



A(l)gora: The Mindscape

Cheryce von Xylander (☑)
Leuphana Universität Lüneburg, Universitätsallee 1, 21335 Lüneburg, Germany cheryce.von xylander@leuphana.de

Abstract

This essay for the inaugural issue of *Technology and Language* articulates how we inhabit public space in the critical tradition of the Enlightenment and in the condition of contemporary cyber-technologies. The fabled *agora* of the ancients has forfeited its intersubjective relevance and imaginary potency. Community no longer hinges on communing: Algorithmic Gate-Keeping is taking command. This paper sounds the bell for a new approach to envisaging social cohesion based on the notion of an "*algora*," a term coined to describe a state of affairs that has a longer, largely overlooked, philosophical pedigree. The history of cognitive ideation is also the history of "mindscapes." They are occasioned by the conjuncture of technology and language, an insight articulated by Kant, formalized by Turing and now practiced by the global citizenry of users, daily hammering out on keyboards what this means in practice.

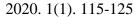
Keywords: Cyber-Kant; Mindscape; Algora; Public Space; Philosophy of Mind; Turing Imitation Game; Reason as Composition

Аннотация

В этом эссе для первого выпуска журнала "*Texhonoruu в инфосфере*" ("*Technology and Language*") описывается, как мы живем в публичном пространстве в традициях Просвещения и в условиях современных кибер-технологий. Легендарная агора древних утратила свою интерсубъективную значимость и воображаемую мощь. Сообщество больше не зависит от общения: контроль берет на себя алгоритм. Эта статья является сигналом к новому подходу к представлению о социальной сплоченности, основанному на понятии "алгоритма" – термина, придуманного для описания положения дел, имеющего длительную философскую историю, в значительной степени игнорируемую. История когнитивного мышления – это также история "лабиринтов разума". Они вызваны соединением технологии и языка, предвиденным Кантом, формализованным Тьюрингом и ныне осуществляющимся благодаря участникам глобального государства, ежедневно выясняющим на клавиатуре, что это означает на практике.



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I.

Public space was privatised while our philosophers were busy doing other things. What was once the agora of the ancient Greek city-state has morphed over the centuries until it was supplanted, recently, by an algora, if you will, owned and upheld by a bloc of global media empires. No longer a bounded place, the algora resembles an extancy amorphously transacted online and steered by algorithmic gate-keeping. Pandemic ersatz sociality has pushed the transformation front and centre: the immediacy of anonymous proximity associated in its purest form with the agora – and in derivative application with the temple, the church, the museum (both in classical and modern conception), the theatre, the restaurant, the cinema, the gym – has given way to a new modality of being alone together (euphemistically, called "connection," "connectedness," and "connectivity"), a synchronized isolation marked by the ineluctable surveillance that has been built into the system. 1. We are left with a two-tiered oxymoron: a private public space with no locality. Will these new arrangements deliver the insight and sagacity we have come to expect and rely upon for the conduct of social affairs? How will we know if the life-sustaining metabolism of consensual sanity is no longer properly, sufficiently and reliably selfcorrecting? And most importantly, perhaps, where shall we turn for guidance if said agora/algora phase-shift turns out to be detrimental to our deliberative processes, and radically disruptive of the cognitive tools and dexterities on whose sound functioning our techno-scientific civilization, fragile in its sophistication, has come to depend?

This would be a fine question to put to a contemporary philosopher but for the complication of historical reflexivity: Western philosophy - a branch of aestheticopolitical shamanism which in its most orthodox, disciplinary formulation is especially partial to the regulative function of societal congregation – traces its origins to the very public space that we take to be metonymic for the practices of reason established in the pre-digital era, namely aforementioned agora. In the absence of this organising principle, it is unclear how we might resolve, collectively, wherein new operative standards of rationality consist. Philosophers of the agora discharge the performativity of reason before a live and semi-cohesive audience in the referential matrix of spatial embodiment and gestural signification. To philosophize with, through and by means of the algora, by contrast, amounts to a feat of epistemic pioneering akin to navigating the open sea without compass or map. Of course, it is possible to settle into the delusory comfort of projecting the agora onto the algora – as the user interfaces at every access point of our quotidian deep dives into cyberspace encourage us to do. This allows the prospectors, namely all of us, to read the old into the new and, specifically, to impute speech acts to a mimetic machinery that is merely giving a good impression of actualized intentionality. The danger here is that the false conception will likely preclude any strategic and calculated course correction.

