

## Complex Times, Complex Time: The Pandemic, Time-Based Theorizing and Temporal Research in Management and Organization Studies

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The Covid-19 pandemic brings *time* to the foreground as a multidimensional force that pervades diverse phenomena. For example, ‘flattening the curve’ – the key crisis management strategy pursued by many governments – is about *slowing down* the spread of the virus so that hospitals *gain time* to ramp up capacities and to heal patients without overflowing. Stimulus programs are about bridging the time between the *pre-* and *post-*pandemic *pace* of economic activity, because the virus is *slowing down* large parts of the global economy. Time is also of the essence in the development, production, and distribution of vaccines, complex tasks permeated by questions of timing (‘*When* will vaccines be available?’), pacing (‘*How fast* can people get vaccinated?’), and sequencing (‘*In what order* should people be vaccinated?’).

The pandemic also brings to light diverse experiences of time. For some, rushed rhythms of busy lives are slowed down. Others, for whom work has been disrupted, grapple with being stuck in a never-ending, ‘future-less’ moment of distress, in which it is difficult to distinguish days, weeks or months. Yet others must cope with the experience of all spheres of their lives (e.g., work, family, and private life) suddenly happening simultaneously, leading to what feels like never-ending fatigue. With space disappearing as a coordination device for many people (e.g., going to an office away from home), time is often the most salient coordination mechanism that structures days and weeks.

These examples lay bare multiple, interwoven temporal dimensions usually hidden from view. Whereas management scholars are increasingly drawing attention to

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individual dimensions of time, the pandemic thus calls for a more holistic approach. In this commentary, we highlight the *complexity* of time – a perspective that is gaining momentum in management research (e.g., Bansal et al., 2020; Blagoev et al., 2021). Such research incorporates multiple time dimensions and their interplay, and draws on concepts and theories of time rooted in social sciences, economics, natural sciences, humanities, and organizational practice. We illustrate what such research should address.

## THE PANDEMIC AND THE COMPLEX NATURE OF TIME

Time is complex. The pandemic has forcefully propelled this realization beyond expert scholarly circles. Taken-for-granted understandings of time as objective, universal, uniform, and reliable have been profoundly disrupted. Many apparently reliable temporal patterns, boundaries, and routines have dissolved into thin air, while new routines based on the digitalization of work experiences have flourished. Breaks between meetings, as well as commutes to and from work, are suddenly gone, making us realize how important and valuable such apparently ‘empty’ times are for transitioning between roles, how easily they can be lost, and how much they may relieve tension. The digitalization of work accelerated by the pandemic has also meant fewer breaks between work and home at any hour of the day or night. At the same time, new types of empty times have been created by the frustratingly widespread cancellation of public and private events, from concerts through football matches to weddings. Suddenly, planning even the most banal of in-person events has become a challenge, because it is difficult to predict how the pandemic might develop in the near term, let alone in the distant future. In sum, the pandemic has unveiled the contingency and fragmentation of time, as one aspect of its complexity.

The pandemic also draws attention to another aspect of this complexity: the interdependence of temporal rhythms. Interdependence means that the enactment of one rhythm constitutes a constraining or enabling context for the enactment of another. When rhythms are interdependent, small local events have large global consequences, as in one person contracting Sars-Cov-2 in Wuhan triggering a global pandemic.

The complex nature of time revealed by this pandemic relates to two fundamental concerns: (a) the *particularity* of the time of organizations, organizational actors and events, and (b) its interplay with a *plurality* of (other) times in organizations and beyond (Gherardi and Strati, 1988). *Particularity* means that time is not absolute but idiosyncratic and relative to the (organizational) systems that observe and, thus, produce it (Luhmann, 1995). *Plurality* implies that organizational phenomena are characterized by multiple temporal rhythms rather than by a single linear conception. In the following, we highlight pathways for research that can advance our understanding of the complex nature of time with respect to these concerns.

## PATHWAYS FOR FUTURE RESEARCH

### Particularity

*Affective dimension of time.* Emotional experiences of and responses to the temporal disruptions caused by the pandemic are diverse and serious. For many, ‘pandemic time’ is associated

with anxiety, distress, and lack of motivation. There are reports of people using strategies to make ‘time pass faster’ (e.g., developing new hobbies, resorting to unhealthy media consumption, etc.) to overcome negative affective responses. Such responses are closely tied with temporal experiences ‘such as feeling like time has stopped or that everything is in slow motion, experiencing a sense of timelessness, confusing the order of time and days, and perceiving a foreshortened future’ (Holman and Grisham, 2020, p. S63).

These examples show that we need a deeper understanding of affective dimensions of time (e.g., Johnsen et al., 2019). For example, we need a better understanding of the emotional dynamics that inform whether actors frame a disruptive event like the pandemic as a threat or opportunity, a question of particular relevance for scholars of strategy and entrepreneurship (see also Kunisch et al., 2017). The affective dimension of temporal structuring can also re-invigorate research on work motivation (and boredom), empowerment (and powerlessness), leadership (and followership), and other management topics.

*Enactment of time.* Our examples also make evident that scholars should explore how time is continuously (re-)enacted in and through situated actions. The pandemic raises issues surrounding not only the change and disruption of established socio-temporal orders, but also their maintenance and, sometimes, puzzling persistence, perhaps in altered (remote) form. For example, there have been huge disruptions in the temporal routines of hospitals and other health care settings. New and more polychronic temporal orders are also emerging as professors can now (and sometimes are expected to) simultaneously give an online exam in one app while attending a video conference in another.

