel engines to electric vehicles, including the provision of incentives to
consumers and banning the sale of petrol and diesel engines. These interventions are
predicted to lead to significant changes in consumer behaviour, with some suggesting
that the number of electric vehicles on European roads will grow from 2 m in 2020
to 40 m by 2030 (Balch, 2020). Despite a consensus on goals and the implementation
of seemingly effective instruments, these interventions have led to new challenges, for
example, how to deal with the increased weight and size of vehicles, or how to satisfy
the demand for lithium. In addition to environmental and geopolitical ramifications,
knock-on effects can be more obscure, such as the way surging lithium demand has
contributed to changes in the preferences of Portuguese farmers who now see oppor-
tunities for lithium prospecting as more attractive than traditional livestock farming.
Considering the initial aims of policy interventions to address environmental chal-
lenges, the changes in preferences of Portuguese farmers paradoxically now threaten
to precipitate a mining boom in rural Portugal, with the potential for causing large
scale industrial-environmental damage (Balch, 2020). In light of a complex exam-
ple such as this one, the suggestion that 'prescriptive theorizing also offers a prag-
matic dimension by delineating the means to achieve specific ends, enabling theorists
to map out pathways for expediting desired change' (Hanisch, Accepted/In press;
p. XX) seems a fairly inflated idea, if not rather offering an outright dangerous pre-
dicament in cases where the complexity of phenomena easily outstrips the scope of
any prescription offered by management researchers.

SCIENTIFIC THEORIZING OF COMPLEXITY

What is to be done? The question of theory-based interventions in the world brings into sharp relief the tendency of science to claim authority when it comes to identifying and determining the preferences of otherwise muted individuals, groups and communities; a form of 'soft paternalism' which has been subject to critical scrutiny in other disciplines such as behavioural economics (Rizzo and Whitman, 2019; Sugden, 2013). As Tsoukas (2017, p. 141) suggests 'questions of circumstances, events, timing, history and subjective preferences', all configured in idiosyncratic ways, matter enormously in addressing the question of 'what is to be done'. However, the development of formal and analytical knowledge of the kind that we have discussed necessarily entails the delimitation of a 'region' to be studied and an isolation of 'a phenomenon' from the worldly context in which it is experienced. As such, conventional theorizing, by design, tends to omit 'most of what matters' (Weick, 2007, p. 18). Perhaps somewhat surprisingly, the limitations of scientific rationality for addressing questions of experiential complexity have long been acknowledged by the behavioural economists that the Point paper seeks to emulate. For example, von Hayek (1989) offered a searing critique of what he called the 'pretense of knowledge', stressing that the application of scientific rationality to complex social problems overlooks an important form of 'local knowledge' – 'the particular details of time and place that affect the preferences, constraints, and choices of individuals' that remain unavailable to outsiders or experts (Rizzo and Whitman, 2019, p. 236). Yet attempts at developing prescriptions for managerial practice and organizational interventions, as well at attempts at cultivating 'desirable futures', seem curiously wedded to formal and analytical knowledge as a basis for action. Against the bravado of interventionist debates we may consider the limits of our theorizing, knowledge, and our very capacity to predict events in the future. What we call 'epistemic humility' entails a questioning of the extent to we can know whether scientific claims 'accurately portray the quality of evidence for believing the claim to be an accurate one' (Schwab, 2012, p. 29). Besides traditional questions and epistemic criteria of accuracy and validity, the key point we wish to make here with the concept of humility is that even if we find 'accurate' things, such as figures or graphs that demonstrably capture changes about the pollution of an area, these are abstractions that are tied to the past and, crucially, may not capture the actual experiences of those affected.