Today's algora reaches everywhere and nowhere. The logic of spectatorship is reversed with respect to the former idiom of corporeal communication; digital infrastructures stalk their users' every action and inaction. We are the unwitting

¹ For incisive analysis of the political consequences, see Zeynep Tufekci (2017).





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performers in this arena, continually replicating our own agency. There is no audience, a notion from the trope of theatre and museum, more public spaces rendered defunct by pandemic and digital transformation. Instead, attention scatters through the interstices of mediated communication and spawns an emergent, distributive, composite and heterogeneous field of sensory activity, in short, not only a "techno- or mediascape" (Appadurai, 1990), but a vast and amorphous mindscape (Xylander, in press), where public and private are hopelessly entangled. In addition to the platforms being proprietary, commercial venues - that is to say private assets - the very distinction that the public/private dichotomy conjures has been rendered obsolete. Public patterns are calculated by culling private judgement calls aggregated on the fly while private stirrings answer to imperceptible *public nudgings* (Couldry & Mejias, 2019). This dynamic recalls autopoiesis although they are prodded by determinist protocols of command lines with an admixture of heuristic spontaneity. Such procedural doings generate a most precious albeit essentially artificial commodity, namely datafied agency, a novel resource of consummate ideality whose value chain depends, signally, on concealment, or in other words public privacy. This is not a necessary feature of the system. It is a perversion we are complicit in sanctioning through regular use.

II.

Why launch a journal called *Technology and Language*? We associate technology with engineering and manufacture, language rather with the humanities and contemplation – worlds that appear to be further apart today than ever before. Pundits peddling the clash of cultures lament that the divide between *téchne* (craft, art) and *logos* (word, knowledge), laboratory and study, hand and head is driving the loss of felt meaningfulness and a general decline of values in the Western world. There is a growing cabal of celebrity culture warriors earning their keep online as influencers and digital spin-doctors with this lucrative narrative of fissure and decline (Ruoff & Xylander, 2020). The remedy to this trending divisiveness, they would have us believe, is the embrace of ideological adhesives, causes that purport to unify community around covenants of sectarian "identity" (be they gender, race, sex, or blood and soil, and devotion to a charismatic leader or other varieties of ethnic exceptionalism), or around esoteric invocations of "wholeness" (Horn, 2020). But is this, perhaps, a misleading line of argument? Do such descriptions of the malaise perpetuate the very syndrome that these agitators foment?

Taken alone, the title *Technology and Language* conjures new media environments with their sundry *ersatz* engagements, liminal actualities and iterative routines. "Duolingo" comes to mind, "Babbel" and untold other Apps widely in circulation – online services for the learning of foreign tongues in the age of digital tuition. Such stirrings typify modalities of enculturation that bring into effect new patterns of anthropogenesis without ever occasioning displacement, mobility or friction of any kind. Virtualized armchair globe-trotting for, shall we say, everywoman and everyman and every LGBTQ+person. Brain exercises said to stave off dementia. The philosopher's guide

² For a discussion of this cultural divide as reflected in the orthogonal "literacies" of paper – writing paper vs. industrial paper, see Xylander (2017).

³ Kenan Malik (2019) notes that it is considered progressive to pursue politics in the name of disadvantaged groups, be they transgender, muslims, or women.





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through the galaxy can begin right here. While language acquisition is certainly relevant to the field at issue, of central interest here is not massively online multiparticipant cyborg pedagogy. Nor has the disjunct spurred the editorial inspiration: this journal is not about technology *or* language; these should not be considered optional alternative lines of enquiry or simply domains of complementary activity. This digital journal — with its purposive attempt to reimagine the classical public space of the *agora* under the brave,

enquiry or simply domains of complementary activity. This digital journal – with its purposive attempt to reimagine the classical public space of the *agora* under the brave, new, twitterfied conditions of the distributive tiktok talk making up the *algora* – seeks to articulate the conditions of possibility for a disinterested conjunction of the two. What is it about technology *and* language that might warrant special claim on our attention? And why should said concomitance preoccupy us at the present time not just for the duration of an essay or the length of a monograph but on an ongoing basis over consecutive issues of a quaint throwback, a scholarly journal, in the guise of an online hub for opining?

