Digital transformation of management and organization theories: A research programme

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Funding information
Research Council of Lithuania, Grant/Award Number: 01.2.2-LMT-K-718-02-0019

Abstract
This article draws on the groundwork by George Spencer Brown and Niklas Luhmann to outline a general framework for the digital transformation of management and organization theory. It is shown under which conditions guiding distinctions of these fields may be defined as false or true. The framework is applied to selected examples, thus demonstrating that most guiding distinctions of management and organization theory are false. The article concludes with an outlook briefly expanding on the distinction between an electrification and a digital transformation of management and organization theories.

KEYWORDS
dichotomies, digital transformation, dilemmas, dualisms, false distinctions, guiding distinctions

1 GUIDING DISTINCTIONS OF MANAGEMENT AND ORGANIZATION STUDIES

On 24 April 2019, I launched an online brainstorming on the ‘Guiding distinctions of social science’ using partizo.com, a discontinued Internet platform by the Swiss crowdsourcing service provider Atizo AG. On the landing page, a short text informed participants that the aim of the brainstorming was to collect as many pertinent guiding distinctions—defined as dichotomies and dualism such as economy/society, market/hierarchy, action/behaviour or micro/macro that have sparked controversies and shaped debates in our fields—as possible. Within 1 month, participants had contributed over 480 guiding distinctions, of which some of the most relevant to the present context include:

- State/market
- Socialism/capitalism
- Stakeholder/shareholder
- Public/private
- Agent/structure
- Method/theory
- Qualitative/quantitative
- Mechanistic/organic
- Man/nature
- Order/chaos

Though far from being comprehensive, this list of influential distinctions is indicative of the basic problem motivating this work. The issue at stake, however, is not that organizations and management challenges of any kind ‘are simply too complex to be well explained by simple dichotomies’ (Jelinek et al., 1983, p. 338). As these and similar distinctions have, in some cases for decades, defined the shape of our fields, my contention is rather that we should take them seriously. Sure, when confronted with ‘false distinctions’ (Chia, 2014, p. 648f; emphasis not in the original), dualisms, dualities or dichotomies, we might insist that they ‘betray the fluid and inherently intertwined character of social processes and experiences’ (Cloutier & Langley, 2020, p. 16) and seek to regain the ‘context-rich middle ground where deeper conversations take place’ (Purnell & Freeman, 2012, p. 112). Still, such attempts to scale and
explore the space between and beyond the two poles, thus ‘preserving as much as possible relationality, temporality, situatedness, and interpretive open-endedness’, again imply that we ‘make distinctions that overcome dualisms’ (Tsoukas, 2017, p. 132).

Contributions to a better understanding of what makes distinctions powerful enough to define dualisms as false and overcome them are therefore a noble past-time, the pursuit of which appears even more desirable as the current ‘digital transformation is adequately understood as transition from an analogue to a digital age’ (Roth, 2019, p. 89) and hence implies the translation of analogue fluidities, (grey) scales and middle grounds into systems of binary distinctions.

The proliferation of computer technologies and digitized information currently revolutionizing research and knowledge production in management and organization studies is increasingly being matched by corresponding methodological innovations. Yet this digitalization of research methods does not only provide us with ever-bigger datasets for the testing of traditional forms of theories but also suggest the possibility and need for digital theorising (Kitchin, 2014).

In the present article, I shall draw on the groundwork by George Spencer Brown and Niklas Luhmann to outline a general framework for the digital transformation of theory and show how and under which conditions dualisms, dualities, dichotomies, and other distinctions may be defined as false or true. I shall then apply this digital framework to some of the above guiding distinctions, thus demonstrating that most of them are false, before I highlight the role false distinctions play in the design, maintenance and perpetuation of discourses, strategies and paradoxes nurtured, dreaded or simply co-performed in management and organization theory and practice. In an outlook, I shall briefly expand on the distinction between an electrification and a digital transformation of management and organization theories.

2 TRUE AND FALSE DISTINCTIONS

If digital transformations are correctly associated with computers (Roth, 2019, p. 88), then it is important to recall that the basic principle of computation is the translation of symbols into, and their retranslation from, binary digits (Turing, 1937, pp. 232; 237). Numbers become computable as soon as we use two of them, 0 and 1, to recode all other numbers. First devised by Gottfried Wilhelm Leibniz (1703), this binary numeral system is now used by almost all contemporary computers.

