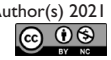
Original Article

Management Learning
1–19



DOI: 10.1177/13505076211053871
journals.sagepub.com/home/mlq

Towards an integral pedagogy in the age of 'digital *Gestell*': Moving between embodied co-presence and telepresence in learning and teaching practices

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Abstract

Digitalisation offers a wide array of opportunities, but also challenges, for universities and business schools alike, regarding the provision and delivery of their teaching and learning activities. The COVID-19 pandemic has highlighted some of these challenges, as it forced educational institutions to move their pedagogic activities online in line with new governmental regulations. In this article, we identify and discuss critically the following three interconnected challenges: (1) shifting from direct embodied co-presence to technologically mediated telepresence, (2) re-embodying teaching and learning activities and (3) rethinking the purpose and relevance of teachings in business schools. We explore these challenges through a phenomenological lens, informed by the Heideggerian concepts of enframing (*Gestell*) and releasement (*Gelassenheit*), with a focus on (re-)embodiment. Finally, we discuss the need, for teachers and learners, to be able to reflectively move between embodied and digital(ised) forms of learning and teaching and outline some implications and perspectives regarding the development of an integral pedagogy.

Keywords

Body, digitalisation, education, Heidegger, pedagogy, telepresence

Introduction

Distance education, remote teaching and online instruction are not new approaches to pedagogy or curriculum design, but they have taken on renewed salience. The emergence of new technologies and the intensification of the process of digitalisation provide, for institutions of higher education and business schools alike, a wide array of opportunities, but also various important challenges

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(Fransson et al., 2019; Holmwood and Marcuello, 2019; Laurell et al., 2020; Stephenson, 2018). However, there are stark differences in higher education regarding the degree to which universities are engaged with online education (Bach et al., 2006). While some institutions solely provide a few Massive Open Online Courses (MOOCs), others offer modules or specialised programmes available online (such as MBAs), and still others deliver degrees fully accessible online. The on-going pandemic is exacerbating existing discrepancies between universities on matters of digitalisation, with institutional, cultural, and national differences reinforcing variances in responses. Differences aside, all these developments feed into the world-wide digitalisation not only of education, but of societies at large, impacting our experience(s) of ourselves, others and the world.

With the COVID-19 pandemic sweeping around the world, with population lockdowns, restriction on the use of social spaces, distancing as well as surveillance systems for 'contact tracing' (see Leclercq-Vandelannoitte and Aroles, 2020), educational institutions have been challenged and their future jeopardised (Williamson et al., 2020a). Specifically, the ways in which the continuing pandemic is calling for redesigning and actually reshaping individual, social and professional activities have affected educational institutions. A large number of them have had to shift most of their operations online, using digital remote education formats under tense conditions and in tightly compressed timelines. Instead of transposing on-going modules, seminars or workshops online, there is a growing need to develop new or elaborate digital forms of teaching.

This article is concerned with the corresponding challenges faced by universities, as they attempt to digitalise teaching and learning activities and engage in new forms of pedagogy. While a large body of research has, for some time already, examined both the strengths and weaknesses of online teaching (Ananga and Biney, 2018; Arbaugh et al., 2013; Redpath, 2012; Schroeder et al., 2010; Whitaker et al., 2016), the challenges and pathways underpinning shifts from 'traditional' to digital learning, (or moves between both), remain to be explored critically. We thus need a framework, which would provide a critical understanding of the embodiment of online learners, in order to better conceptualise the complex and multifaceted entanglements between technologies, the process of learning and embodiment.

Here, we use a phenomenological lens as a way of framing the challenges underpinning the move from 'traditional' to digital learning. We contend that such a lens is particularly suitable, as it allows considering the experiential dimension of our encounters within the world which, in the context of this article, are pathways to a more revealing understanding of teaching and learning in relation to digitalisation in today's world. Phenomenologically, when embodied humans teach and learn, they are integrated in a natural and social order not as mere 'objects', but relationally intertwined with their selves, others, and the technological world as a nexus. Advanced post-phenomenology can help to see (digital) technologies not just as separated functional or instrumental objects, but as transformative mediators of human-world relations (Rosenberger and Verbeek, 2015). In particular, we draw from the Heideggerian concepts of enframing ('*Gestell*') and releasement ('Gelassenheit') that we extend to the digital context. We argue that Heidegger's (1977) notion of enframing (*Gestell*) is insightful when reflecting on the 'technologisation of life'. In particular, it is helpful for exploring how digitalised technologies alter and reconfigure relations between and experiences of (embodied) place, self and others in the context of education (Kouppanou, 2017) and for reflecting on specific challenges faced by educational institutions.

Through our framework, we identify and discuss three challenges. The first challenge concerns the shift from co-presence to telepresence, with the loss of bodily or embodied qualities of interactions between teachers and students as well as among students. The second challenge relates to issues of embodiment and calls for the development of pedagogical approaches that would re-embody teaching and learning activities digitally. Finally, the third challenge, which ensues from the first two, concerns the need to rethink the purpose and relevance of business schools; explicitly,

the purpose and relevance of their teaching practices and types of managers they educate and implicitly, which forms of leadership and modes of organising they reproduce.

