

Agglomerations, Relationality, and In-betweenness: Re-learning to Research Agency in Digital Communication

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ABSTRACT: As today's communicative acts are usually irrevocably tied with digital technology, it is important to better understand the resulting ontological and epistemological shifts. The central claim of this article is that humans can no longer be the prime referents of research, either as pure communicators or pure audiences. Instead, research must become sensitive to relational agential flows, whereby different entities interact within ontologically flat agglomerations. For this purpose, the article develops a posthumanist account of the research process that explicitly rejects traditional anthropocentric assumptions in favor of an egalitarian framework that emphasizes relationality and, therefore, constant multidirectional change without linear paths of causation.

KEYWORDS: agency, posthumanism, technology, agglomeration, anthropocentrism, algorithm.

INTRODUCTION

This article sets out to explore the ontological and epistemological changes that have resulted from our ever-increasing entanglement with digital technologies. Paradoxically, even though such entanglements run as deeply as constitution (or, rather, co-constitution) of everyday realities and experiences, we, both as publics and researchers, seem to demonstrate a lack of awareness, seemingly assuming that traditional categories and methodologies that had primarily been developed for analog environments are still largely viable. Among the assumptions that are largely taken for granted, even though they are without merit in today's environment (if they ever were) are dichotomies between subject and object, actor and acted, human and nonhuman as well as largely unidirectional accounts of causation. Instead, it must be acknowledged that due to the depth of entanglement between humans and their artefacts, communication

research (although that applies to other disciplines as well) must move beyond the traditional notions of technology being a mere manifestation of inventive human creativity (and, therefore, tool-like) towards something much more interactive. In order to do that, however, we must move away from the human, not abandoning it completely, but seeing it as merely a part of a larger meshwork of actors and forces – agglomerations composed of humans, code, algorithms, data, devices and other hardware, infrastructure, signals, and other elements. In order to conceptualize and explicate the ontological and epistemological shifts arising from such changes and to construct an appropriate research framework, this article ultimately develops a synthesis of posthumanism, actor-network theory, and object-oriented ontology whilst also borrowing some elements from post-qualitative methodologies. The result is a highly relation-centric framework that prioritizes *interaction between elements* instead of the elements themselves.

Structurally, the article opens with a discussion of the ever-growing role of the digital in structuring and shaping everyday environment and perceived reality through the combination of algorithm and data. It then explores how this human-digital meshwork challenges traditional assumptions about the human self and its place in the world. Finally, a relational framework is developed that recasts agency not as an attribute of particular elements but as their in-betweenness.

DIGITAL STRUCTURATION OF SOCIAL LIFE

As Hildebrandt (2016, p. 5) asserts, the current condition is best described as an ‘emerging life world that thrives on mobile, hyper-connected cybernetic systems’, thereby overcoming traditional dichotomies such as the natural and the artificial; hence, this is a world that combines ‘a frontend (the world we see and navigate) and a backend (the largely invisible computational architecture that sustains and informs the frontend)’. Likewise, the digital also increasingly structures the socio-political architecture of everyday life, particularly as ‘[p]olitical systems, elections, decision-making, and citizenship too, are increasingly being driven by aspects or by-products of automation or algorithmic systems at different systematic levels’ (Ünver, 2019, p. 1). Simultaneously, today’s digital environment has transformed the allocation of attention: as the latter is scarce, competition over it becomes intense, meaning that competitive advantage becomes deeply rooted in developing ever more efficient ways of targeting individuals and aggregating them into susceptible audiences (Kalpokas, 2019). Political communicators and news media outlets are clearly not an exception in that regard, having to extensively rely on audience analytics (Zamith, Belair-Gagnon, & Lewis, 2019, p. 7). In this respect, a new class of digital-technological actors enters the fray.

