Mapping an uncontroversial space: The use of digital technology in school counselling in Romania

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Abstract

The study employed an ethnographic methodology to map the controversies surrounding the use of digital technology within the Romanian school counselling system. Mapping controversies is a method for retracing agency within actor-network theory. The results point towards the surprising absence of controversy within the explored field. This occurs due to discursive tactics that foreground the problem of enacting platformed bodies and ignore controversies associated with wider social aspects. By making the discursive space unconducive to controversies, the counsellors and the counselling system are made vulnerable to the agendas of the numerous actors that are being ignored.

Keywords: School counselling; digital technology; actor-network theory; controversies; platformed bodies

Introduction

The use of digital technology in career counselling has been one of the main driving forces behind the development of new counselling practices during the past decades (Hooley et al., 2010; Kettunen & Sampson, 2018; Sampson et al., 2019; Barnes et al., 2020). The process has not been free from controversies, as digital technology has had important impacts on career development, such as concerns about the loss of counsellor jobs, about data privacy, about the quality of digital career counselling services, or the automation of work.

Even if not all the predicted impact of digital technology has occurred or will necessarily happen, the ominous presence of a future in which digital technology displaces human labour and limits human access to work has been instrumentalised by neoliberal discourse (Hooley, 2019) to foster a feeling of inadequacy and constant fear of being made redundant by forces outside of our control.

Applying Actor Network theory

As fresh sources of power are developed, fresh sources of analysis and political action are needed (Haraway, 1991, p.165). The epistemological framework hinted at by Haraway as an example of such a critical approach is actor-network theory (ANT) (Latour, 2005), which is part of the larger socio-material family of theories. The use of socio-material theories within career counselling studies has been limited, with existing literature concentrated mostly within doctoral studies (Broad, 2013; Barraclough, 2017; Milosheva et. al, 2021).

Socio-material theories take away the privileged position of human actors when attempting to explain a phenomenon and emphasise the agential nature of non-humans. Agency does not imply volition, nor is it an exercise on the part of the observer to personify non-human actors and make them quasi-human. For example, the ice you might slip on while on your way to the counselling office has no wish or intention to cause harm, yet it affects the actors with which it comes into contact. After decades in which epistemologies took language and language games as the privileged path to understanding reality, sociomaterial theories attempt to make matter come to matter again (Barad, 2003).

For career studies, drawing upon socio-material theories opens a path towards reconsidering careers beyond human-to-human interactions, which have a reductive approach towards non-human agencies. Describing the position of a truck driver can be fairly easy in terms of skills requirements and regulation, but it hides the agency of the fuels burnt to make it possible, by relegating it to a footnote.

ANT is structured around three principles (Crawford, 2004): agnosticism, generalised symmetry and free association. Agnosticism purports that there should be no a priori assumptions, that one should be impartial and that no interpretation is privileged over another. Generalised symmetry requires a single explanatory frame to be used for all actants in the network, be they human or non-human. Free association puts the researcher in a position to abandon the conventional split between the scientific object and the social subject (Latour, 1993) when analysing phenomena.

Scientific controversies, in their public incarnation, are debates involving scientists and sections of society around a scientific topic (Martin, 2014). They take a specific meaning within ANT studies (Latour, 1993; Venturini, 2010; Petrina, 2019), where they act as a method for retracing agencies. Controversies act as a tool for democratising the discursive space and allow for all actors to participate in the negotiation process (Venturini, 2010). They emerge, develop and close (Callon, 1986); they do not linger endlessly. Latour (2020) provides the example of the climate crisis, which, after years of debate, can no longer be considered a controversy for science, as the facts are beyond dispute, even though there are groups who will try to cast doubt and politicize the matter, regardless of the scientific facts.

The use of digital tools within career services (Hooley & Staunton, 2020; Wilson et al., 2022) is not done in a vacuum; instead, they become part of the socio-material assemblage that is the counselling system. As the COVID-19 pandemic settled in, digital tools were seen as a practical way to thwart the virus's reproductive programme which was using human gatherings to find suitable hosts. The digital environment was used to enact a different obligatory point of passage (Callon, 1986). In ANT such points are defined as materializations of attempts to capture the movements of other actors. They can take the shape of conceptual tools – such as regulations or research projects – or that of physical infrastructures.