For this form of computation to work, the guiding distinction of the digital age, 1/0, must be a true distinction. True distinctions are made of two mutually exclusive and jointly exhaustive sides and, therefore, fulfil George Spencer Brown’s (1979, p. 1) definition that ‘(d)istinction is perfect continence’. True distinctions split the entire space in which they are drawn into two sides and thus create a world where everything located in it belongs exclusively to either the one or the other side. Distinctions that fail to satisfy this definition may consequently be defined as false distinctions.

Common language examples of reasonably true distinctions include in/out, open/closed or perhaps true/false, whereas red/blue or economics/social sciences are false distinctions insofar as the former distinction is not jointly exhaustive (because the colour space is made of more than two colours) and the latter not mutually exclusive if we count economics among the social sciences. At the same time, the highlighted conjunction in the preceding sentence also points out that the distinction between true and false distinctions is an observer-relative concept. If an observer recalls a crucial scene from The Matrix, then red/blue effectively turns into an in/out distinction relative to that matrix and hence into a true distinction.

The above example of 1/0, and hence the prime distinction of the age of digital transformation, too, is characterised by that ambivalence. By default, the distinction between 1 and 0 is a false distinction as the two numbers do not cover the entire number space and are, therefore, certainly not jointly exhaustive. Yet, as soon as we treat these two numbers as binary numbers and use them to recode the entire number space, including the numbers 0 and 1, we may safely take 1/0 for a prime example of a true distinction.

If ‘(e)verything said is said by an observer’ (Maturana, 1975, p. 315), if ‘every observation must distinguish’ (Luhmann, 1993, p. 998) and if science is truly operating the distinction between true and false, then regular occurrences of false distinctions represent a core challenge for those professionally preoccupied with truth.

When confronted with false distinctions, analogue theorising may treat the two sides as poles of a continuum. This allows for the observation of mixed types or middle grounds. Analogue theorising might also turn to third categories or values, thus turning the dysfunctional duality into a plurality or at least triad. The resulting issues are obvious. Consider the market–hierarchy distinction, for example, in the context of which networks have been discussed as either mixed- or neither–nor-type third value. Either strategy then implies that the original distinction of market and hierarchy is false: in the former case because the obviously intermixing or overlapping
sides are not mutually exclusive and in the latter case because the resulting triad of independent categories is maintained by the co-observation of three false, because jointly not exhaustive, distinctions (market/hierarchy, hierarchy/network and network/market). In the end, one false distinction has been replaced by one or several other false distinctions.

Digital theorising does not have the possibility of resorting to mixed or third values as all it can process is binary distinctions. For a digital theory, occurrences of false distinctions therefore act as an invitation to translate them into architectures of true distinctions. Note, however, that this deliberate bias to true distinctions is not a moral stance, but rather a function of a digital theory architecture. As mentioned earlier, false distinctions are highly effective in creating and sustaining academic discourses and therefore play an important, though not always unproblematic, role in marking topics and fields in need for further research and formalization.

The way digital theorising proceeds when confronted with false distinctions is to turn them into true ones. As shown by the above discussion on Leibniz’s 1/0 system, this approach has been the generic principle of some of the earliest forms of digitalization. 0 and 1 are two out of an infinite, and hence jointly never exhaustive, set of elements. By definition, the 1/0 distinction is therefore a false distinction unless we redefine 1/0 into a binary distinction and put the two elements in a place from where to recode the entire set of numbers. As soon as this transposition is observed, 1/0 co-occurs as one true and one false distinction, which obviously can be translated into one another. The only tool for this translation is architectures of true distinctions, that is, matrices of 1/0, as this is the only true distinction in the digital universe. Table 1 shows a simplified example of this principle: If 1/0 is taken for a true distinction, then the emerging architecture creates a space that can contain both the original false distinction (see the cells 01 and 00) and perspective all other ones.

In developing his advanced version of systems theory, Niklas Luhmann (1995a) pursued a similar strategy. By default, system and environment have been nothing but two knots in an extensive semantic network until he redefined them into mutually exclusive and jointly exhaustive concepts, thus transposing them into a position from where the binary distinction could reorganize the entire system of communication. As this encompassing system includes the concepts of system and environment, Luhmann (2013, p. 44) was able to claim that ‘a system is the difference between system and environment’. This seemingly paradoxical definition emerged as Luhmann (1995b, p. 173) traced Maturana and Varela’s (1980) concept of autopoiesis back to Spencer Brown’s concept of ‘a re-entry of a form into the form’. As a result, Luhmann (e.g., 2013, p. 56) claimed that the principle of re-entry, that is, the self-application of a distinction, applies not only to biological or ‘living systems’—which may be defined as those systems that create and maintain themselves by the very operations by which they draw a distinction and thus maintain their boundary to their environment—but also to psychic and social systems. The concept of re-entry has thus been tapped for the development of social theories.