In the above context, publics should not be treated as natural, self-forming, or independently existing. Instead, it must be always kept in mind that '[p]ublics emerge when technologies create associations by aggregating people' (Annany, 2016, p. 100), typically by means of identifying and connecting people deemed to be like-minded or likely to have very similar psychological profiles, i.e. likely to react to the same content in predictably similar ways (Klinger & Swensson, 2018, p. 4). Therefore, content governance algorithms create a 'we' by judging similarity (Annany, 2016, p. 107), prompting some authors to ascribe to algorithm-powered online platforms the capacity for 'the orchestration of existence' or, at least, of the conditions thereof (Langlois and Elmer, 2019, p. 10). That association is made possible due to the abundance of '(Big) data captured through digitized devices [that] are processed by algorithms' with the aim of 'predicting what a person will do, think and like on the basis of their current (or past) behaviors' (Newell & Marabelli, 2015, p. 4). Such processes are built deeply into the operating principles of online platforms that need to automate their operations for real-time dealing with staggering amounts of content and user engagement, leading to the structuration of the attention of publics (Flyverbom & Murray, 2018, p. 6).

Bucher (2018, p. 4) defines this structuration and labels it a creation of 'programmed sociality'. In this creation process, 'entities (both human and non-human) are associated and gathered together, enabling interaction between the entities concerned', and that is carried out 'through computational means of assembling and organizing' (Bucher, 2018, p. 4). Hence, in contrast to the assumed wisdom of communication studies, 'contents, messages, and explicit framings of positions may become less important than the underlying conditions that give people access to particular kinds of information' (Flyverbom & Murray, 2018, p. 7). A direct consequence of the preceding is that any communicative act must now be addressed to two distinct audiences simultaneously: humans and social media algorithms that determine its position in the pecking order of content and, therefore, who is going to be exposed to it (Proferes & Summers, 2019). Indeed, without a content item being identified as relevant to us by an algorithm, even information from our closest friends will be omitted, let alone that from more distant communicators (Seubert & Becker, 2019, p. 933). As a result, we can witness a symbiotic relationship between the technical and the social, whereby their presence and relationship cannot be understood in terms of isolated constituent parts but, instead, must be conceptualized in terms of 'networks, assemblages, or hybrids' (Bucher, 2018, p. 50). In a similar way, and referring back to Langlois and Elmer (2019 p. 11), it must be stressed that current processes of structuration of everyday life 'do not focus solely on the person, but on orchestrating a set of relations among groups, humans, non-humans, services or products, places, spaces, technologies, and times', thereby opening

up presence as an agglomeration of extremely diverse interacting entities. In this way, while we should not credit algorithms with taking over the world, we should certainly see them as having dislodged humans from their central position, if there ever was any.

However, we should focus not only on aggregating humans into groups, categories, and publics, but also on framing and molding their perceptions and opinions through content selection. Crucially, as Just and Latzer (2017, pp. 245–246) emphasize, '[a]lgorithmic selection on the Internet influences not only what we think about (agenda-setting) but also how we think about it (framing) and consequently how we act' through drawing attention to some items but not to others and thus shaping the consciousnesses and realities of individuals and, through them, the social order of societies. That leads, following Pötzsch (2018, p. 3316), to 'algorithm-driven constitution of identities' through creation of virtual bonds that encompass humans, contents, and emotions. Moreover, our attachments often seem to be rather zero-sum: hence, as users 'emotionally, ideologically, culturally, or socially align with similar others, they also disalign with the contextually unrecognizable other', thereby leading to polarization of both knowledge and emotion in-between groups, the origin of which may be merely the result of algorithmic sorting of online 'likes' (Döveling, Harju, & Sommer, 2018, p. 4). Nevertheless, even though ascription to groups may have taken place on the basis of some otherwise tangential traits (ones that are otherwise non-central to the individual's life), algorithms can still work as 'technologies of the self' (Karakayli, Kostem, & Galip, 2018) by providing a benchmark for practices, emotions, and tastes dominant within the ascribed group and inciting the individual to take them as an authoritative standard to be aspired to.

Crucially, at stake are algorithmic 'ways of world-making – the practices and capacities entailed in ordering and arranging different ways of being in the world' that ultimately involves setting particular realities as default ones (Bucher, 2018, p. 3). Here we must agree with Vaidhyanathan (2018, p. 13) in understanding truth as 'beside the point', at least in the sense of correspondence between a factual statement and verifiable fact. Instead, truth acquires a functional character – it is what works for and ties together a particular group. Since the algorithmic environment, acting as an 'attention machine', effectively 'directs your attention depending on the way in which other net users have directed their attention' (Citton, 2017, p. 71), the factors of interactivity and relationality become clear: instead of some external standards serving and being analyzable as benchmarks, internal circulations of content and opinion end up sustaining identities and serving as functional truths within and for the group. Hence, we end up being wrapped in experience cocoons that are personalized and tailored to our tastes and preferences by algorithmic agents. Thus, audiences get the pleasure of personalization in exchange for curation of experiences. This collusive pattern is also

observed in relation to some of the major malaises of contemporary information environment, such as fake news and post-truth (Kalpokas, 2019).