In the Romanian context, counselling started being offered overwhelmingly as platformed work (Gillespie, 2010), where counsellors performed their tasks using one of the several platforms made available by the public educational system. The closed nature of these platforms – though interlopers do manage to intrude from time to time – distinguishes them from the social media that constitute the public side of the platformed society (van Dijck, 2013), but they share the same manner of enacting the platformed body (Møller & Nordtug, 2021; Cardoso & Scarcelli, 2021). The understanding and the experience of one's own body changes when its projection is mediated by a digital device, as their affordances condition what and how we perceive as our own body. This had been apparent for some time (Tiidenberg & Gómez Cruz, 2015), but the pandemic forced the counsellors into a sudden position of having to use their digital bodies in order to represent themselves when interacting with their beneficiaries.

Video-conferencing platforms facilitate the 'collocation of different people on the same mental map' (Gitelman, 2008, p. 7), but they also support and mediate the meeting of digitised bodies. The symmetry that ANT invites us to incorporate into our view of sociality, brings to the fore the fact that it is not only human bodies which are of concern – that of the counsellor and the counselee – but also the body of the digital hardware that requires equal attention, as it needs to be prepared to mediate the interactions.

Background: the Romanian context

The Romanian school counselling system is built around 42 Centres for Resources and Educational Support (CRES) – one in each of the 41 counties and the Municipality of Bucharest – which, at the time of the data collection were employing over 2500 counsellors.

School counsellors are hired by the CRESs, following the same procedure as all other teachers in the public education system. Multiple tertiary qualifications allow access to the profession, the most prevalent of which are psychology, pedagogy and sociology. Counsellors carry out their work in one or multiple schools where they are assigned. They have the status of teaching staff and are required to provide 2 to 4 hours per week of teaching activities, along with their main body of work, which comprises counselling activities.

An exploratory study regarding the patterns of use of digital technology by Romanian school counsellors on the eve of the pandemic (Iacob & Borș-Georgescu, 2022) pointed towards the existence of three groups: a) counsellors who make all-round use of digital technology, who were the smallest group, b) counsellors who make less frequent use of

digital technology, who were the largest group and c) counsellors who make regular use of digital technology for specific professional tasks.

A review of policy documents locally developed by the CRESs has shown that they failed to engage with controversies related to the use of digital technology (Iacob, 2024) due to the use of formulaic approaches in mapping issues affecting the system, which relied on scanning tools not fit for purpose, like the SWOT analysis (Hill & Westbrook, 1997) and the PEST analysis (Diaz Ruiz et al., 2020).

Methodology

From November 2019 to June 2021, I conducted interviews in Romanian with seven school counsellors (C1-C7), three CRES managers (M1-M3) and one project coordinator (PC) working in a CRES. Participants had at least five years of experience on their job.

They were contacted through email and professional meetings. They agreed to take part in the study voluntarily. Ten participants were female and one male (M3), reflecting the gender imbalance affecting teaching positions in the Romanian public education system.

Twenty semi-structured interview sessions were conducted, totalling 640 minutes of recordings. The interviews were transcribed and thematically coded (Braun & Clarke, 2006) using Nvivo.

The participants were explicitly asked to present their experiences and opinions on the controversies, critical incidents and issues affecting the use of digital technology in the practice of school counsellors. The analysis was limited to what the counsellors and managers identified as problematic and did not include what an outside observer could consider problematic or controversial (e.g. the use of personal social media accounts in professional settings, the need to use personal devices for professional tasks).

Results

In line with the results of the analysis of local policy documents of the CRESs (Iacob, 2024), which showed potential controversies being reduced to problems, that were meant to be solved in procedural ways, the interviews failed to identify involvement in the negotiations that surround controversies. The failure raised the possibility that either the theoretical framework had been poorly applied or there were other phenomena at work that precluded counsellors and managers from articulating their engagement with controversies.