A major benefit of a re-entry approach to theorising is its utility for the design of architectures of true distinctions. Consider the example presented in Table 2, which show the results of a re-entry of the ultimate system-theoretical distinction between systems and environment.

As demonstrated by Table 2, one re-entry is enough to create an architecture of true distinctions that captures not only the difference between system and environment, but also distinguishes the system/environment perspective from the distinction between systems in environments and environments in systems.

The case would be different, however, if we had reasons to believe that the system/environment distinction is not a true distinction. Per definition, a re-entry works only with a true distinction, for otherwise it would not be one. Thus, all a digital theory can do when confronted with false distinctions is to translate them into true ones. This is achieved by the transformation of one false into two true distinctions (see Table 3).

The contrastive observation of Tables 2 and 3 shows that definitions of distinctions as true or false are not set in stone. If we take system/environment for a true distinction, we may use it to create digital and increasingly complex architectures of systems and subsystems. If we assume that system/environment is a false distinction, as

<table>
<thead>
<tr>
<th>System</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>Systems</td>
</tr>
<tr>
<td>Environment</td>
<td>Systems in environments</td>
</tr>
</tbody>
</table>

TABLE 2 Eigen-complexity unfolded by the self-application of a true distinction (Roth, 2019, p. 92)
digital theorists we need to translate it into the two true
distinctions non-/system and non-/environment. If we
now combine these two distinctions, the original distinc-
tion is unfolded into a perspective that complements the
observation of systems, environments and entanglements
thereof by an apperception of the world as the ultimate
horizon of all meaning, that is, Luhmann’s (1990) version
of Spencer Brown’s unmarked space that may be ‘injured’
or mapped by the system/environment distinction as much
as other distinctions. This neither–nor perspective
on his own guiding distinction corresponds with one
intuition of the late Luhmann (2013, p. 51) who contem-
plated that an architecture built on another distinction,
form/medium, might be developed into ‘a very general
theory that would transcend even systems theory’ and
‘potentially relativise even the systems theoretical
approach in spite of its universal pretensions and its sci-
entific claims that are currently being especially well
developed’.

In this sense, the above approach—namely, the re-
entry of true and the translation of one false into two true
distinctions—may also be safely applied to distinctions
other than system and environment; and it may even be
radicalized whenever we treat some of the truest of the
true distinctions like false ones (see Table 4).

Table 4 combines two of the most foundational dis-
tinctions of social theorising (Roth, 2019, 2021), namely,
similar versus dissimilar and equal versus unequal, in a
very specific way. Thus, Table 4 reveals that the ‘falsifica-
tion’ of even a reasonably true distinction and its transla-
tion into even ‘truer’ distinctions has a generative
capacity. If the distinction between equal and unequal
is further split into the distinctions non-/equal and non-/
unequal, then the cross-tabulation of the resulting
distinctions creates a world in which we can observe not
only equal and unequal situations, but also those where
circumstances are both equal and unequal—that is, equal
in some dimensions and unequal in others—as well as
circumstances that are neither equal nor unequal and
therefore dissimilar. Thus, the translation of a true into a
truer distinction may lead to the birth of a new

If we treat both un-/equal and dis-/similar as reason-
able true distinctions now, then their cross-tabulation
unveils that they might well be ‘the foundational distinc-
tions of social sciences and, therefore, capable of map-
ning all social forms or variables into one matrix’, as
suggested by Roth (2021, p. 719).

The result of the above translations of false into true
distinctions has striking similarities with the tetralemma
(Kleve et al., 2020; Roth, 2019, 2021), a classical structure
from Indian logics first popularised in traditional Indian
jurisdiction, where it helped to double the options for
decisions a judge could make in court. By default, when
confronted with conflicting interests between two parties,
a judge is expected to rule in favour of one of them. If the
judge experiences this choice as dilemmatic, however,
the tetralemma can help to neutralise the dilemma as it
allows the judge rule not only to in favour of either the
one or the other party but also in favour of both or neither
of them (see Table 5).

In looking at Table 5, it is remarkable that the basic
architecture of the tetralemma is created whenever we
treat a dilemmatic distinction as false and split it into two
true distinctions. Thus, we find that our digital approach
to social theorising rests on century-old foundations and
may be particularly useful when confronted with distinc-
tions that appear dilemmatic or problematic in any
other way.