As our phenomenological take – informed by the concept of enframing (*Gestell*) – on these challenges will show that there is a need to develop, design and enact more integral modes of learning and teaching. Such integrative pedagogy can best be realised through an ethos of engaged releasement (*Gelassenheit*). This releasement allows a mindful relationship to material and socio-cultural hybrids as they emerge in digitalised teaching and learning. As such, it permits the revival of a form of openness towards the practices and contents of both experiential and experimental learning. A commitment to a re-embodied form of learning, pursued in the spirit of an engaged *releasement*, may mediate the unfolding of 'alternative' forms of economic, societal, socio-cultural, thus political, and ethical interests and inter-relationships.

We structured our article as follows. First, we introduce the Heideggerian concept of enframing (*Gestell*), which contextualises and frames our discussion of the digitalisation, or digital enframement, of teaching, learning and embodiment. Then, we briefly review research on online learning, with a focus on its relation to embodiment. Afterwards, the next three sections outline and explore our three interconnected challenges. Subsequently, we discuss the need for teaching and learning practices that can move between embodied and digital thus co- and telepresence. Finally, we offer some perspectives on a more integrative pedagogy and corresponding learning and teaching practices.

Technologies, embodiment and learning: 'Digital Gestell'

The Heideggerian concept of enframing (Gestell)

For Heidegger (1977), the concept of enframing (*Gestell*) is to be understood as an expression of the 'essence' of the world-forming nature of technology. Each epoch or period thus sees a different form of technological enframing – the more developed and intense technologies become, the more likely we are to have our experience of the world tightly enframed. This enframing as *Gestell* can be seen to shape an 'epoch of modernity' inasmuch as it underpins nearly all iterations and practices within a given socio-historical context (Heidegger, 1977).

The concept of enframing (*Gestell*) reveals how both technology and the process of 'technologisation' are intimately related to our ways of being in the world. Along with other beings, humans stand ambivalently within a technologically enframed world which both opens and limits their horizons. Put differently, technological enframing is pervasively structuring, ordering and requisitioning all around us and ourselves. The modern stance of being enframed is one that instrumentalises and technicises the world as a resource, and that is characterised by its constant availability for further exploitation.

In the age of digital enframing (*Gestell*), everything and everywhere appear as seemingly within immediate reach, which forces all entities (humans included) into a position that allows them to be 'called upon' when needed (Riis, 2008; Wendland et al., 2018). Being enframed means being constantly answerable to a logic of power and domination that is premised on functional and instrumental criteria. Enframing mobilises a formalised language and approach that can model and adjust individuals into technological-calculative beings. What is more, those using digital technologies are themselves in danger of being 'objectified', thus converted into a calculable and regulatable set of pre-programmed informational and datafying patterning governed by the logic of late-capitalism.

Importantly, for Heidegger (1977), the danger of modern technology is that everything is framed or appears to be a technological problem. In turn, solutions can only be technology-based

or technocratic. Instrumental rationality thus becomes the only possible and legitimate way of thinking and operating, indeed the only way of Being-in-the-world. With this orientation, humans lose not only the capability of releasement but also the ability to experience and think otherwise. In other words, they are forgetting that their technological understanding of the world is only one way of interpreting the world among many others. For Heidegger, Gelassenheit (to be understood as a receptive way of thinking and being) is the answer to the problems of Gestell (Claxton, 2018).

With enframement determining the way in which things show up and order, teachers and learners, as well as digital entities, designs and contents, become exploitable 'objects' in the form of tools and resources used by managerial control or governance (Ciborra and Hanseth, 1998). This implies that learning and teaching activities, which are dependent on technology, may become increasingly regimented and homogeneous, which may lead towards strict conformity and homogenisation. When those involved in education start seeing themselves as 'quasi-technological' entities or as extensions of technologies, they are in danger of losing contact with their authentic, embodied and independent being, with the disintegration of a distinction between self and tool-object. The question of the body and embodiment thus becomes central.

Embodiment and the multifaceted nature of technologies

While Heidegger rarely discusses the body itself (see Aho, 2005; Schalow, 2006), he nonetheless made a significant contribution to theories of embodiment through both his critique of technological existence and his hermeneutic recovery of more original ways of being in the world that reveal our fragile interconnectedness with things (Aho, 2010). If all learning and teaching activities take place in a cyberspace, they appear not only to be somehow disembodied, but also disoriented somewhere between everywhere and *now*here.

Importantly, technology has transformed in ways that Heidegger was not aware of during his lifetime. In particular, this includes the collapsing of 'traditional' spatial and temporal frames of reference, and the accelerations in hitherto unseen velocity (Rosa, 2013). Further developments may see modern enframing technologies as a force making everyone and everything homogeneous and one-dimensional. In addition, the original concept of *Gestell* by Heidegger, as an omnipresent and omnipotent technological mode of revealing reality, has been criticised for being either too abstract and/or too nostalgic (Verbeek, 2005). In particular, Heidegger's claims can be seen to be removed from the ways in which technology operates in ordinary experience and have thus been critiqued for lumping several empirically nuanced and historically contingent technological advances into broad, monolithic characterisations (Ruin, 2010).