A further crucial factor is that datafication of one's life is unavoidable: as Caplan and boyd (2018, p. 4) poignantly observe, 'merely existing in the world means you are structured into the technologies and systems that structure most of social life today'. Hence, the structure and conditions of engaging with the affordances of today's technologically advanced societies leave individuals with 'no choice but to leave a data trail behind them' (Kelleher & Tierney, 2018, p. 199). This datafying tendency is only further strengthened by the Internet of Things and the omnipresence of devices worn and carried with us that collect, send, and exchange data, thereby enabling customization and targeting of messaging down to a very finely grained level (Mosco, 2017, p. 103). As a result, power increasingly comes to depend on the ownership of what Davies (2019, p. 198), in a flip of the old Marxist adage, calls 'the means of data production'. The operational logic of most platform and service providers usually plays a major role here: as it is often difficult to foresee all the possible present and future uses of potentially available data, it only makes sense to apply a 'preemptive capture' mindset, whereby every available data item is retained because some value may always be discovered at some later time (Greenfield, 2018, p. 41), at least as long as that can be justified in light of existing regulations (e.g. EU's GDPR). After all, data are now conceived as an emerging form of capital, the uses of which are multiple, including, profiling and targeting, system optimization, management and control of present things and events and predictions of those to come (Sadowski, 2019, pp. 5–6). The precedings are only those perhaps most immediately relevant to communication.

In essence, algorithms are effective in modifying our behaviors and herding us into communities by working constantly 'to give us more of what we seemingly want' (Bucher, 2018, p. 149). But there is also an important digital-technological-biological interface. As the same hedonic systems of the human brain appear to be involved when indulging in all things from drugs and sex to art to social media, neither properly being of 'higher' or 'lower' order (Nadal & Skov, 2018), what matters is the interconnection whereby the mind's experience of outside triggers transcends to the viscera, with the ensuing bodily changes impacting back on the mind and its engagement with the world outside the body (Damasio, 2018). Hence, once we become engaged in this techno-biological triggering, whereby data about individuals are algorithmically rendered into content recommendations that individuals are bound to enjoy (i.e. that are going to trigger their hedonic systems), a direct and powerful bond between humans and code is forged, one that also has clear addictive qualities. Crucially, because 'we all seek out pleasurable stimulation to our brain chemistry', those seeking to implant information and/or behaviors in us have prime access if they manage to secure

that biological route to our minds (Ammerman, 2019, p. 51). The processes seem to be quite deterministic: due to our psychological characteristics, each user seems to have their own ‘persuasion profile’, meaning that we essentially desire particular kinds of information (regardless of its other characteristics, such as veracity) in a way similar to craving for particular foods (Ammerman, 2019, p. 54). But what really hooks us ‘is not the sensation we receive from the reward itself, but the need to alleviate the craving for that reward’ (Eyal, 2019, p. 97). Hence, once we learn that certain content, source, or platform gives us pleasure, we are strongly conditioned to return, thereby becoming addicted to a piece of trigger-identifying code.

The above triggering through pleasure would, however, be impossible (or, at least, much harder to achieve) without shared *susceptibility* to it, which brings us back again to data analysis: as Sunstein (2018, p. 3) puts it, ‘[i]f the algorithm knows that you like certain kinds of music, it might know, with a high probability, what kinds of movies and books you like, and what political candidates will appeal to you [...] what products you’re likely to buy, and what you think about climate change and immigration’. It must be kept in mind that given enough data, the algorithm will deduce deeper needs hidden behind the ostensibly clear surface layer, such as psychological states behind requests for particular music or film, thereby tailoring other content accordingly without the user even understanding both the tailoring and the need behind it (Siggelkow & Terwiesch, 2019, p. 113), relying simply on an emotional (or even pre-emotional) resonance that just seemingly naturally fits. Hence, the combination of data and algorithms makes possible not just an effective way of microtargeting but also deeper insights into message tailoring for maximum influence and real-time feedback on the uptake and performance of the message, which is immediately associated with the data profiles of both the targeted individuals and those deemed to be similar to them; consequently, both content and delivery can be perfected, non-stop and live (Singer & Brooking, 2019, p. 178), limiting users’ capacity to choose.