### Table 3: Result of a translation of one false into two true distinctions

<table>
<thead>
<tr>
<th>System</th>
<th>Non-system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>System in the environment</td>
</tr>
<tr>
<td></td>
<td>Environment</td>
</tr>
<tr>
<td>Non-environment</td>
<td>System in system</td>
</tr>
<tr>
<td>World</td>
<td></td>
</tr>
</tbody>
</table>

Note: The example of system/environment.

### Table 4: Radical un-/truth and the generative capacity of in-/equality

<table>
<thead>
<tr>
<th>Equal</th>
<th>Non-equal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unequal</td>
<td>Similar</td>
</tr>
<tr>
<td>Non-unequal</td>
<td>Equal</td>
</tr>
</tbody>
</table>

### Table 5: The tetralemma as result of the transformation of one false into two true distinctions

<table>
<thead>
<tr>
<th>This</th>
<th>Not-this</th>
</tr>
</thead>
<tbody>
<tr>
<td>That</td>
<td>Both this and that Or that</td>
</tr>
<tr>
<td>Not-that</td>
<td>Either this</td>
</tr>
</tbody>
</table>

3 | EXAMPLES OF FALSE DISTINCTIONS IN SOCIAL THEORISING

A digital approach to social theorising has significant
consequences for social theorising. Consider the example
illustrated in Tables 6 and 7. Though decades old and
intermittently challenged by an untimely declared end of
TABLE 6  Capitalism/socialism: A true distinction?

<table>
<thead>
<tr>
<th>Capitalism</th>
<th>Socialism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalism</td>
<td>Socialism</td>
</tr>
<tr>
<td>Socialism</td>
<td>Capitalist socialism</td>
</tr>
</tbody>
</table>

TABLE 7  Capitalism/socialism: A false distinction

<table>
<thead>
<tr>
<th>Capitalism</th>
<th>Non-capitalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialism</td>
<td>Capitalist socialism</td>
</tr>
<tr>
<td></td>
<td>Socialism</td>
</tr>
<tr>
<td>Non-socialism</td>
<td>Capitalism</td>
</tr>
<tr>
<td></td>
<td>Despotism</td>
</tr>
<tr>
<td></td>
<td>Feudalism</td>
</tr>
<tr>
<td></td>
<td>Fascism</td>
</tr>
<tr>
<td></td>
<td>Environmentalism</td>
</tr>
</tbody>
</table>

history (Fukuyama, 1989, 1992), the debate on capitalism versus socialism has not lost momentum, witness not least the recent revivals or advocacies of ideas of steering markets towards fairer or more sustainable outcomes, stakeholder capitalism, socially responsible investment, ESG metrics, triple bottom lines, sustainable development goals, democratic socialism or eco-socialism (Adler, 2019; Elkington, 2018; Freeman et al., 2010; Giddens, 2013; Kovel, 2007; Pepper, 2002; Schwab, 2021; Schwab & Mallert, 2020; Yan et al., 2019).

If we take the timeworn distinction between capitalism and socialism for a true distinction, then we can perform a re-entry resulting in the observational options depicted in Table 6.

Created by the re-entry of one supposedly true distinction, the result of this manoeuvre allows for little more than the observation of two pure and two mixed types of regimes. Sure, we may insist that the distinction between a socialist capitalism like in Scandinavia and the capitalist socialism of a country like China is crucial. Yet, what is absent in Table 6 are so-called ‘third ways’ if by a third way we mean not yet-another Giddens-style mixed type between, but rather a vision beyond capitalism and socialism. The situation is different, however, if we treat one of the prime distinctions of the 20th century as a false distinction and split it into two true ones (see Table 7).

As always, the translation of one false into two true distinctions combines former separate mixed types into one category and creates a fourth category of neither socialisms nor capitalisms, which now allows for the observational flexibility necessary to recall that history in general and even a century overshadowed by the distinction between capitalism and socialism has seen the rise and fall of many regimes that are not well-understood in terms of either capitalism or socialism (see the exemplary list in the bottom-right quadrant). In this sense, Table 7 may be read as a compact argument that there are good reasons to consider capitalism/socialism a false distinction. In this context, it is noteworthy that the traditional Indian tetralemma has later been extended by Buddhist erudites to include a fifth position that ultimately allows for replacement of one tetralemma and the folding out of another one (Kleve et al., 2020), an approach that has also been found to be instructive for the constructive navigation of paradoxes and tensions created by false distinctions (Roth et al., 2021).