Reviewing the use of controversies in ANT, Venturini (2010) warns against using bad controversies in ANT-informed studies, of which he describes four types: cold controversies – where actors either ignore each other or are in harmony with one another; past controversies – where debates are no longer ongoing between the actors involved; boundless controversies – the ones that are highly complex and require considerable resources to be mapped; and underground controversies – which are not publicly observable, such as those involving secretive groups. Arguably, the use of digital technology in school counselling does not fit in any of these categories: it is a current issue, which generates controversies within public debates involving professionals and the general public, and is observable and bound to prescribed professional practices.

Feeling sufficiently confident that it was not the theoretical framework which led me to this point, I have cautiously proceeded to map how the problems raised by the interviewees were precluded from becoming full blown controversies.

Suppressing controversies: denial, downplaying, distancing, doubt

Controversies have surrounded the use of digital technology during the pandemic, and multiple actors have participated in them, but they repeatedly failed to burst onto the scene of school counselling in Romania. The interview participants noticed them but did not feel that the controversies involved them as a community of professionals in the debates.

Public debates have flared around the use of digital technology, aided by the circulation of cultural products such as the documentary 'The Social Dilemma' (Orlowski, 2020), on the practices used by social media companies to increase engagement and drive-up adoption of their products, which was mentioned by one of the counsellors as terrifying and eye-opening. However, when questioned about the use of social media within school counselling, she made a clear break between how they are used in professional settings and elsewhere:

C5: 'I see a bunch of threats, but not for counselling.'

As the Zoom video-conferencing platform was rapidly being adopted as an educational tool, serious security vulnerabilities became apparent (Singer & Perlroth, 2020). Although the National Cybersecurity Directorate issued a warning (DNSC, 2020) noticed by one of the interviewed counsellors, it was ignored by the counselling system, leaving her to decide how to act upon it.

The use of digital technology within the counselling system had episodic reflections in the national press where it showed, for example, how the lack of private space for conducting counselling sessions required students to attend them from bathrooms (Guță, 2020) or while having walks in the park.

None of the reflections and experiences of the counsellors and the managers made visible through the interviews can be construed as representing engagement with a controversy related to using digital tools in a professional setting. That is not to say that participants were not aware of the controversial nature of digital technology or the debates that were taking place around it. They could nominate controversies, but they treated them as not applicable to school counselling.

Several tactics of rendering the discursive space unsupportive towards controversial issues have emerged during the coding of the interview material, which reflect various levels of disengagement and distancing from controversies.

The most potent tactic used was the outright denial of the existence of critical incidents or controversial issues related to the use of digital technology within school counselling practices.

M3: 'To be honest with you, we haven't had any incidents on this topic. Until now, we haven't had any incidents of this kind, which would create the need to over-regulate something of this sort.'

C4: 'During all these months, it never happened to me.'

The representation of the use of digital tools becomes sanitised of any threats either arbitrarily, as illustrated by the counsellor separating the use of social media in professional and non-professional contexts, or by appeal to an unspecified scientific authority or mechanism that purportedly verifies the digital tools that are recommended for the use of counsellors.

The most prevalent disengagement mechanism was downplaying the effects entailed by incidents, the inadequate access to digital technology, and the exclusion they generated.

C2: 'There is a pretty small percentage of children who don't ... who have difficulties because of the technology. 5-10%, something like that.'

C5: 'Really, they [i.e. connection breakdowns] didn't happen too many times.'

The downplaying of the effects was often done in conjunction with the transfer of responsibility to the beneficiaries, even if their vulnerabilities were compounded by other factors that would have warranted additional support.

M1: 'Many didn't join the [online] classes, especially children from disadvantaged groups. Even if they had tablets, they still didn't participate in school activities.'

When incidents happen, they happen to someone else, thus marking a distance between the counsellor and the incident, meaning that it did not require action on their part. Participants identified several incidents, but each time, another counsellor or teacher was the one affected rather than the interviewee.

C4: 'A teacher was coordinating the pedagogical practice of some students, and they joined some [online] classes. [...] They joined the wrong class: they were supposed to join TechEd, but they joined the English class. [...] When it will happen to me, I will learn my lesson.'