These problems are well known outside of management studies. The philosopher A.N. Whitehead (1929) already lamented such a 'bifurcation' of theorized causes and mechanisms from the complex experience of causes, suggesting that both should ideally be considered together. Jane Jacobs (1961, p. 488) provides a helpful illustration of this split, pointing to 19th century utopians who, in rejecting urbanized society, developed housing in the spirit of garden cities as a return to the idea of simple environments, craft, harmony, and consensus – and thus with the aim of implementing social reform. But this intervention, laments Jacobs, is to elevate and forcefully project an artistic picture or ideal as it 'is the easiest thing in the world to seize hold of a few forms, give them a regimented regularity, and try to palm this off in the name of order. However, simple regimented regularity and significant systems of functional

order are seldom coincident in this world' (Jacobs, 1961, p. 489). The solution, she offers, is to elevate both art and life; it is the task of understanding the complex order of a city itself, not reduce it analytically to traffic arteries, housing, business, and recreation zones: 'No single element in a city is, in truth, the kingpin or key. The mixture itself is kingpin, and its mutual support is the order' (Jacobs, 1961, p. 490). Such a complex order inherently resists analytical reduction, eluding even the most advanced analytical techniques (of causal identification, instrumental reasoning, etc.), because it is not a matter of analysis alone, but of a synthesis of scientific analyses and the broad and widely varying experiences of those living in and being affected by ordered systems such as cities (see Cornelissen, 2023).

THE RADICAL CONTINGENCY OF THE FUTURE

Above we have argued that elaborations of the distinction between description and prescription veils a deeper-seated homology between both, rooted in an instrumental logic that reduces complexity to isolated factors which, for the sake of analysis, are taken to be real, and then set into causal relations (Cornelissen, 2023; Cornelissen and Kaandorp, 2023). But this logic, and the prescriptions derived from them, begins to idle in face of the unknowability of future events. It additionally, but problematically, casts the process of deciding about desirable futures as one in which preferences exists prior to choices being made and simply persist unaltered afterwards (Scherer and Palazzo, 2007, p. 1106).

The challenge, in other words, is to make decisions about the future by accounting for what one does not (yet) know, rather than assume that the patterns of the past and our reasoning about them will, in some discernible way, recur. But how does one prepare for surprises? And, more to the point, how does a scientific discipline with little experience or historical concern for the implementation of theories, begin to think about its possible influence in the world to come? There can, per se, be no definite answer and, indeed, the idea that 'the' answer can be formed right here and now, is part of the problem. Let us therefore suggest a few hesitations, prolongations, and complications, aimed at lessening the likelihood that academic interventions, be that via prescriptive theorizing, the scaling of utopic solutions, or other 'fixes' rooted in a concern for consequences, end up delivering just more misery, disappointment and a greater loss of hope (March, 2018).

James C. Scott (1998, p. 345) issues a few simple reminders of the fallibility of grand designs and radical solutions when it comes to intervening in the future. The first is to take small steps, which suggests that, rather than beginning from a position of knowledge which assumes that the effects of interventions are known in advance (be that through propositional or instrumental reasoning), we begin with the admission of ignorance. As complexity theory has long taught us, any intervention in complexly related systems with feedback loops interacting on multiple levels (what Rachel Carson called the 'vast web of life' (Carson, 2002, p. 270)), is likely to provoke an active response in that system and, seen from the linear perspective of the simple intervention, in unpredictable ways. This realization already powerfully suggests that both humans and the biological world

as such are capable of adaptation ('learning'), requiring the adjustment of ends and means over time. It also indicates that such complex pathways of interactions can never be known in their totality, not least because any observer is inherently also 'part' of the very system they try to describe (Von Foerster, 1984). The admission of ignorance over complex patterns is not an admission of failure, but it signals wisdom about one's own situation as belonging to – rather than being objectively detached from – the world (see Hanisch, Accepted/In press, Table 1).

Scott's second reminder is to favour reversible interventions and, therefore reversible consequences. This suggestion relates not just to first-order elements, such as say financial investment or the clearing of land for the development of sustainable housing projects, but also to higher-order processes, such as the goodwill, trust and hope of those engaged in, and affected by, such projects. Big hopes, as James March argued, oftentimes lead to great disappointments and the garnering of '[g]reat enthusiasms, commitments, and actions [ought not to be] tied not to hopes for great outcomes but to a willingness to embrace the arbitrary and unconditional claims of a proper life' (March, 2018, p. 226).