From a comparative perspective, capitalism/socialism appears as a variant of another highly influential distinction, namely, that of economy/society and its now more popular derivate business/society. Raised to prominence in the early days of a then-emerging discipline, the economy/society distinction reflects attempts by the early classics of sociology to make sense of what they took for a decoupling of the economy from the moral bases of the emerging nation-states (Durkheim, 1933; Marx, 1867; Weber, 1978). This perceived ‘great transformation’ (Polanyi, 1978) has since motivated countless conceptual or normative claims, reasons and strategies for a ‘re-embedding’ or ‘embeddedness’ (Beckert, 1996, 2003, 2006) of an apparently the dis-/embedded economy. Particularly the early diagnoses share two implicit assumptions, namely, first, that the economy is not, or may under certain circumstances not be, part of society and, second, that the concept of society is properly defined or demarcated by the borders of a nation state. This overidentification of society with a political construct then lends credence to the image of a categorial separation between the economy and a politically defined society. Against this backdrop, the capitalists appear to be advocates of the economy and the socialists as defenders of society.

Regardless of whether we confuse society with a politically demarcated nation state or hold the economy to be a subsystem of a larger social system called society, however, it is evident that the economy/society is false. In the first case, the distinction is not jointly exhaustive because not everything that is non-political is automatically economic; and in the second case insofar as if the economy is a subsystem of society, then the two concepts are not mutually exclusive.

Neither partisan side-taking nor the detection of countless mixed types or bridges between economy and society can therefore be scientifically as productive as a translation of the false distinction into two true ones (see Table 8).

This digital transformation of the guiding distinction of another perceived ‘great transformation’ is revealing
as it shifts the focus from economy–society tensions to worldviews in which the economy is only one out a larger set of antagonists or subsystems of society, and probably not even the most important one (Roth et al., 2019).

4 | CONSEQUENCES FOR MANAGEMENT AND ORGANIZATION THEORISING

It is hard to underestimate the impact of a digital transformation of key concepts and guiding distinctions of social sciences on management and organization theorizing.

Most notably, the economy/society distinction has for decades exerted an enormous influence on our fields and continues to do so in the ostensibly enhanced variant, according to which ‘the economy is embedded within society, which is embedded within the rest of nature’ (Costanza, 2020, p. 2). This idea has established a habit of defining sustainability into an economic, social and environmental dimension (European Commission, 2001; Mauerhofer, 2008) and became probably most popular under the trademark ‘triple bottom line’ (Elkington, 1994, 1997, 1998).

As convincing as this idea might seem, however, it has extended rather than resolved the above issue of the false economy/society. This fact is best illustrated by the most prominent depictions of the triple-bottom-line model themselves (see Figure 1).

Figure 1 shows the three most common depictions of the triple-bottom-line framework. Each version makes a strong visual case that the economy/society distinction is a false distinction. The left-hand side Venn diagram clearly suggests that ‘Economy and Society’ are not mutually exclusive. The same is true for the upper right nested circles model, which suggests that the economy is part of society. The lower right three-pillar model, by contrast, implies that economy/society is not jointly exhaustive as there seems to be a need for a third concept, the environment, located at the same level of analysis.

As a result, the triple-bottom-line or 3D sustainability frameworks do not challenge, but rather extend or even exacerbate the very overemphasise of economic issue they claim to remedy by their complementary focus on environmental issues. As a result, the antagonism between the advocates of the economy and the political representatives of ‘the society’ is now intensified and perpetuated by claims and concepts devised by of those who think to know best about or represent the needs of ‘the environment’, which the latter commonly confuse with nature, although the term environment is clearly broader than the environmental concept of natural sciences (see Tables 2 and 3).

This example of an enhanced false distinction is one of many that illustrate the capacity of false distinctions to create and perpetuate discourses that might lead to quicker results and into different directions if the underlying distinctions were digitally transformed along the lines outline in this text. In fact, the fields ploughed through by paradox theory are ripe and soaked with countless dualisms, dualities, dichotomies or tensions created by false distinctions (Roth et al., 2021), of which some—like the family/business distinction in business family research (Kleve et al., 2020)—are positively constitutive of an entire field.

In other contexts, the issues created by false distinctions may seem more mundane. Take stakeholder theory, for example, where the constitutive guiding distinction, shareholder/stakeholder, which may be identified as false as soon as we scrutinise the canonical stakeholder diagram by Freeman (1984, p. 55; see Figure 2).