Yet, Heidegger (1977) did not study technology from an empirical viewpoint; his interest laid in how, within enframed interactions, individuals navigate between different potentialities of 'being technologised'. Rather than discarding the concept of enframing (*Gestell*) and its underlying reasoning altogether as outdated or focussing only on the limited interpretation of an imagined poetic 'inhabitation' to replace the technical 'homelessness', the question should revolve around what Heideggerian thinking has to offer for the 21st century (Georgakis and Ennis, 2014). It thus seems important to reflect on *how technological and economical enframings are connected to very practical questions of power, capital, labour and distribution of wealth* (Eldred, 2017).

Facing the pervasive dominance of digital enframement, the challenge remains to develop creative and engaged ways out of technological nihilism. Such concerns resonate with the pedagogical literature, and in particular, research that has attended to changes induced by the digitalisation of teaching and learning activities that consider the role played by processes of (dis)embodiment in such transitions. We now turn to this literature.

Online teaching, learning and pedagogy

Contextualising online learning

Since the late 1980s and early 1990s, a vast and growing body of scholarship has examined the pedagogical interest of incorporating information technologies (and their affordances) into management education in universities and business schools (see, for instance, Alavi et al., 1995, 1997; Bilimoria, 1997; Leidner and Jarvenpaa, 1993; Redpath, 2012; Webster and Hackley, 1997). Over the years, this has taken many different forms, starting with software enabling remote learning through Internet-based forms of teaching, to informational and communication platform technologies, enabling both asynchronous and synchronous forms, and more recently to MOOCs (see Whitaker et al., 2016).

Implicitly, it was expected that new technological innovations would both improve the delivery of online teaching and make it more affordable (Gilbert, 1996). Interestingly, these technologies have brought to the fore new possibilities in the form of asynchronous learning (Coppola et al., 2002; Jaffee, 1997), more interactive forms (Dede, 1990; Glover et al., 2005; Laszlo and Castro, 1995) or possibilities to create multi-platform teaching resources, for example, blending face-to-face teaching with interface-based online tools (Daspit and D'Souza, 2012). All these developments also generated new (or exacerbated existing) problems, including the digital divide (Hill and Lawton, 2018; Underwood, 2007), copyright issues (Palloff and Pratt, 2002) or disconnection between teacher and learner (Kozar, 2016). This last point, in particular, resonates with phenomenologically inspired studies on learning and embodiment which we outline in the following section.

Embodiment and learning: a phenomenological perspective

The connections and relations between practices of embodiment and learning have been explored in miscellaneous contexts (Dall'Alba and Barnacle, 2005; Heath, 1998; Maiese, 2013). This includes, for example, the professional activities of train dispatchers (Willems, 2018), makers (De Vaujany and Aroles, 2019), academics (Valtonen et al., 2017) and managers (Pittaway and Cope, 2007), as well as the pedagogic activities in universities and business schools (Tomkins and Ulus, 2016). Highlighting the role of bodies in learning processes (Gärtner, 2013; Küpers, 2008; Rigg, 2018; Yakhlef, 2010), this literature has drawn our attention to the tacit or implicit dimensions of learning expressed through embodied interactions. In line with this understanding, the core of learning is not seen to be located within discourses, 'in the form of publicly available symbols, codes and rules. Rather, it primarily resides in the schemata of the body' (Wacquant, 2005: 466) and the corresponding embodied encounters that materialise when in co-presence.

While it has been argued that technologies might enable different forms of embodiment (Jewitt, 2006; Price et al., 2009), there is also a strong sense that something gets lost in the process of moving from physical co-presence to digital telepresence. The distanced, unstable relationship between body and 'subject' with which we engage when we communicate online, places us in modes of identity-formation and pedagogical relations that are very different from those experienced in face-to-face classroom interactions. In digital and distance learning, the body is in a way 'rearticulated' by our increasingly intimate relationship with the machinic (Bayne, 2004) or 'among machines, rather than above or below them' (Simondon, 2017: 18). Besides, this plasticity of technicity and socio-technical culture makes human beings act as coordinators and inventors that might perform the process of learning as a logical extension or reasserting and retaining the Cartesian mind or body split in education, that appears as being available now 'any time, any place'.

Computer-mediated communication and learning through screen, inscribed in the 'dataism' (Beer, 2016), 'datafication' (Williamson et al., 2020b)' and 'learnification' of education (Biesta, 2010) through the instrumentalisation of technology-enhanced learning may limit the intensity and depth of interpersonal and pedagogical contact. This may be related to a form of 'machine behaviourism' (Knox et al., 2020) that entails enacting a combination of radical behaviourist theories and machine learning systems. Such orientation seems to work against notions of student autonomy and participation, seeking to intervene in educational conduct by shaping learners' behaviour towards embedded predefined aims. Altogether, this brings to the fore specific challenges when it comes to the ambivalent digitalisation of teaching and learning activities. Particularly, by approaching this complex process of digitalisation through Heidegger's work on technology and the concepts of *Gestell* and *Gelassenheit*, we identified three specific main challenges. These pertain to the transition from embodied co-presence to disembodied telepresence in teaching and learning activities, attended to in the following sections.

Challenge 1. Shifting from direct embodied co-presence to technologically mediated telepresence

Our first challenge concerns the shift from co-presence to telepresence that parallels the move from face-to-face, campus-based presence, to remote presence online for teaching. In particular, we are concerned here with what 'gets lost' – and potentially what might be (re)gained – in the process of dis-embodying pedagogic activities. Phenomenological research has investigated the specific qualities and processes of embodied learning and implicit knowing (Evans et al., 2009; Gieser, 2008; Küpers, 2005, 2008), thus providing us with a conceptual framework through which to conceive the transition from embodied co-presence to disembodied telepresence.