The answer lies in the recent convergence of technology and language as generative potentialities fostering cognitive surplus value. With the Universal Turing Machine, technology has been abstracted into a generalized model of its own functioning; mechanical appliances have been usurped by the grammar of their problem-solving logics. Nanotechnology has turned material science into hermeneutic exegesis: we need only recall the parabolic presentation of IBM inscribing itself into the elemental structure of matter itself by means of atomic self-issuance (Nordmann, 2006). Scriptural authority has been delegated to particle physics while the Universal Turing Machine – today a constant companion of average punters in the oft touted Free World, though certainly not free from software entanglement, from as early as the age of three onwards (Auxier et al., 2020). The internet of things reverses the relative priority of "actants," to speak with Latour (1996); a networked surround on which humans intermittently interpose their attenuating presence dominates.⁴ Ironically, "anonymity" is most highly prized where it has been effectively obliterated by design, namely on the internet.⁵ Optimization as governing principle: With the ever-increasing scale of automation has come a shift in the locus of supervisory steering functions, what Shoshana Zuboff (2019) calls "surveillance Capitalism." The wiles of reason, once by-product of engaged human assembly, both anonymous and deliberative, are being usurped by the iterative calculus of recursive emulation – how things were done in the past bootstraps and benchmarks the fractal archaeology of future marginal action. The sweeping indexicality of today's information architecture is re-formatting late enlightenment subjectivity, which was partitioned according to the dictates of individuated personhood (Foucault, 1966/1970). Future philosophy of mind will parse differently. As intelligible decision-making becomes manifestly less anthropocentric, the interpretative proscenium of the romantic self will likely succumb to a hybrid idiom of self-regulating incrementality based on human-

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⁴ Peter Weibel's "Streaming Festival" can be understood as a performative philosophical exploration of this digital turn with its attendant social adjustments. Due to pandemic lockdown, the official opening of the "thought experiment" (*Gedankenexperiment*) he curated together with Bruno Latour for the ZKM Karlsruhe, "Critical Zones," had to be postponed. Weibel took the exhibition online – and turned it into a test run of alternative public spaces. For a review of the streaming festival see Xylander (2020).

⁵ The Electronic Frontier Foundation (EFF), a forceful lobbyist for internet anonymity, offers a rationale in an online mission statement on Anonymity (Anonymous, n.d.). For political contextualization of the EFF see Levine (2018).

⁶ For a related argument based on the transformative impact of recent film culture see Denson (2020).

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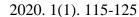
machine interactions where, and this is the crux of the journal, *Technology and Language* form a continuous concurrence.

Our first task is not healing the rift between the apparatuses and their operators. We must take stock of the loss of a meaningful demarcation between organic and inorganic purposiveness. Alan Turing's (1937) "On Computable Numbers, with an Application to the Entscheidungsproblem" reduces the design of problem-solving to combinatorial tables of inputs and outputs. His later essay, "Computing Intelligence and Machinery" (Turing, 1950) correlates the totality of discrete state machines that comprised mechanical processing on the Victorian factory floor with the "digital computer." He reminds the reader that before artificial intelligence contracted into the semiotics of the digital, it articulated itself in the coordinated cadences of industrial manufacture. Mechanizing the means of production involves automated problem solving, that is to say an instrumental enactment of purposive action, in short, applied reason. Turing famously equates intelligence to an "imitation game," which quite pointedly does not consist in a human pretending to be a machine, a scenario that would end with a knock out in round one (Turing, 1950, p. 434). Instead, the imitation game calls for the machine to dissemble, to make like its human counterpart, to act actually human. Yet, the contest does not consist - as usually maintained - in the machine's feigning blanket humanness. The imitation game is scripted more exactingly. Its scenography is alluringly hybrid, fluid and recombinatorial.