A key factor in uncovering the above susceptibility is the emergence of what Zuboff (2019) calls ‘surveillance capitalism’. This new stage of capitalism denotes an era when the large platform providers in particular possess much more behavioral data about their users than necessary for the mere purpose of service upgrade, resulting in ‘*behavioral surplus*, fed into advanced manufacturing processes known as “machine intelligence”, and fabricated into *prediction products* that anticipate what you will do now, soon, and later’, these products ultimately ending up for sale in ‘*behavioral futures markets*’ in which buyers effectively ‘lay bets on our future behavior’ (Zuboff, 2019, p. 8). And as personalization is fully derived from the capacity to uncover present characteristics and predict future behaviors of audiences, the drive is there to tap into ‘ever richer sources of behavioral surplus’ and, thus, to engage in ever deeper behavioral conditioning (Zuboff

2019, p. 278). Moreover, presence of such knowledge enables access to the desired audiences that is typically real-time and involves automated bidding, engaged in by algorithms that represent advertisers; in this way, attention is no longer bought in aggregated blocks (and, therefore no longer needs to be tailored to the average range of interests within the block) but, instead, is aggregated from individuals located across multiple online and offline places, one user at a time (Ammerman, 2019, pp. 31–32). All of the above must, therefore, make us ask, with Ammerman (2019, p. 172), whether ‘our behaviors are the product of nature, nurture, or neural networks’, the latter being a type of machine learning.

TOWARDS A POSTHUMANIST UNDERSTANDING OF AGENCY

Despite the key role played by algorithms, their operation and outcomes are difficult to account for because not only ‘their decision-making criteria are concealed behind the veil of code that we cannot easily read and comprehend’ (and the code itself usually is proprietary) but also algorithms are often ‘dynamic in their ability to evolve according to different data patterns’ (Perel & Elkin-Korel, 2017, p. 181). Moreover, there often is no such thing as *the* algorithm but, instead, a multiplicity of task-specific algorithms, ultimately rendering platforms works constantly in progress: ‘eventful’ rather than outright opaque (Bucher, 2018, pp. 47–48). This multiplicity and perpetual change is an inherent part of the construction (and continuous *reconstruction*) of the digital architecture of contemporary world, as illustrated by the prevalence of A/B testing, whereby different versions of the same code or content are pitted against each other to determine, which one is the most effective in bringing about the expected audience reaction (Bucher, 2018, p. 48). It thus becomes impossible to know what kind of code one is affected by, and different people (both users and researchers) may be faced with different versions of it, rendering attempts at understanding digital architecture largely futile. Effectively, then, algorithms, some of the key structuring forces of the everyday, are clearly moving beyond human understanding (Andrews, 2018, p. 301), directly contravening Enlightenment ideas of enquiry, knowledge, and rational explanation.

Even when we *do* talk about humans being the referents of the contemporary algorithm-infused environment, it is often not immediately clear *what kind of humans* we are talking about: increasingly, these are not flesh-and-blood human beings, but ‘data doubles emerging from the various corporate-controlled big data repositories’ that ultimately ‘feed back into real lives and entail palpable material consequences’, thereby becoming ‘constitutive of what they allegedly merely represent’ (Pötzsch, 2018, p. 3317). Likewise, the ‘life’ of data extends beyond that of humans, meaning that data doubles lead their own existences