Other and othering

Relations and exchanges that happen through telepresences appear as distant, non-localised and displaced. Similar to other forms of distributed interactions, such as remote work, telework or telecommuting in virtual space, learning in telepresence enables the presence of the other, but at the same time, constrains and impoverishes the character, richness and depth of (embodied) encounters as well as features of alterity as present in direct face-to-face interactions. This ambivalence regarding the role and position of the other and the quality of interactions is highly relevant as learning entails a responsive engagement with that which is different as well as a receptivity to other ways of being in the world. Thereby, the absence, or rather altered presence, of the 'tele-other' calls for renewed ways of relating and connecting as 'technical media run up against the limit of representability, without being able to represent this limit themselves' (Waldenfels, 2009: 110–111).

A central aspect of learning, which takes place on campuses, concerns peer-learning in the form of interactions among students in the context of seminar discussions, group presentations or informal communication in-between classes (Boud et al., 2014; Boud and Lee, 2005; Havnes, 2008). Informal meetings on campuses open students to other people's ways of being and perspectives in a sense of discovery and engagement learnings from whom they would not have met or worked with otherwise. The absence of such encounters is potentially detrimental to learning processes, as being an active participant of a community has been shown to have a powerful influence on learning (Lave and Wenger, 1991; Wenger, 1999).

Shifting from embodied co-presence to partly disembodied telepresence directly affects the 'provision' of these outlined forms of learning. While there might be ways in which interactions between lecturers and students can be digitally 're-created', this turns out to be a much

more complex process between students. One of the reasons for this might be that students are accustomed to using digital technologies for private purposes other than those of learning or academic or study-related concerns. In light of this, the mobilisation of digital technologies, for the purpose of peer-learning, may be especially challenging, thus requiring the cultivation of new forms of relating to each other as well as media literacy and culture.

Feeling, sensing and experiencing

In terms of presentational performance, a lecture bears striking similarities with theatrical events: it involves a performer (the lecturer) and assigned roles, an audience (students), a setting (lecture-theatre or seminar-room), programmes and scripts (contents), some rules (scheduled times, breaks, quietness, etc.), specific accessories and equipment (white board, slides, etc.), a shared cocreated atmosphere and reality. Such performative perspective has been mobilised to argue against the recording of lectures (O'Callaghan et al., 2017), as it cannot capture the constitutive embodied nature of a lecture. As such, watching a recorded version fails to provide the experiences offered by physically attending and interacting. Put differently, attempting to replicate or transpose the atmosphere of an embodied performance through a video or audio recording is bound to remain insufficient and suboptimal.

Such systematic limitation highlights the need to reflect on what it means to give a lecture, or to perform bodily (Küpers, 2017), in a digitalised way in cyberspace and on how to create digitalised universities as (re-)embodied organisations (Styhre, 2004). The impossibility to fully replicate the atmosphere of a lecture means that digitalising lectures inevitably entails a rethinking of the content provided so that the agreeable and entertaining dimensions and contents may play an increasingly important role (Postman, 1986). This is not just a consequence of disembodiment, but a direct outcome of technologies being the interacting media.

Another illustration of the tensions between (directly embodied situated) co-presence and (indirect technologically mediated) telepresence is reflected in the role that non-verbal cues play in learning. In a digitalised learning environment, the inability to perceive the other as a co-present body in place and time constrains the spontaneous relationship between those involved. With the lack of eye-contact, squelching of voices, and deficits of a mutual enfolding of the senses, possibilities for an embodied reversibility are limited which in turn impact how teachers and learners (are being) see(n), hear(d) and experience others. Instead of sitting or facing one another reciprocally, they perceive talking and listening heads on a projection screen, finding themselves looking up, down or sideways at sometimes much-larger-than-life images of those they see or talk to online. Contrasted to what can be conveyed through traditional face-to-face, embodied activities, teaching and learning in 'interfaced' tele-space imply a tremendous reduction of multisensory experiences. In particular, somatic forms of learning, where the body enacts experiential and experimental learning (Rigg, 2018), are, if not lost, very limited. This distortion of 'social presence' (Hiltz, 1986) leads to missed opportunities to sense and read bodily and facial expressions holistically. In a 'disembodied' relation, those involved miss key-signals from one another, while being susceptible to external interruptions and distractions, leading to distortions in communication.

Here and there

Phenomenologically, relationships and communication in digitalised telepresence affect the role of body and place as it distributes presence in simultaneous interactions. When individuals, teachers or students alike are connected virtually, there is a sense in which they are in two places at once, thus creating a certain dissonance between a fictious presence and felt absence. The temporally

immediate transcendence of space through the use of the digital communication technologies creates a bi-localised space of interaction, which causes specific changes in embodied social praxis. Digitalised connections constitute a de-grounding of place, and a disconnecting from lived bodily environments. Furthermore, not sharing a physical environment also means that the 'space-within-potential-reach' will have qualitatively different meanings for those involved.