The introduction of digital devices in school counselling settings has rendered the actor's body transportable and subject to increasingly more costly procedures for policing its ontological boundaries (Nimmo, 2011). What do we take for the body of an actor? Is a message typed in chat sufficient proof that the person we suppose is behind the keyboard generating it is indeed that person? Is the claimed failure of digital devices real, or just a simulated breakdown? Doubts have plagued the interaction between teaching staff – counsellors among them – and students. These doubts were instrumentalised to obscure the extent of inadequate access to digital devices and connectivity.

C5: 'I've noticed, from what my colleagues tell me, that for maths, Romanian language, biology, there is a very pronounced tendency to have this sort of incidents happen [i.e. connection breakdowns], especially if the students know that they'll have an oral or written test.'

These discursive tactics – denial, downplaying, distancing, and doubt – have taken away the public and communitarian aspects of controversies and reduced them to problems that each counsellor needs to solve alone or in small groups. Counsellors were being delegated the responsibility to negotiate with other actors – parents, IT companies, digital devices, beneficiaries – the fallout of incidents related to the use of digital technology, but this was done within a fixed framework that lacked the mechanisms that would take into consideration the concerns of the counsellors and would have supported them in finding new equilibria in relationship with the other actors.

Enacting platformed bodies

While counsellors were not engaged in controversies, they saw many problems associated with using digital tools to deliver counselling and educational services. Central to these problems was the enactment of platformed bodies, of which three participated in the counselling process: the counsellor, the counselee, and the digital tools (both as physical entities and mediation devices). Each body required preparation for the interaction and constant care, as they were seen as having the potential to fail at any moment.

While preparing for online work, counsellors spared little thought for their physical appearance as they subsumed it into professional routines and did not mention it. What did concern them was the process of digitising their bodies: was their image properly captured and projected onto the screens of the students? Was their voice being clearly heard? Headphones, external speakers, microphones and video projectors – which rendered the voice and the image – became part of the body image of the counsellor. The physical body was only discussed in terms of the effects that platformed work had on it, such as tiredness and increased health concerns (e.g. worsening eyesight, weight gain, reduced physical activities).

Digital tools as physical entities and software also needed care. Very slow computers were returned to the organisation providing them, work phones with limited functionality were supplemented with personal phones, software licences had to be renewed, and workarounds had to be found for testing software to function on newer operating systems.

Digital materiality (Latour et al., 2012) has enabled the creation of digital rooms for digital bodies. Like physical rooms, digital rooms came with different affordances, depending on the software architecture underpinning them and the devices that enabled participants to join. Being able to share a presentation or dividing participants into smaller groups was conditioned by the functions of the software used – Google Meet and Zoom were the most widespread – and the device – laptop, desktop, phone or tablet – used by each participant. New maps were required to navigate this materiality: where was a specific button displayed on a specific device? Did one device allow for one specific function? How was an image displayed on a particular student's device? Getting lost was a common occurrence, as software architecture would change frequently, and devices were prone to glitches.

Unlike for themselves, the counsellor's gaze was much more aware of the counselee's physical appearance. Several reasons might account for this discrepancy. On one hand, students were less accustomed to routinising the preparation of their appearance, they had unequal access to resources to care for and digitally project their image and voice, and they shared their home space with other human and non-human actors, which brought their agendas. On the other hand, counsellors needed to purposefully seek information about the counselees – which in face-to-face settings was abundant, but was much more challenging to access in digital environments. Legal requirements related to online teaching, school codes of conduct and the personal understanding of the counsellors of how students should present themselves have also come into play.

Discussion

The use of digital tools has been on the agenda of counselling services for many decades (Watts, 1986), but they were at different levels of capacity and readiness to engage with the reality brought on by the spread of the COVID-19 virus. While some counselling systems felt reasonably well prepared for such a change (Moore, 2021), this did not seem to be the case for the Romanian school counselling system.

What become apparent in the analysis of the interview material was the propensity to reduce a messy reality that would have warranted being treated as a matter-of-concern, to one rendered as a matter-of-fact (Latour, 2005). Rather than being politicized, disruptions were quickly naturalized and equated to previously mapped situations.