even after the physical person is long gone (Lupton, 2020, p. 41). No less importantly, this datafied online presence runs counter to any sense of epistemic stability of the self because, first, we are made and remade ‘a thousand times over in the course of just one day’ as a result of constant updating of and adding to our data doubles and, second, ‘[w]ho we are is composed of an almost innumerable collection of interpretive layers, of hundreds of different companies and agencies identifying us in thousands of competing ways’, rendering an objective authentic self a thing of the past (Cheney-Lippold, 2017, p. 6). Instead, identity emerges as a result of ‘a constant interplay between our data and algorithms interpreting that data’, meaning that ‘[d]ata about who we are becomes more important than who we *really* are or who we may choose to be’ (Cheney-Lippold, 2017, p. 25), establishing ‘a set of relationships that mobilize and aggregate users and non-users with non-human data points’ (Langlois and Elmer, 2019 p. 3) that claim authoritative value over one’s person whilst also being derivative thereof courtesy to datafication processes and in response to user reactions to previous data-based decisions.

Instead of falling for quick, easy, and ultimately misleading essentialisms, we must focus on how ‘digital technologies, software, code and algorithms [...] are both socially *produced* and socially *productive*’ (Williamson, 2017, p. 267). Importantly, algorithms ‘link society, technology and nature in a mesh of relations’ through ‘the many practices of relating, constructing, tinkering and applying’; simultaneously, though, the direction of this process is an unstable one: ‘it is not always the algorithm that is doing the shaping or folding. Sometimes humans fold things into the algorithm, and sometimes algorithms fold things into something else’ (Lee et al., 2019, p. 2). Similarly, Bucher (2018, p. 4 and pp. 94–95) taps into this malleability by emphasizing the necessity to understand ‘software and algorithms as dynamic and performative rather than fixed and static entities’ that not only ‘do things to people’ but also have things done to them *by* people as they are ‘continuously molded, shaped, and developed in response to user input’, while Velkova and Kaun (2019, p. 2) focus on how ‘algorithms and their users co-construct and counter-curate each other’. Here, humans can be placed at both ends. Either as producers (both code writers and users whose behavior is fed back into the algorithmic architecture, thereby affecting the latter’s shape) or as users who become rather strongly subjected to what they consume, revealing paradigmatic relationality and interactivity. The preceding then becomes the basis for what Lupton (2020, p. 14) sees as assemblages, composed of human and digital entities, i.e. materialities that are lively, constantly changing and interrelating.

As the above developments indicate, we need to move from ‘the more *individual* sense of rational-autonomous selfhood characteristic of high modern Western thought’, to ‘more *relational* senses of selfhood’ (Ess, 2015, p. 89) – a kind of enquiry that is often labelled posthumanist for its rejection of the usual anthropocentric

mode of thought and uprooting ‘the common sense of our Enlightenment heritage that matter is passive and mind active’ (Hildebrandt, 2016, p. 182; see also Davies, 2019, p. xi). Under their traditional guise, anthropocentric accounts of the world imply a preferential standard of care applied to humans based on the latter’s allegedly exceptional and unique qualities, thereby justifying instrumental treatment of everything else as mere tools for promoting human wellbeing (Srinivasan and Kasturirangan, 2016, p. 127). As such, anthropocentrism is ‘based on a three-fold thesis, according to which humans are special and privileged entities compared to other living beings (ontology), they are the only sources of knowledge (epistemology) and the sole holders of moral value (ethics)’ (Ferrante & Sartori, 2016, p. 176) as well as a set of allegedly exclusively human capacities, which other entities were supposed to lack, perhaps most notably ‘science, reason, language, tool use, mourning, deception, imagination, and knowledge of mortality’ (Peterson, 2011, p. 131). Most of the above supposedly exclusive characteristics have already been demonstrated to exist elsewhere in nature, but they have also suffered a further blow in the hands of today’s digital technologies (The Onlife Initiative 2015, p. 8).