The realm of tele-present spaces involves a modified 'we-relationship' through which meaning-intentions are intersubjectively synthesised. The intersubjective achievements concerning projects grounded within the immediacy of tele-present 'place' create an embodiment 'in there'. This 'in there' means that learning takes place in a specific temporal simultaneity (i.e. virtual community of time), thus creating a third realm of co-existence. In such simultaneity, those involved are able to engage in instantaneous, synchronised contact with distant others, who are 'consociate contemporaries' (Zhao, 2004) within an 'electronic proximity' (Dertouzos, 1998). This stance corresponds to a form of 'being t/here presence' characterised by the fact that those present 'share a community of time without sharing a community of physical space' (Zhao, 2015: 114). In such apart-together, tele-co-presence, 'individuals are physically remote from one another, hence "tele"; but in the sense that they are able to reach one another in real or near-real time through electronic mediation, the individuals are temporally together with one another, hence "-co-presence"' (Zhao, 2015: 115).

It is the increasingly important 'perceived proximity' (Wilson et al., 2008) that also explains the paradox of 'far-but-close' in virtual work, which is the state of 'being far' physically, while co-existing with a 'feeling close'. This paradox of 'far-but-close' is typically experienced in communication through conference calls, video conferencing, blogging, intranet and the use of further media. Experiencing being 'far but close' has the potential to jeopardise and displace relations and alienate resonances (Küpers, 2021) of those involved in virtual settings. Relationally, this concerns, for instance, the cultivation of mutual trust or sharing of implicit knowledge (Cramton, 2001; Zhao, 2007), losses of sensory and expressive communications, reduction in intimacy, opportunities to bond with others and emotional involvement (Mann et al., 2000).

As we have seen, one important challenge revolves around the transition from embodied co-presence to a seemingly disembodied telepresence in the context of university teaching and learning activities. More specifically, this transition was approached by looking at the impact of digitalised modes of teaching and learning on alterity, sensations, emotions, relations and spatio-temporal implications. Articulating and understanding these changes help addressing losses and shortcomings as well as responses to the intensifying reliance or dependence on technology-mediated media for learning. Accordingly, the following challenge builds on the first one, reflecting on what it means and how to re-embody teaching and learning activities.

Challenge 2. Re-embodying teaching and learning activities

Our second challenge concerns the path through which to re-embody *differently* teaching and learning activities within a virtual format. Being in telepresence does not necessarily mean that all forms of embodiment and bodily encounters are lost completely. While in telepresence, a sense of embodiment is predicated upon the sensorial body, which is capable of malleability with its experiential boundaries, and thus affects and extends bodily corporeality into the real-virtual environments. The body mediates telepresence and experiences in cyberspace, as embodied beings bring their everyday, real-world understandings and social experiences into virtual encounters. But even more, there is a need for reintegrating the body and embodiment into digitalised learning, discussed in the following.

Re-embodiment, phenomenology and technologies

When dwelling in telepresences, part of the sensorial architecture of the body remains in the physical world, while another is projected into the virtual one. Thus, cyberspace is not a disembodied reality and education does not become disembodied through scopic media (Tschaepe, 2020). Rather, the virtual space is a medium through which a different kind of embodiment can be experienced, leading us to shift the way our bodies participate in education. Moreover, what is experienced may be seen as a kind of transfiguration of body-boundaries, to such an extent that the 'virtual' becomes an aspect of an extended or augmented embodiment. What is therefore needed in teaching and learning is an understanding of corporeality that at the same time re-embodies and transfigures embodiments. Yet, re-integration and transfigurations of bodily dimensions are insufficiently considered in conventional forms of teaching. In turn, a phenomenological understanding of embodied learning can help to understand the need and ways for reintegrating important dimensions. In particular, it can reveal and revalue what heretofore has been unfelt, unseen, untouched, untasted and un-smelled and hence, unknowable, unthinkable or unrealisable, while reworking and reintegrating embodied practices of learning related to digital modes. If learning is rooted and processed in our engaged, bodily lives, what does it mean that the same becomes part of digitalised world and how can it be re-embodied practically?

What happens when experiences of technologies become part of the phenomenal bodies of users or human beings? What happens when technologies are incorporated into the daily rhythms and practices of teachers and learners, to whom a 'bringing near' orientation is intensified and expanded by de-distancing tools of the digital age? Tools and technologies both extend and limit the human body; they also amplify and change human experience. With a 'technological embodiment' (Ihde, 1990), we are materially engaged creatively (Malafouris, 2015) in skilful practices, opening up to new socio-technical possibilities. If embodiment is always already related to tools and to being equipmental, there is a reciprocal relationship between bodies and technologies, with the latter serving as extending the body or enhancing the senses. For an anti-essentialist, neopragmatist and politicised post-phenomenology (Ihde, 2009; Rosenberger and Verbeek, 2015; Verbeek, 2020), human modes of being are a 'continuum of human-prostheses inter-relations' (Ihde, 2012: 374). Accordingly, human–technology relations are not representational relations, but an embodiment of life-wordly relations (Ihde, 1990). Humans as fabricating and tool-using *homo faber* (Ihde and Malafouris, 2019) are made by making things, thus co-evolve with technologies and changing environments.

Furthermore, insofar as technology is used or employed by embodied human agents, the latter ones are also employed by technology (Ihde, 2001), thus a part of a socio-cultural and materio-technical mediation. In turn, if the lived bodies of these agents are the media for all experiences, including the virtual learning and teaching, the use of technologies is never completely 'disembodied'. In turn, this does not mean that technologies and digitalised spaces are neutral, but that they profoundly condition and transform experiences of learning and relations to others. Correspondingly, learners and teachers become deeply layered within and reshaped by the influence of the technological networks in which they are enframed.