For the investigated context, denying the existence of controversies was the central message that could be discerned from the interviews, even if its veracity was called into question by examples provided later by the same person. This made it possible for the system as a whole to dismiss potential requests by outsiders to join the debates. Mechanisms were not set up to engage in a meaningful way with the actors that claimed a right to be part of the negotiations – like software and hardware providers, parents, the virus, cable networks. Adjustments were based on the educational system's understanding of the needs of the other actors, that had limited support in the way in which those actors represented their own needs.

When the issues were systemic and could not be dismissed, downplaying the effects and transferring the responsibility were the next lines of defence from the controversies that threatened to barge in and engulf the counselling space. For day-to-day practice, less powerful but still effective tactics were employed: distancing oneself from the epicentre of the incidents and casting doubt on the nature of the problem.

Counselling professionals were aware of the controversial nature of the use of digital technology, but the professional discursive space was sanitised of references that would engage the counselling system in a negotiation process with other actors on this topic. Both service practitioners and managers resorted to discursive tactics that suppressed, pushed aside, distanced themselves from or minimised the existence and effects of controversial aspects of digital technology. The critical incidents noted by the interviewees were not treated as issues to be addressed by the professional community, but by individual practitioners.

Enacting platformed bodies became the focus of counselling practitioners during the pandemic, when interactions were almost exclusively mediated by digital devices. Digital bodies are fragile and prone to breakdowns. Streaming them requires great care. Counsellors were preoccupied with digitising their own bodies, creating a digital meeting space, and policing the presence of the counselees. The use of a digital environment entailed constant effort for things that used to be taken for granted in face-to-face settings, such as access to the facial cues of the other participants.

Conclusions

ANT-informed studies shy away from claiming to offer a definitive picture of the investigated reality, recognizing that what they provide is but a snapshot in an everchanging landscape. What they try to do instead is to sensitize readers into recognizing agencies that manifest themselves within the space being mapped, while at the same time inviting them to consider entering negotiations with actors staking a claim of legitimate participants to the process – in our case: counselling processes.

Nominally open and standardized, the use of digital technology within the school counselling system in Romania has proven to be just as messy and entangled as its use within much less regulated environments, such as the gig economy (Galfalvi et al., 2020). By not recognizing this reality and the associated agencies, the counselling system has put the counsellors in a position of continuously being made vulnerable (Sultana, 2022) by those very agencies.

Problematisation in terms of controversies (Martin, 2014) is part of a democratic culture that empowers its members to enrol human and non-human actors in enacting professional practices based on a set of negotiated principles. In the absence of this exercise, school counsellors are rendered vulnerable, with their practice open to interference from other actors, with whom they are not equipped to engage.

Policy makers (Kettunen & Sampson, 2018) retain the legitimacy and power to launch the consultation and negotiation processes needed to co-opt other actors' views into the vision of the counselling system. The urgency of the process rests not only on practical implications of using digital technology, but also on the ethical considerations that arise (Kettunen & Makela, 2019).

What were the agendas of the software and hardware providers? Who had access to the students' personal data? How could that data be instrumentalised? What could be done to prevent interlopers from joining online classes? How did outdated hardware and software affect counsellors in delivering their services? How were counselling sessions affected by the private environment from which they were streamed? How did the presence of pets distort the conversations?

All of these questions require negotiations between multiple actors in order for the counselling system to act as the obligatory point of passage that it presents itself to be. However, because digital technology was an incontrovertible topic in the context of the Romanian school counselling system, the agency of the many participating actors was obscured. Commercial interests remained unscrutinised, cats and babies wondered freely around the counsellor, parents and siblings eavesdropped on the counselling sessions,

saints peered over the shoulders of participants from their place on the wall, family members shared digital devices. When these agencies disrupted the counselling process, it was the counsellor alone who had to figure things out.

Ethical statement

Ethical approval for this study was obtained from the Research Ethics Commission of the University of Bucharest (156/06.07.2020).