Posthumanism, by contrast, constitutes a shift away from the dualism of humans and the rest, striving, instead, ‘to unseat the human as the dominant subject of social enquiry while rejecting onto-epistemologies that render humans as categorically separate from the worlds they co-inhabit with proliferating forms of life’ (Margulies & Bersaglio, 2018, p. 103) and, increasingly, with the digital and technological elements of the everyday. For this reason, posthumanist enquiry must replace the human subject as the focus of enquiry with a new research agenda that emphasizes the processes and interactions through which the human and the non-human interrelate (Ferrante & Sartori, 2016, p. 177). Hence, it must be stressed that in lieu of hierarchy we are now approaching a flat ontology of that incorporates both human and non-human elements and their interrelations as the basis for analysis (Mahon, 2018, p. 25). The latter definition must be interpreted as broadly as possible, with the non-human including not only material artefacts but also data, signals, code etc. In this way, functional distinctions and relational hierarchies between the human and the non-human are being erased, ultimately ‘blurring ontological boundaries surrounding what constitutes human, machine, and communication’ (Guzman & Lewis, 2020, p. 81–82). To that effect, instead of being central reference points, humans are demonstrably ‘relational beings, defined by the capacity to affect and be affected’, thereby revealing the human subject as necessarily ‘embedded, embodied and yet flowing in a web of relations with human and non-human others’ (Braidotti, 2019, p. 45, 47). A viable research strategy must, therefore, refocus its attention from the human and, instead, address the plethora of constellations that compose the fabric of the social.

An apt description of changes that have led to the present condition is provided by the Onlife Initiative (2015, p. 7): for them, the key ongoing developments are ‘the blurring of the distinction between reality and virtuality; the blurring of the distinction between human, machine and nature; [...] and the shift from the primacy of entities to the primacy of interactions’ between people, nature, digital elements, and artefacts. As a result of the relational nature of posthumanist enquiry, the question of agential status becomes particularly acute. Here, the kind of body, underlying architecture, or form of being a given entity has should be immaterial – focus must be solely on the effects that one entity has on others (Schwitzgebel & Garza, 2015, p. 100). Similarly, drawing upon actor-network approach, Muriel and Crawford (2020, p. 142) isolate three agency-defining characteristics: ‘first, that agency produces differences and transformations; second, that the characteristics of agency are multiple and do not reside in any one prototypical actor; and third, that agency is distributed and dislocated’. That directly follows the path-breaking work of Barad (2003, pp. 286–287) who had set out to redefine agency as ‘intra-acting’: not an attribute but ‘the enactment of iterative changes to particular practices through the dynamics of intra-activity’. In an almost identical way, Bucher (2018, p. 51) notably opts for what she calls a ‘relational ontology’, which allows her ‘to see agency as *distributed*’, thereby opening the enquiry up for ‘agential capacities of nonhumans’ (see also Braidotti, 2019, p. 54). Likewise, Monforte (2018, p. 380) postulates an unavoidable abandonment of any understanding of the non-human as ‘passive and inert, requiring external (human) agency to do anything’, thereby refocusing research towards ‘actor-networks, entanglements or assemblages of relations between bodies, things, ideas and social formations that affect each other’. Moreover, it seems that even when the human *is* acting, this is not action of a unitary subject, but *interaction* by an agglomeration of chemicals, hormones, tissues, bones, and other diverse elements (Damasio, 2018; Ammerman, 2019).

Crucially, then, the world is to be encountered and enquired into not as something stable, predetermined and pregiven, but, instead, as ‘a set of conditions in which all beings *co-constitute* one another’ (Mitchell, 2014, p. 7), although the term ‘beings’ is perhaps better substituted by a more inclusive ‘entities’. Similarly, due to the ‘lively’ (Lupton, 2018, p. 3) nature of the agglomerations that compose the social, it only makes sense to focus research on ‘practice, action, and performance’, whereby all objects are ‘no mere props for performance but parts and parcel of hybrid assemblages endowed with diffused personhood and relational agency’ (Vannini, 2015, pp. 4–5). Still, Vannini’s original version focuses exclusively on material bodies and objects, which is anachronistic in today’s world and must be extended to technological artefacts, data, code, and signal, with all of these diverse elements comprising an agglomeration that is flat, i.e. composed of summands that have equal status. No less importantly, that agglomeration

‘is not static or fixed in any way’ but is, instead, ‘a dynamic space and time of becoming, emerging, unfolding, and of moving, connecting, diverging’ (Greene, 2013, p. 751). The preceding can only lead to the acknowledgement that ‘life arises from the entanglement of actors’ whose characteristics play no qualifying role (Vannini, 2015, pp. 7–8). Here the capacity for being an active agent is again revealed to be part of immanent ontology, i.e. ‘a *flat surface*’, comprised of various elements and potentials ‘moving at different speeds that produce but do not condition the actual’ in a process that ‘is always becoming’ (St. Pierre, 2019, p. 5). And while the rejection of research design as such by so-called ‘post-qualitative’ scholars (see St. Pierre, 2019) is, most probably, a step too far, they nevertheless offer a key takeaway: central focus on a non-hierarchical and multi-directional plane in which the distinction between the actual and the potential becomes blurred, meaning that, as DeLanda (2016, p. 1) suggests, the various assemblages and agglomerations that interactively constitute the world are never products but always processes in and by themselves.