Focusing on the situated enactment of time enables scholars to recognize the dynamics that underpin the emergence, change, continuity, and persistence of socio-temporal orders. Why are certain temporal structures and routines so easy to disrupt, whereas others withstand external and internal pressure for change? Why are equivalent temporal routines disrupted for some, but not for all, and in differing ways? What are the impacts of such disruption and the implied fragmentation of temporal rhythms and experiences, both organizationally and on organizational members’ mental health? How is the enactment of time transformed in the virtual world, in which it seems possible to accomplish multiple, previously incompatible tasks at the same time?

## **Plurality**

*Tensions and contradictions.* The pandemic has exposed a need for a deeper appreciation of temporal interdependencies. These can manifest both synchronically, in terms of tensions among multiple rhythms, and diachronically, in terms of unpredictable, non-linear dynamics within organizations and external to them but affecting them.

It has also exposed tensions among the multiple, interdependent rhythms of organizations and societies. The pre-pandemic pace of economic activity – in terms of the circulation of people and goods – could not hold under the conditions of exponential spread of the virus, because doing so would imply the collapse of the healthcare system. At the same time, slowed-down economic activity for some (e.g., traditional retailers) has implied accelerated growth for others (e.g., online retailers). In many cases, what appear at first sight to be contradictory dynamics actually implicate and mutually constitute

each other. For instance, the relatively monotonous rhythms of work in the home office create and, indeed, depend on the frantic rhythms of home delivery services, online shops, and the like who supply remote workers with food, drinks, clothing, and entertainment. These examples illustrate just some of the ways contradictory temporal dynamics (acceleration/ deceleration, synchronization/ desynchronization) are crucial for understanding the pandemic and its social and organizational consequences.

This also requires scholars to explore alternatives to traditional views of entrainment, which suggest that synchronizing across differing rhythms is often an effective temporal strategy. One potential alternative, vividly observed during the pandemic, is temporal uncoupling (e.g., Geiger et al., 2020), whereby the rhythms of a focal system (e.g., healthcare) are uncoupled or shielded off from the rhythms of other systems (e.g., the economy) as to guarantee adequate internal functioning of the focal system. This view suggests that, in many cases, differences among rhythms need to be maintained rather than dissolved through entrainment. Much more research is need on the mechanisms and practices that underpin such maintenance.

*Non-linear temporal dynamics.* The pandemic also calls for a deeper understanding of the non-linear nature of time. Non-linearity means that the connections between the past and the future are always continuously re-negotiated in the present, rather than constituting a unidirectional vector. For instance, many actors have drawn on distant events in the past, such as the Spanish Flu of a century ago, to make sense of their unfolding and unfamiliar present, in particular during the first months of the pandemic in early 2020.

Such references to the past have sometimes enabled actors to build expectations about the future, unpredictable and non-linear rhythms of the ongoing pandemic, such as, should we expect a second, third, or fourth wave, and will it be worse than the first one? The expected future (e.g., a coming next wave), in turn, is actively drawn upon to legitimate decisions made in the present (e.g., tightening or loosening the social distancing measures). At the same time, the post-pandemic future is being made and remade in the ongoing present, as we observe an increasing disparity of different rates of vaccination around the globe. More likely than not, those who are able to receive a vaccine earlier, and the countries that are first to vaccinate a major part of their population, will be the ones who leapfrog into a post-pandemic future.

This post-pandemic future, therefore, will proceed from very unequal conditions depending on the rhythms of vaccination enacted in the present. What are the scholarly implications of recognizing that time can flow in multiple directions (some linear, some not) and at different rates for populations around the globe? Whether we see time as flowing from the past through the present to the future, or the other way around, or both, can have radical consequences for understandings of organizational continuity and change. By turning our standard, linear notion of time on its head, we may be able not only to imagine but also to enact needed radical, off-trajectory forms of change.

## CONCLUSION

By surfacing crucial temporal dimensions that have previously been hidden, the pandemic makes it possible to appreciate the complex, intertwined, always evolving depths

of time much more fully than was the case before. Insights developing this appreciation can help to create some positive outcomes from a situation that that has devastated so many.

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## REFERENCES

- Bansal, T., Crilly, D., Jansen, K., Langley, A., Okhuysen, G. and Shipp, A. (2020). 'Theorizing time in management and organizations'. *Academy of Management Review*. Call for Papers. Available at <https://aom.org/events/event-calendar/event-detail/2022/09/01/higher-logic-calendar/amr-special-topic-forum---theorizing-time-in-management-and-organizations>.
- Blagoev, B., Hernes, T., Kunisch, S. and Schultz, M. (2021). *The Temporal Turn in Management and Organization Research: Foundations, Key Concepts and New Directions*. Working Paper.
- Geiger, D., Danner-Schröder, A. and Kremser, W. (2020). 'Getting ahead of time – performing temporal boundaries to coordinate routines under temporal uncertainty'. *Administrative Science Quarterly*, **66**, 220–64.
- Gherardi, S. and Strati, A. (1988). 'The temporal dimension in organizational studies'. *Organization Studies*, **9**, 149–64.
- Holman, E. A. and Grisham, E. L. (2020). 'When time falls apart: the public health implications of distorted time perception in the age of Covid-19'. *Psychological Trauma: Theory, Research, Practice, and Policy*, **12**, S63–5.
- Johnsen, R., Berg Johansen, C. and Toyoki, S. (2019). 'Serving time: organization and the affective dimension of time'. *Organization*, **26**, 3–19.
- Kunisch, S., Bartunek, J., Müller, J. and Huy, Q. (2017). 'Time in strategic change research'. *Academy of Management Annals*, **11**, 1005–64.
- Luhmann, N. (1995). *Social Systems*. Palo Alto, CA: Stanford University Press.