References

Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society, 28*(3), 801–831. https://doi.org/10.1086/345321

Barnes, S.-A., Bimrose, J., Brown, A., Kettunen, J., & Vuorinen, R. (2020). *Lifelong guidance policy and practice in the EU: Trends, challenges and opportunities: final report*. Publications Office of the European Union. https://data.europa.eu/doi/10.2767/91185

Barraclough, S. J. (2017). *Re-imagining the posthuman in counsellor education: entanglements of matter and meaning in the performative enactments of counsellor-in-training identities* [University of Canterbury]. https://ir.canterbury.ac.nz/bitstreams/29f46422-0760-4d58-8016-17713c15aaa1/download

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp0630a

Broad, J. H. (2013). *Doing it for themselves: A network analysis of vocational teachers' development of their occupationally specific expertise* [University of London]. https://discovery.ucl.ac.uk/id/eprint/10020018/

Callon, M. (1986). Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St. Brieuc Bay. In Law, J. (Ed.) *Power, Action, and Belief: A New Sociology of Knowledge?* (pp. 196–233). Routledge and Kegan Paul.

Cardoso, D., & Scarcelli, C. M. (2021). The bodies of the (digitised) body: Experiences of sexual(ised) work on OnlyFans. MedieKultur: Journal of Media and Communication Research, 37(71), Article 71. https://doi.org/10.7146/mediekultur.v37i71.122642

Crawford, C. S. (2004). Actor-network theory. In Ritzer, G. (Ed.) *Encyclopedia of Social Theory*, Sage Publications.

Diaz Ruiz, C. A., Baker, J. J., Mason, K., & Tierney, K. (2020). Market-scanning and market-shaping: Why are firms blindsided by market-shaping acts? *Journal of Business & Industrial Marketing*, *35*(9), 1389–1401. https://doi.org/10.1108/JBIM-03-2019-0130

DNSC. (2020, April 2). *Aplicația Zoom are probleme majore de securitate* [The Zoom app has major security issues]. https://dnsc.ro/citeste/alerta-zoom-vulnerabilitati

Galfalvi, E., Hooley, T., & Neary, S. (2020). Are young people aged 16-19 using or expecting to use the gig economy for their careers? *Journal of the National Institute for Career Education and Counselling*, 45(1), 34–40. https://doi.org/10.20856/jnicec.4505

Gillespie, T. (2010). The politics of 'platforms'. *New Media & Society, 12*(3), 347–364. https://doi.org/10.1177/1461444809342738

Gitelman, L. (2008). Always already new: Media, history, and the data of culture. MIT Press.

Guță, S. (2021, June 20). Cum face față un consilier școlar la peste două mii de elevi. "Nu e suficient să ajut 10 copii, dacă alți 100 sunt în dificultate" [How a school counsellor manages to work with over two thousand students. "It's not enough for me to help 10 children, if another 100 are having trouble"]. *Libertatea*. https://www.libertatea.ro/lifestyle/cum-face-fata-un-consilier-scolar-la-peste-doua-mii-de-elevi-nu-e-suficient-sa-ajut-10-copii-3610273

Haraway, D. (1991). *Simians, cyborgs, and women. The reinvention of nature*. Routledge. https://doi.org/10.4324/9780203873106

Hill, T., & Westbrook, R. (1997). SWOT analysis: It's time for a product recall. *Long Range Planning*, *30*(1), 46–52. https://doi.org/10.1016/S0024-6301(96)00095-7

Hooley, T. (2012). How the internet changed career: Framing the relationship between career development and online technologies. *Journal of the National Institute for Career Education and Counselling*, 29(1), 3–12. https://doi.org/10.20856/jnicec.2902

Hooley, T. (2019). Career guidance and the changing world of work: Contesting responsibilising notions of the future. In M. A. Peters, P. Jandrić, & A. J. Means (Eds.), *Education and Technological Unemployment* (pp. 175–191). Springer Singapore. https://doi.org/10.1007/978-981-13-6225-5 12

Hooley, T. & Staunton, T. (2021) The Role of Digital Technology in Career Development. In Peter J. Robertson, Tristram Hooley, and Phil McCash (eds), *The Oxford Handbook of Career Development*. Oxford University Press.

Hooley, T., Watts, A. G. & Hutchinson, J. (2010). *Careering through the Web. The potential of Web 2.0 and 3.0 technologies for career development and career support services*, UK Commission for Employment and Skills.