Particularly with regards to the reliance on relation and emotion-laden flows of online communication, non-representational theory’s shift ‘from cognition to the pre-cognitive (or non-cognitive), focusing on practices, giving equal weight to (material) things, and stressing affect and sensation’ (Kormelink & Meijer, 2019, p. 638) makes particular sense. Here, affect encompasses relations between all the elements in hybrid agglomerations, being ‘an in-between, relational phenomenon’ courtesy to which ‘[s]ubjects cannot be disentangled from objects, or individuals from their situations’ (Wetherell, 2015, p. 158). For an illustration, we may imagine a person listening to music on a streaming service: a particular affective intensity is passing through a technological device and then, as soundwaves, through the air to enter the person’s ear to then cause bodily reactions (nervous signals, hormone releases) that get translated into action (continued listening or skipping the song) which, through a device and network infrastructure is passed as a signal to create data and metadata entries to then inform the next affective intensities to be passed, first as signal, then translated into soundwaves by a device, to both the person in question and those deemed to be similar to them. This constant entanglement, of which the preceding is merely one example, only serves to underscore that everyday life, in both exceptionality and mundanity, must be seen as ‘an ongoing composition in which humans and non-humans participate’ (Neyland, 2019, p. 11) without clearly pronounced causal hierarchies.

The above relational account, based on affective interactions, also allows to make sense of the interaction with and between, and the actual impact of, a great variety of content, both truthful and fake, and of users, from transparent human users to anonymous or pseudonymous trolls to sockpuppets or outright bots: as Harman (2018, p. 61) bluntly puts it, even Sherlock Holmes,

unicorns, and others are fully-fledged objects on their own right as long as they are interrelated with by other entities. Hence, while ‘the real horse has a *different form* from the imaginary horse, and clearly a different form from a unicorn’ (Harman, 2018, p. 258), that is the only difference between them; and what really matters, and what underlies both their sameness and difference, is their affective capacity vis-à-vis other entities. An agenda for research must, consequently, center around analyzing the lively *interactions* between the diverse elements of agglomerations and the affective intensities that bond them instead of simplistically focusing on the humans or (in more technological-determinist circles) on the algorithms that are deemed to be the agents responsible for a particular communicative act or pattern. This, notably, also involves a change of perception from actors to in-betweenness, i.e. tracing the pressures and the touchpoints through which elements incur changes on each other. Crucially, causation must here be understood not as a linear movement from the mover to the moved but as multidirectional interaction between multiple movers and moved elements whence, even if a dyad is isolated, the relationship between them will likely be bidirectional, often via the mediation of data. While that by no means disqualifies quantitative research, it puts much more onus on interpretation and description, necessitating a narrative on affective flows.

CONCLUSIONS

This article has demonstrated the necessity to move beyond traditional understandings of agency, particularly of the anthropocentric kind, in communication research. Humans simply cannot be seen as autonomous actors, either as communicators or as audiences, but are, instead, deeply interwoven with other elements, such as code, data, devices, communications infrastructure, data etc. in what, due to their non-hierarchical nature, could be called agglomerations. While at certain moments and in certain contexts some elements (e.g. data-rich platform providers, algorithms that structure information supply, or something else) may acquire a larger share of power, there nevertheless remains a sufficient degree of interactivity to ensure that agency remains in-between, a potentiality always circulating among the elements. In this context, it is reasonable to adopt a posthumanist outlook that embraces equality and relationality among the diverse subjects, objects, and experiences of this world. Hence, the core implication for researchers is that we must refocus attention from humans (both in terms of them acting and being acted upon) towards the space in-between elements and the affective networks of interactions and relations within that space.

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