The "digital computer" qua Turing is precisely *not* simply humanoid in semblance; it simulates *embodied humans*. To begin with, he imagines the contestants of the imitation game to be gendered, namely a man and a woman. The man pretends to be the woman and an external interrogator attempts to identify who is who (Turing, 1950, p. 433). For the next round of the imitation game, one player is replaced. It happens to be the man. Now the contestants are, on one side, the woman from the previous round and, on the other, a machine pretending to be a man pretending to be a woman (Turing, 1950, p. 433). Turing cycles through various castings of these roles. Elsewhere in the essay, he summons two technological contestants: an actual piece of manufacturing equipment, on one side, and a digital computer pretending to be a programmed automaton pretending to be a mechanical device, on the other (Turing, 1950, p. 440). His imaginary dramatization of mindful action is every bit as transmutable, phantasmagorical and kaleidoscopic as this may sound. Go read the original. Turing's transcendentalism evokes a transgender, nonbinary utopia.

At the end of what reads like a brilliant polemic against brain exceptionalism, Turing takes the imitation game to its logical conclusion. In the final round, we revisit the earlier match between the machine pretending to be a man pretending to be a woman, for one, and the original woman, for another; she is now replaced by a digital computer (Turing, 1950, p. 441). We are left with the unsettling impression of two dissimulating automata — subtly differentiated at machine-level specification — who now compete against each other for a mantle of spurious authenticity that has no sensory relevance. All that remains in view are imitative routines fuelled by the ingested remnants of obsolete identities, gendered or otherwise. Intelligence, in this conception, amounts to the simulation of intelligent behaviour, be it by humans or machines. A radically constructivist cognitive paradigm where the very parameters of agency are up for grabs. No longer bounded by corporeal or sensory givens, agency would then arise as pure







immanence from transactions occurring in a matrix of co-incidence and its antecedent contingencies.

Technology and Language sounds innocuous enough, even non-committal. It invites you to free associate on technology as a linguistic practice with its own grammars, semantics and inflections and on language as a cognitive technology. Such deliberations could fill numerous issues without admitting to what is ultimately at stake, namely the question of philosophy itself. Taken as a logical quantifier, the conjunction commits us to a quest for what technology and language have in common – and that, I submit, is a peculiar reliance on and furtherance of the philosophical ground of the means by which cognition materializes as a force able to shape the composite that is reason.

III.

Reception histories can perpetuate distortion. The German philosopher Immanuel Kant (1724-1804), a pioneering theorist of public space and the distributive mechanics of reason and judgement, is widely revered as an advocate of the capitalist bourgeois subject (Pinker, 2018, p. 24). He has been portrayed as its most persuasive spokesman, its cardinal champion. Rightly?

Let us consider the following account of the history of ideas casting Kant as the primogenitor of reason as composition. His program was elaborated in many different keys: there is its material application to worldly circumstance in fiction, see "On the Marionette Theater" by Heinrich von Kleist (1777-1811); it informs the quantitative theorizing of psycho-mechanics, see the real-idealism of Johann Friedrich Herbart (1776-1841); it is at work in the gospel of resistance forming the essence of war and peace, see the writings and military career of Carl von Clausewitz (1780-1831); and it can be found in the mathematics of infinity, see David Hilbert (1862-1943) who posed the "Entscheidungsproblem" referenced in the title of that momentous essay, which led Turing to zero in on the blueprint for an eventual laptop of the kind on which I am writing this essay. And for the digital platforms via which this essay will be distributed to you. And for the sundry devices that will allow you to download or directly access these reveries reverberating in an encrypted plenitude of enregistered signs.

The point is that under the radar of academic philosophy, there runs a genealogy of applied ingenuity arguably more Kantian than the received Kant of the lectern insofar as it highlighted the anarchic and protean quality of reason in its historical contingency arising from ways of being in the world we are thereby making, be they situated or ephemeral. On this reading, Kant masterminded a conceptual arena that enabled a novel understanding of cognition, one that would eventually pave the way for the design and rise of the information technologies cluttering the built habitats of the 21st century. He traces the inner life not to divine spirit but rather to a morphogenetic confluence of forces in the world, an epistemic epigenesis, if you will, where intelligible form emerges from the plethora of practices — manual, social and mental. Since applied Kant leads rather directly to the cognitive sciences with their engineered contrivances, it should come as no surprise that Kant's moral philosophy may be uniquely suited to apprehending the

⁷ For a critical deconstruction of the ideological premises informing this reception history see Riskin (2019)

⁸ For a masterful demonstration of this down-to-earth Kantianism as reflected in Clausewitz's applied philosophy of war see Caygill (2013).