Scott's third reminder is to plan for surprises. Big interventions such as those required by grand challenges are costly and, as a long history of public infrastructure projects shows (Flyvbjerg et al., 2003), they are never on budget. However, if by tendering out projects to the lowest bidders or by wagering everything on one assumed mechanism, law or set of probabilities, there is already a negative margin of error built into the intervention from the very start, leaving little room to respond creatively when things do not turn out as planned. Similarly, if uses and ends are tightly specified so that there is little room for repurposing or change (Weick, 1979), then the chance of 'white elephants' (i.e., costly interventions that are no longer useful) increases. Ignorance, in other words, is not to be responded to with probabilistic or otherwise (*ex ante*) assumptions of certainty, but with flexible designs that allow for changes throughout the lifetime of a project and beyond.

Scott's final reminder is to anticipate human inventiveness. Management scholars should be well aware of the capacity of humans to repurpose or recombine things (see Penrose, 1959) and that new technological developments or scientific discoveries will alter the conditions for which any prescribed plans were originally made. This may yield efficiencies that are not detectable at the beginning but we should also not forget that what may be 'good' for particular communities, firms, or individuals may be generally problematic because it overlooks the fact that theorists have no control over the application of prescriptions that draw their legitimacy from the veneer of scientific rationality and its associated value neutrality – what may be 'good' for the theorist may not be good for the those implementing or being on the received end of prescriptions (Sugden, 2013).

CONCLUDING THOUGHTS

In this *Counterpoint*, we have responded to the proposal of Hanisch (2023) towards instituting a prescriptive form of theorizing in management research that is adept at addressing some of the most pressing societal issues of our times. Whilst we do not

take issue with the broader ideal of management scholars engaging with such import-ant phenomena, and endeavouring to make a difference, we do point to a method-ological weakness upon which his proposal and similar others are based. As we have argued, prescriptive theorizing assumes too readily and too easily that it can decipher means and ends, explanans and explanandum, and turn these into legitimate and vi-able prescriptions for intervening into real-world phenomena. It does so by, similar to descriptive theorizing, assuming phenomena 'as if' they readily fit certain maxims and means-ends relationships and can thus be instrumentally brought about. We see this as a dangerous fallacy which, when it goes unchecked, is bound to lead to unforeseen problems and consequences rather being the panacea that is hoped for. Instead of simply assuming in a reductionist sense things to be the case ('as') about complex social phenomena, or 'as if' interventions into such phenomena can easily be realized, it may be more productive, as we have argued, to ask 'what else' or 'what if' to better decipher the complex constellation and dynamics of any particular social phenomenon. Years ago, strategy scholar Ansoff reasoned that the shape of a house cannot be gleaned from a pile of bricks, nor can a forest be understood by studying trees alone (Ansoff, 1979/2007, p. 226). What Ansoff meant to convey is that any reductionist sense of sci-entific causality is only part of the experience of the world, tied to specific apparatuses of knowledge production that prescribe state of affairs, whilst experience is sensitive to complex and changing patterns that inherently exceed any number of identifiable causes or means. What may be needed, then, is a (re-)opening of management studies towards more systemic ways of thinking (Cornelissen, 2023) and the development of new ways of theorizing that speak to the middle ground between bricks and houses, trees and forests, and how the latter always exceed any number of the former.

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NOTE

[1] Within management research, Ghoshal (2005) famously critiqued the limits of this model when it is used as a prescriptive guide to practice. Pointing to their 'deterministic' propositional grammar (Ghoshal, 2005, p. 77), and using Transaction Cost Economics (TCE) as an exemplary case (Ghoshal and Moran, 1996), he showed how managers by enacting a theory's propositions affirm its underlying assumptions, even if these are limited or morally suspect (such as those relating to the inherent self-interestedness and opportunistic nature of agents), and thus make them 'true' (what we now often refer to as performativity, see Wickert, 2024).

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