Iacob, M. (2024). Translation and treason: analysis of policy documents on the use of digital tools in the Romanian school counselling system. *Journal of Pedagogy, LXXII* (1), 223-243. https://doi.org/10.26755/RevPed/2024.1/223

Iacob, M., & Borş, O. (2022). Patterns in the use of digital technology among school counsellors in Romania. *Journal of Pedagogy, LXX* (2), 9–27. https://doi.org/10.26755/RevPed/2022.2/9

Kettunen, J., & Makela, J. P. (2019). Practitioners' conceptions of ethical practice in social networking in career services. *International Journal for Educational and Vocational Guidance*, 19(3), 345–362. https://doi.org/10.1007/s10775-018-9383-4

Kettunen, J., & Sampson, J. P. (2018). Challenges in implementing ICT in career services: Perspectives from career development experts. *International Journal of Educational and Vocational Guidance*. https://doi.org/10.1007/s1077 5-018-9365-6

Latour, B. (1993). We have never been modern. Harvard University Press.

Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford University Press.

Latour, B., Jensen, P., Venturini, T., Grauwin, S., & Boullier, D. (2012). 'The whole is always smaller than its parts' - a digital test of Gabriel Tardes'. *The British Journal of Sociology*, 63(4), 590–615. https://doi.org/10.1111/j.1468-4446.2012.01428.x

Latour, B. (Director). (2020, January 9). MOOC-BL-04-PART-2. https://vimeo.com/383741420

Martin, B. (2014). The controversy manual. Sparsnäs: Irene Publishing.

Milosheva, M., Hall, H., Robertson, P., Cruickshank, P., & Lyall, C. (2021). *The socio-material nature of careers work: An exploration of knowledge co-creation amongst career practitioners*. https://hdl.handle.net/2142/109678

Moore, N. (2021). What has digital technology done for us and how can we evolve as a sector to make best use of what it has to offer? *Journal of the National Institute for Career Education and Counselling*, 46(1), 25–31. https://doi.org/10.20856/jnicec.4605

Møller, K., & Nordtug, M. (2021). Platformed Bodies. *MedieKultur: Journal of Media and Communication Research*, 37(71). https://doi.org/10.7146/mediekultur.v37i71.128779

Nimmo, R. (2011). Bovine mobilities and vital movements: Flows of milk, mediation and animal agency. In Bull, J. (ed.). *Animal Movements. Moving Animals: Essays on Direction, Velocity and Agency in Humanimal Encounters*. Uppsala: Uppsala University, Centre for Gender Research.

Orlowski, J. (2020). *The social dilemma* [Film]. Exposure Labs.

Petrina, S. (2019). *EDCP 585 Lecture Notes (STS Controversies)*. University of British Columbia. https://blogs.ubc.ca/msts/files/2019/04/04a-EDCP585LectureNotesSTSControversies.pdf

Sampson, J. P., Kettunen, J., & Vuorinen, R. (2019). The role of practitioners in helping persons make effective use of information and communication technology in career interventions. *International Journal for Educational and Vocational Guidance*. https://doi.org/10.1007/s10775-019-09399-y

Singer, N., & Perlroth, N. (2020, April 20). Zoom's Security Woes Were No Secret to Business Partners Like Dropbox. *The New York Times*. https://www.nytimes.com/2020/04/20/technology/zoom-security-dropbox-hackers.html

Sultana, R. G. (2022). Four 'dirty words' in career guidance: From common sense to good sense. *International Journal for Educational and Vocational Guidance*. https://doi.org/10.1007/s10775-022-09550-2

Tiidenberg, K., & Gómez Cruz, E. (2015). Selfies, image and the re-making of the body. *Body & Society, 21*(4), 77–102. https://doi.org/10.1177/1357034X15592465

van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford University Press.

Venturini, T. (2010). Diving in magma: How to explore controversies with actornetwork theory. *Public Understanding of Science*, 19(3), 258–273. https://doi.org/10.1177/0963662509102694

Watts, A.G. (1986). The role of the computer in careers guidance. *International Journal for the Advancement of Counselling*, 9(2), 145-158.

Wilson, M., Robertson, P., Cruickshank, P., & Gkatzia, D. (2022). Opportunities and risks in the use of AI in career development practice. *Journal of the National Institute for Career Education and Counselling*, 48(1), 48–57. https://doi.org/10.20856/jnicec.4807