While Figure 2 obviously compiles a comprehensive list of stakeholders of a very large organization, it is less
obvious that one of the stakeholder categories, the ‘owners’, includes ‘shareowners, bondholders, employees’ (Freeman, 1984, p. 56). The issue at stake here is not the dual appearance of employees as a distinct category and a subcategory of another one. Yet, if share- holders are counted among a stakeholder group, then this move undermines the constitutive distinction of the shareholder management discourse and make a clear case that we are confronted with a false, because not mutually exclusive, distinction. The resulting paradox is that shareholders are both shareholders and non-share- holders, that ‘stakeholder’ is an amorphous container concept without an outside or that calls for an increasing stakeholder-orientation amount to an increasing ignorance towards a crucial stakeholder group. These issues notwithstanding, owners, shareowners, investors, or literally shareholders are still being counted among the stakeholders in the stakeholder management discourse on many occasions.

Whereas the above examples show that false distinctions do not necessarily harm, but may also help to sustain academic discourses, it is obvious that false distinctions may create dysfunctional observational biases and increase inclinations for partisan side-taking or ‘activism’, for example, for the business, society or environment side of an ill-designed equation. In fact, there is reason to suppose that many, if not most, trade-offs and dilemmas confronted by management and organization researchers and practitioners are results of false distinctions ‘in action’. On the other hand, it is equally plausible to assume that false distinctions may be strategically employed for the design of such dilemmas and tensions, for example, when distinctions are used to create moral frames or other intellectual devices that narrow the decision-making options down to a point where one of the two remaining choices is basically not an option at all. Examples of such strategies include ‘freedom or socialism’ during the 20th century cold war or ‘trust in science’ versus ‘conspiracy theory’ in the context of the COVID-19 crisis.

5 | OUTRO: DIGITALIZATION VERSUS ELECTRIFICATION

If the idea that digital transformation is closely related to computers and networks of computers is a no-brainer, then it is crucial to recall that whether these universal machines are abstract, mechanic, or electronic does not make a fundamental difference.

Though we management and organization theorists, too, are spending more time ever with computers and online, the outcome of most of our activities remains analogue text, which we are writing line-by-line and then store on computers or post online. For everything digital, we rely on a community of IT experts who configure and administrate the ubiquitous digital architectures augmenting ‘reality’ today.

The present outline of a digital approach to management and organization theorizing is an invitation to develop our coding skills at least up to a point where we can theorize digitally on a ‘low code’ base. Failure to achieve this level of digital literacy would be momentous as it would complicate the development of digital management and organization theories that can keep up with and critically reflect upon the proliferation of digital research methods. Resistance against the digital transformation of management and organization theory would moreover lead to inadequate theories of these increasingly digitally transformed domains of society. Corresponding theoretical resentments might also spark resistance to organisational change or support ideological movements whose goals might be at odds with ideas of an inclusive, trust-based and sustainable digital innovation society. In fact, as we continue to produce and share electronic copies of our analogue book-and-article-theories, the prevalence of false distinction in them constitutes a risk that we not only continue to draw on false distinctions such as man/nature, shareholder/stakeholder or economy/society/environment but also amplify their impact as we misuse the very electronic machines that could enable us to theorize digitally. As long as these false distinctions are used to define moral frames, pyramids of values, sustainable development goals or ‘environmental, social, and governance’ credit systems in a bid to overcome perceived world problems, the odds are fair that the current electrification of our
textbooks, book moneys, passports, and health and weather records might be ‘pushing us in the direction of a new medieval system’ (Huxley, 1958) rather than on a track to an actually digital age. This assessment is in line with Alan Turing’s (1995, p. 390) thought that concerning computers ‘the property of being digital should be of greater interest than that of being electronic. That it is electronic is certainly important because these machines owe their high speed to this (...). But this is virtually all that there is to be said on that subject. That the machine is digital however has more subtle significance’. Thus, if we management and organization theorists accept the challenge of doing more than flooding the Internet with traditional trade-offs and digital copies of analogue text, we shall find that the digital transformation of management and organization theory is yet to come.

ACKNOWLEDGEMENT
The author gratefully acknowledges the receipt of funding from European Regional Development Fund (Project No. 01.2.2-LMT-K-718-02-0019) under grant agreement with the Research Council of Lithuania (LMTLT).

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**How to cite this article:** Roth, S. (2022). Digital transformation of management and organization theories: A research programme. *Systems Research and Behavioral Science, 1–9*. [https://doi.org/10.1002/sres.2882](https://doi.org/10.1002/sres.2882)