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metamorphosis of *agora* to *algora* and to grasping consequent ethical implications for ordering public/private affairs. Kant may not be the supreme apologist of modern individualism after all. He may turn out to be a digital innovator *avant la lettre*, a posthumanist oracle invoking always an already imaginary trope of reason that each of us enlists to enact our respective simulation of reason while the mereology of coordinations presents a phantasm of ambient intelligence (Lando, 2017).

This is not the place to dwell on why or to what extent Kant's conception of reason may have been lost in the shuffle. Let us note for the nonce that his seminal 1784-essay in the Berlinische Monatsschrift equated the very definition of Enlightenment to the drawing of a clear distinction between public and private acts of deliberation – and, what is more, safeguarding the boundary between them (Kant, 1784a). Indeed, Kant famously inverts their relative valency by casting private judgement as institutionally compromised and biased while pitching public judgement as the true domain of negotiated comprehension and intersubjective verity (Foucault, 1966/1970). His philosophical system was penned with an exemplar of artificial intelligence "in the room," namely von Kempelen's "Mechanical Turk." An essay by Johann Erich Biester on this automaton appeared in the same issue of the *Monatsschrift* as did Kant's essay – indeed the two pieces were adjacent and cross-referenced, as Simon Schaffer (2001) shows. Make no mistake: Kant was engaging period AI. That other essay was entitled "Remarks on von Kempelen's Chess-playing and Conversation Automaton" (Biester, 1784). Yes, it was a trick, a human player was hiding in the contraption and initiating the moves that were being played by the Turk-styled, mechanical puppet. But, as Schaffer unpacks, the device was so ingeniously constructed that it took 80 years before the human operator's secret hiding place was finally revealed. Meanwhile, the performance delivered by the Mechanical Turk for the audience of the Berlinische Monatsschrift featured an automaton beating the likes of Benjamin Franklin at chess (Standage, 2002), a display of virtuosity reminiscent of IBM's Deep Blue beating Kasparov in 1997 (Hsu, 2002). Kant's peers debated the veracity of Kempelen's sensational achievement and doubted that "wood can think," so Biester enunciates the disbelief in automated reason. But Kant arguably discerned a revolutionary subtext to the aesthetic object lesson, spotting behind the fake a performance of autonomous artificial intelligence, one that has become paradigmatic; its archetypal instantiation. And he seized the challenge presented by this early, courtly *imitation game* to reflect on the far-reaching implications of such clever accourrements that mimic humans who, in turn, are play-acting – the very insight eventually codified by Turing.

Kant's *Critique of Pure Reason* inaugurated a new conception of epistemic practice, one that opened the way for parsing subjectivity into mechanical and sentient, quantitative and qualitative, particulate and composite apparitions (Kant, 1781/1787). What is more, the subjectivity Kant articulated had dimensionality, its notional agency scales from embodied selfhood to transcendent personhood. Kant deemed hybridity foundational to human self-development. His theory of mind arguably opened the floodgates to the digital disruption engulfing us at present. Suppositional postulates underlying the Universal Turing Machine were conjured in East Prussia (Kant's domicile), so the claim, and this nascent context gives his Transcendental Idealism elevated relevance as we grapple with the vast proliferation of Turing-devices that form a ubiquitous web of connection. Kantian ethics – a cardinal example of how technology and language dovetail – can be enlisted in





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taming the manifold public consequences of the augmented privatisations, both phenomenological and proprietary, of digitality. I have called this research agenda "Cyber-Kant." It holds that contemporary smart infrastructure operationalize a military-industrial complex of applied engineering prowess, 10 hinging on a quintessentially

Kantian insight, namely that human instrumentality and human freedom are conjoined, at

the hip, as it were, like the girl and fish of legend.