Re-embodying online education

With traditional systems of logical order and pressuring regimes that define uniform learning objectives, measurable certainties and skill- and outcome-based imperatives that are limited and merely reconfirm digitalised learning, the call for alternative education concepts and practices emerge. Re-embodied modes can activate potentials for a multidimensional, qualitative and

transformative approach to learning. This turn to embodied modes of learning would need to be supported through education for academics, but also for students – if embodied digital teaching is a skill to be mastered, so is embodied digital learning.

The challenge will be to design courses, pedagogies and organise resources and methods in digital education that scaffold the bodily, affective and interactive dynamics constitutive of understanding in a particular domain. According to Ward (2018), this can be done by identifying bodily and affective dispositions and inculcating affective structure, thus drawing on the pervasive habits of bodily and affective response of learners. Accordingly, a skilled teacher is one who has had their own habits of expression and explanation shaped by affect-laden classroom interactions with learners and vice versa (Ward, 2018). Such experience-based 'hi-story' of interactions between teachers and learners could and should be reflected in the way online learning resources are created and delivered.

Engagement with and commitment to the learning process becomes possible by designing learning materials and practices that 'reshape' the existing bodily and affective responses of learners in requisite ways. As embodied presence and perceptible reactions of other learners can signal-boost the affective salience of the subject matter, these presences and responses need to be conveyed in online learning, by attending closely to pacing, structure, delivery and other expressive qualities of the learning material and their potential effects (Ward, 2018: 16). Online teaching needs to attempt to 'compensate' for its limits by leaning harder on the ways in which bodily and affective habits can be shaped by online resources (e.g. effective analogues while designing and presenting learning material and practices). The challenge lies in leaving room for somatic, emotional, intuitive, non-discursive and artful dimensions of learning, without debilitating intellectual principles of analytical rigour and reason-based enquiry. This orientation would also allow a link to praxis in all its materio-socio-cultural dimensions. All these dimensions are part of a process of inter-relating those involved in new ways to a world extended into both real and virtual spheres.

This second challenge revolves around the path through which to re-embody teaching and learning activities within a virtual format. In particular, it requires exploring relations between technologies and processes of re-embodiment. In other words, this entails reflecting on the ways in which online, digital learning and teaching activities need to be redeveloped in the light of the intricate relation between technologies, embodiment and the sensible world. This prompts to reflect more broadly on the need to rethink not only the delivery but also the contents of pedagogical endeavours. Thus, the following challenge builds on this second one in order to carefully consider how to re-evaluate the purpose and relevance of teaching activities in business schools.

Challenge 3. Re-purposing – rethinking the purpose and relevance of teaching in business schools

Our third challenge concerns the need to re-assess, re-design and re-purpose teaching in business schools, by prioritising social welfare over the pursuit of individual business success. This becomes all the more urgent in the face of multiple crises partly caused by reductionist orientations, unsustainable business practices and disregard or mistreatment of environmental and social realities. In other words, in addition to reconsidering ways in which modules are taught and delivered, there is a need to reflect on actual contents and underlying objectives, as these two facets cannot be kept separate. Correspondingly, there have been calls to rethink goals and ways of teaching and learning in management education for quite some time (Giacalone and Thompson, 2006; Granter and Tischer, 2014; Henisz, 2011; Küpers, 2015; Warren and Tweedale, 2002).

Beyond reductionism

A reductionist approach and one-sided practice of education, with a functionalistic 'silo type' disciplinary and instrumentalising mentality, now perpetuated in a virtual way, would only reproduce 'more of the same' and echo long-standing problems in management education. This refers to ineffective forms of education that partialise or compartmentalise learning, rather than attempting to cross disciplines in order integrate knowledge, concerns and insights more holistically. New digitally updated curricula continue to put too much emphasis on teaching students sets of knowledge and analytical tools, leaving the false perception that management problems can be defined as neat technical packages presented in simplistic ways, with prefabricated templates, pre-programmed arrangements, and linear lists in PowerPoints.

Correspondingly, the curricula of business schools function as an apparatus. With Agamben (2009), such apparatus can be thought of as a 'set of practices, bodies of knowledge, measures, and institutions that aim to manage, govern, control, and orient – in a way that purports to be useful – the behaviours, gestures, and thoughts of human beings' (p. 12). In other words, it is 'anything that has in some way the capacity to capture, orient, determine, intercept, model, control, or secure the gestures, behaviours, opinions, or discourses of living beings' (Agamben, 2009: 14) producing subjectifications and a machine of governance as part of the political theology of the market.

Therefore, the task at hand is to avoid a continuation of poor management theories and teaching pedagogies, now offered at and translated to a digital level, that perpetuate the destruction of good management practices (Ghoshal, 2005), such that students learn 'wrong' things in digitally updated forms. Considering the past and present management education, the call for teaching and learning differently and more critically (Collinson and Tourish, 2015; Cornuel et al., 2015; Painter-Morland et al., 2016) intensifies now with new powerful modes of digitalisation.

Digitality and repurposing

Importantly, the shift to the digital constitutes an opportunity to fundamentally rethink practices. The difficulty lies in an awareness circumventing the limitations set through the age of digital enframing (*Gestell*) and to engage with phenomenological ideas that would give prevalence to other ways of being in and sensing the world.

What is needed are open-ended forms of co-learning that recognise an integral pluralism (Molz, 2009) as a guiding orientation. These forms of learning and orientation give space for processing the complexities and ambiguities of experiences, decisions and practices, including reaching consensus, resolving conflicts and creative problem solving. Overall, the pressing crisis and the necessity to develop more digitalised, technology-mediated forms of pedagogy may provide possibilities for re-assessing, rethinking and further investigating the realities and deeper relevance of how and what is taught and/or learnt and before all why or what teaching serves. Concerning the 'how', the challenge will be how to further develop and enact being online and onsite in ways that connect embodied-analogical and digital forms, thus more integral ways of learning and teaching, promoting opportunities for modes of releasement (*Gelassenheit*). Correspondingly, regarding the 'what', this would entail developing a more integral understanding of responsibility, alternative organising and different forms of knowledge and practices including those of leadership. Finally, the 'why' calls for a reflection on how different, critical thinking, and especially a focus on sustainability and its development in all education, at all levels, needs to become a part of the mission and practice of business schools and universities.

Repurposed ecologies of learning provide a 'a blended learning space where multiple actors co-create sustainability organically using a variety of tools, relations, and forms of learning' (Wals, 2020: 61). For Wals (2020), the underlying emancipatory pedagogy

> is *relational* (allowing for caring for and connecting with people, places, and other species), *critical* (allowing for critique and questioning), *actional* (allowing for agency and creating change), *ethical* (opening spaces for ethical considerations and moral dilemmas), and *political* (confrontational, transgressive, and disruptive of routines, systems, and structures when deemed appropriate). (p. 75)

Embracing such a relational, critical, emancipatory and caring perspective, an embodied and digitally integrated, repurposed education is about finding a balance between qualification, subjectification and socialisation (Biesta, 2006).

Overcoming reductionist orientations and developing a more multidimensional and inclusive learning approach that entails facilitating experiential ways of a relational understanding and processual enactment of learning (Küpers, 2008) is pivotal and an opportunity to embrace. This kind of relational learning would incorporate being, knowing and doing in both real and virtual ways. Moreover, this form of orientation contributes to more creative, integrative and sustainable comprehension and wiser practices of learning and teaching especially related to management (Küpers and Pauleen, 2015; Rooney et al., 2021). Such an integral approach helps also for learning to move between co- and telepresence and calls for specific implications discussed in the following.

Discussion

Moving between co- and telepresence

Many of the aforementioned issues of teaching occur by enacting or practicing analogue in a digital(-governed) world (Hassan, 2020) or when digital (neo-liberalised) universities and its digital labour (Peters and Jandrić, 2018) are organised in network(ed) space and time (Hassan, 2017). As a *Gestell*, they currently have a little equivalence to or correspondence to conventional practices (Pasquale, 2015). The question then is how to deal with the tension, that teachers and students, as *homo digitalis* who exists within the logic of the digital, are no longer people of 'action' (Han, 2017), since teaching and learning are increasingly organised around and by digital devices and environments that formalise, grammatise and capture activities through computerisation?

As outlined earlier, teachers and learners are or can be present in multiple virtual-digital and physical-real places at the same time, or can engage in asynchronous communication, interacting with others located both in different places and times (Leander et al., 2010). The challenge will be to create varying opportunities and tensions during negotiating time-space contexts in moving between co-presence and telepresence to develop engagement, learning and identity (Kumpulainen and Rajala, 2017). Similar to a physical classroom situation, both teachers and learners online have the responsibility to create an educational atmosphere that is conducive to this learning environment. Playing different roles, operating diverse tasks and fulfilling specific obligations in moving between stances of co-present and 'distanced' tele-present learning environments is itself a learning. As much as functioning in tele-present realms is more challenging to meaningfully act, observe, respond and interact, trying to integrate re-embodying elements can make it easier as part of an integral pedagogy practice.

(Political) Implications of enframing (Gestell) on Education: The Power of Mediation

The technological, digital enframing (*Gestell*) pertaining to education in seemingly disembodying ways may imply reducing the need for physical classrooms and 'interplaced' mobility (Howard and Küpers, 2017), while class sizes of online schooling increase, possibly leading to less particular care

and more automated assessment. Correspondingly, large-enrolment classes are supported by new technologies for increased lecture capture (allowing out-of-class access to recorded presentations), which in turn not only questions the status of lectures and teacher presence (Rapanta et al., 2020), but also textbooks, thus speech and writing (Friesen, 2017) and even co-creation of curricula. What is needed for a post-pandemic education is not only open teaching and learning materials (books, online materials, courses, op-eds), but also a more integral practice of teaching that continuously evaluates learning under various circumstances (Zhu and Liu, 2020). This concerns questions about the status of online teaching and self-study as a preparation for onsite practice and how class time can most effectively be used particularly for preparing interactive questions and answers as well as dialogue and debate.