Kant studied – and aimed to ameliorate – human affairs from his hometown of Königsberg, a bustling port town and major trading station on the Hanseatic fringe of global trade routes at the time (Nokkala & Miller, 2019). He deemed it the ideal vantage point from which to rid the world of superstition (Kant, 1798, p. 4). What he knew of the world, beyond the Baltic Sea basin, came from his voracious appetite for news. The appointment of his library sustained a copious diet of natural history and travel books. Our philosopher was the consummate armchair globe-trotter. His prolific exchange with a worldwide scholarly community left traces in journals and letters, and codified the workings of the public sphere (Habermas, 1966/1990, p. 42). Friends and acquaintances report that he mingled with persons of all stations: aristocratic, learned, commercial, artisanal, military and menial. Living where he did and as he did – the biographical literature on his quotidian routines is abundant – he was also steeped in the cosmopolitan chatter of nautical culture. This can't be stressed enough – sailor lore is the salt air Kant breathed.

And seafaring, in fact, does constitute a recurrent theme of his reveries. In "What Does it Mean to Orient Oneself in Thinking" Kant (1786) transplants the navigational expertise used for geography in general and sea travel in particular to the navigational self-enquiry of not losing one's line of thought in the infinite abstracts of time and space. For literary theorist Helmut Müller-Sievers (2015) these techniques for coordination log the inherent "homelessness of the Kantian subject." (p. 96). Allusions to commercial trade and distant colonies are frequent. "Perpetual Peace" – Kant's (1795) essay consulted in drafting the United Nations Charter – speaks of atrocities on the Sugar Islands perpetrated by colonial occupiers so ruthlessly exploitative in the commercial appropriation of native resources, natural and human, that they defy not only "civility" (Sittlichkeit) but every possible construal of civilization, and this includes his allowance for "unsociable sociability" (ungesellige Geselligkeit) (Kant, 1784b). Unlike most colonies, this one turned no profit. The outpost was used solely for naval training; it churned out sailor-soldiers for hire. An archipelago of human clustering that serves one sole purpose: to supply cannon-fodder. Culture reduced to killing machine. Beyond exemplifying untold cruelty, such an enterprise is quite literally unsustainable. The practices on this island expose a nihilism so boundless that it erodes the reproductive capacity on which the human enterprise depends. His morality is not normative so much as illustrative. Kant enjoins us to act in ways consistent with the arithmetic import of our

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⁹ See the text for the exhibition "Open Codes?" at the Kunstraum of Leuphana University (Xylander, 2019), and for the wider digital theoretical context the exhibition "Open Codes" curated by Peter Weibel at the ZKM Karlsruhe (Weibel, Xylander, & Krümmel, 2019).

¹⁰ For an incisive account of the military-industrial origins of the internet see Levine (2018). This distinctive confluence of reasoning strategies in the service of revolutions (philosophical, political, military) – what Alfred Nordmann in this collection of essays subsumes under "technosphere" and "infosphere" – can be traced to the Prussian context in which Kant's critical philosophy appeared, and its aftermath.



actions, a calculus that operates beyond the heterogenous ken of our limited lifespans and restricted perspectives. It was a mindset likely honed by his lifelong engagement with the diversity of peoples and cultural formations articulated in books and the tidings of mariners, young and old.

IV.

As we shift from the *agora* to the *algora*, it behooves us to reimagine with Kant the inner connection of technology *and* language. His insights into yonder lifeworld are strikingly apt for informing how we grasp and respond to our tech predicament today, namely how to orient humanity in an imagined public space compromised by privacy's privations. Distal communication has existed since smoke signalling and yodelling were discovered – the new quality of the *algora* is not remoteness of communication *per se* but its illusory intimation of vicinity. While the "tacit knowledge" (Polanyi, 1958, 1966) associated with institutional proximity of old is lost in the shuffle of new-fangled approximations – with the online university being a prime example of pod-tending in lieu of associating – the challenge this poses for deliberative reasoning and imitative cognition are abundant. How to circumvent infinite regression? These fragments offer a first charting of the waters. A more sustained navigation will follow in a future issue of *Technology and Language*. For the moment, the siren's song and the mermaid's tease must suffice.

Cheryce von Xylander

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¹¹ For an exploration of the philosophical premises informing these technical arrangements see Daub (2020).



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