Considering the digital transformation and mediated-ness of the organising of teaching and learning, it is important to consider the organisational powers of (digital) media (Beverungen et al., 2019). This concern for power includes the materio-technological conditions and structuring of what is perceived or perceivable, of what is visible, utterable and representable. Furthermore, as argued by Beverungen et al. (2019), computers and digital media are ordering devices that are embedded and infrastructural, but through a 'remediation' often disappear from the senses. Critical questions then arise like how, and to what further ambivalent effects, digital media can be used in teaching and learning. Or what it means that media 'count' the symbolic, or 'index' the real and manipulate the social (Peters, 2016)? And will a mediated setup of control and command lead to a 'digital Taylorism' (Taska, 2017) in learning and teaching?

An ethos of releasement ('Gelassenheit') for the age of 'digital Gestell'

In the light of the described pervasive enframement by the 'digital *Gestell*' of technologised modes of education between co- and telepresence, a comportment and a non-objectifying ethos of a releasement as engaged letting-be or *Gelassenheit* (Heidegger, 1966) might be advisable. Enacting this mode of the letting-be of things does not attempt to manipulate, master, or control things, but instead lets things and phenomena be what they are in their own vital natures. Importantly, this letting is not one of indifference or lack of interest, but rather an engaged practice. It may be realised, for instance, through active non-doing, receptive waiting or deep listening with an open mind ready for reorientating and moving in different ways. Specifically, this releasement shifts from the prevalent modes in representational, instrumental or calculative forms towards more fluid and poetic relations.

These relationships are mediated by ways of presencing and mindful orientations that, in the spirit of Ingold's (2018) education of attention, are fostering an openness for a deepened experience. For Ingold, education, understood as being intertwined with experience, is not the transmission or depositing of authorised knowledge, but a way of attending to things, opening up and *e-ducare* that is 'leading out', paths of growth and discovery without predetermined outcomes or fixed endpoints. It is about 'exposure rather than immunization. The task of the educator, then, is not to explicate knowledge [. . .] but to provide inspiration, guidance, and criticism in the exemplary pursuit of truth' (Ingold, 2018: ix). Learning guided by this ethos would mean remaining present, responsive and ethically responsible to people encountered, while being aware of possible technological enframements. This implies employing technological, especially digital, devices without becoming entangled and dominated by them.

Contrary to an assumed anti-technology stance, this releasement (*Gelassenheit*) is an ethical and political concept and proto-sustainable practice as it mediates an ethical responsiveness through an orientation that is turning and returning differently towards things, issues and concerns, while embracing a political hermeneutic of (digital) technology (Verbeek, 2020) within the

eco-political situation of our historical time as an Anthropocene and its crisis. Overall, this focus aligns with the role of universities in enlivening teaching and impassioning student life for a global sustainability (Shrivastava, 2020), thus contributing to transformative education (Walsh et al., 2020) that implies re-embodying and repurposing.

Conclusion

In this article, we articulated three challenges that underlie the digitalisation of teaching and learning activities in a shift from co- to telepresence, re-embodying and repurposing. As these challenges are enframed in a form of digital *Gestell*, sensu Heidegger, we explored the role of bodies and media in pedagogical activities. What will become increasingly important is being versatile to move between embodied-real and digital-virtual forms of educational practices, and embracing an experientially oriented, integral pedagogy with an ethos of releasement as suitable responses in the age of a digital enframement.

Considering the already existing diversity of ways of being in a technologically enframed world, releasement is realised in various forms, unfolding through 'local' ways of teaching and learning. Furthermore, releasement is an ethical and political concept and practice, as it mediates a responsiveness and responsibility, while turning towards issues and concerns. It is political in that it entails an acknowledgement of the other's freedom. Importantly, this is neither a freedom of an elitist mastery, nor a tranquillised withdrawal or quietist harmony. Rather is a proto-anarchic condition of openness in which the singularity or non-identity of things, thinking and concerns in learning and teaching can take place with a relative freedom from choice and availability and detachment within the eco-political situation. This implies we may develop creative and engaged ways out of technological nihilism and freely cultivate furtive forms of ethico-political (counter-) practices.

Education in digital times and digitalised ways is highly ambivalent; restrictive of what is possible, but also enabling and mediating new possibilities. As much as digitalisation confines circumstances and ways of relating, feeling, thinking and acting, in parallel, it also opens up new forms of processing, understanding and responding in educational practices. Post-digital education and its scenarios can be viewed as a period of transition in understanding (Jandrić et al., 2018; Knox, 2019) that might offer networked platforms of communication and distributed media for sharing and emancipatory forms of learning, while acknowledging the political economy of the digital and critical understanding of socio-technical systems.

As much as there are emancipating potentials of the digital, conversely restricted and even oppressive working and learning conditions materialise in disembodied engagements. The contemporary pandemic moment has occasioned the re-organising of many aspects of our educational practices and policies, questioning the status quo and restructuring the ways we go about teaching and learning as well as engaging as human beings. No more so than in relation to technology, and thereby how 'we-think', 'we-learn' and 'we-act' (Jandrić, 2019; Tschaepe, 2020). Considering the tremendous challenges for embodied learning and teaching in a digitalised world due to its powerful and far-reaching implications, we hope that the outlined perspectives on re-designed, re-embodied and repurposed forms and contents, provide not only a conceptual base, but also invite corresponding experiments and enactments for more integral pedagogical practices in the spirit of engaged releasement to create a more sustainable and wiser future to come.

Funding

The author(s) received no financial support for the research, authorship and/or publication of this article.

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