

COUNTER-ALGORHYTHMICS AS PREFIGURATIVE DANCES OF COMMONISM

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An algorithym is a cacography of algorithm — what engineers, programmers and computer scientists call a sequence of step-by-step instructions readable to machines which operate, execute, and compute automatically. Algorithym is meant as a sort of ironic misspelling, since algorithms are often understood to be abstract, symbolic, and immaterial sequences of pure meaning, but of course there is no such thing as a pure idea or symbol nor an immaterial process. Algorithms, therefore, are always also algorithyms; they need to get materialized as machinic signals and pulses within specific frameworks of timing and spacing. Algorithyms are the dirty and concrete materializations of algorithms. With the notion of algorithym, I intended to emphasize both the rhythmic mode algorithms operate in, and their dirtiness; not so much in a socio-techno-political meaning that came later, but foremost as a prioritization of the material and physical over the symbolic and mathematical.¹ This was also a move to differentiate synchronized exactness and full control from the slightly uncontrollable real and its inclination to the impure.

The first time I had this idea was more than fifteen years ago in 2006, while writing my graduate thesis in media studies at University of Basel, Switzerland. For the next five years, I kept the idea for a PhD dissertation, fleshed it out and later defended it in 2012 at Humboldt-Universität zu Berlin. While the world around me changed slowly from the pre-smartphone era via a global financial crisis into the current nightmare of social media, surveillance, data extraction and the rise of right-wing populism and fascism, I was still stuck in my self-induced bubble of German media studies. Here I was influenced by post-structuralism and the writings of Friedrich Kittler, Wolfgang Ernst and Bernhard Siegert (the latter two are the most prominent disciples of the first). *Medienwissenschaft*, as it is called in German, has been institutionalized in the early 2000s and was in a sort of defence mode, meaning that it first had to cultivate its own field and enclose it, thus operating under the dictates of capital and liberalism. The fascination for the technoscientific aspects of media and information technologies made some of us, including me, sort of blind or numb to socio-political aspects. I wanted to understand first how a computer and how ‘the internet’ operate technically in order to understand their cultural and aesthetic effects. It was often via the aesthetics, where the societal was glimpsed, but usually I ignored these aspects.²

My turn towards the political came through three overlapping observations and their consequences. Firstly,

¹ See for example Shintaro Miyazaki, “AlgoRHYTHMS Everywhere: A Heuristic Approach to Everyday Technologies,” in *OffBeat*, Bd. 26, *Thamyris/Intersecting: Place, Sex and Race Online* (Brill | Rodopi, 2013), 135–48; and Shintaro Miyazaki, “Algorhythmics: A Diffractive Approach for Understanding Computation,” in *The Routledge Companion to Media Studies and Digital Humanities* (New York; London: Routledge, 2018), 243–49.

² Early gateways to more critical writings might provide, Shintaro Miyazaki, “Going Beyond the Visible: New Aesthetic as an Aesthetic of Blindness?” in *Postdigital Aesthetics* (Palgrave Macmillan, London, 2015), 219–31, https://doi.org/10.1057/9781137437204_17; and Shintaro Miyazaki, “Algorhythmic Ecosystems. Neoliberal couplings and their pathogenesis 1960–present,” in *Algorithmic Cultures: Essays on Meaning, Performance and New Technologies* (Routledge Advances in Sociology), edited by Robert Seyfert and Jonathan Roberge (London/ New York: Routledge Advances in Sociology, 2016), 128–39.

around 2012, when Kristoffer Gansing became the director of *transmediale* in Berlin for the next eight years, the community around that festival started to slowly notice that ‘the internet’ somehow became continuously boring, profit-driven and disappointing. In the summer of 2013, there was a conference inspired by Fred Turner’s *From Cyberspace to Counterculture* at Haus der Kulturen der Welt in Berlin, which helped me to historically contextualize this feeling by learning about the interference fields of cybernetics, psychedelic counter culture, cyberpunk and early internet enthusiasm. Secondly, global warming became more tangible during these years: 2013 had a very cold March with snow in Berlin and a heatwave in the summer. The environmental humanities emerged as a discourse, which helped to understand better what was happening. I also started to read beyond post-structuralism via political philosophers such as Franco Bifo Berardi offering explanations of how our anxieties are linked to capitalisms,³ which led to a re-reading of both volumes of *Capitalism and Schizophrenia* by Felix Guattari and Gilles Deleuze.

This re-reading, this time, was not due to an interest in networks and machines exclusively, but entangled with the question of how these are linked to our desires, feelings, to authoritarian structures and value-creation machineries. While offering critical perspectives on capitalist machinery, all three thinkers also offer ways to link critique to aesthetic processes. For example, in *A Thousand Plateaus*, the notion of rhythm and the ritornello is quite important.⁴ And thirdly, around 2015–6, the rise of Big Tech companies such as Alphabet Inc, Facebook Inc (now Meta Inc), Apple, Microsoft, and social media provoked many media studies scholars globally and even in the German-speaking context. The entanglement of venture capital, (neo)liberal rhetoric, and Silicon Valley mentality with digitality and digital culture became slowly apparent also to ignorants like me. I understood that digital culture is thoroughly and to the core intermeshed with capitalism and its profit-driven coercions. Some foresighted German colleagues such as Jens Schröter and Till A. Heilmann had already started to argue for a re-embedding of Marxism and critical theory into media theory, while at the same time not abandoning the media archaeological perspective.⁵ With such a combination you would not lose the closeness and expertise on media technological matters, processes, algorithms and materialities. At the same time, you would be able to see and work out the negative, undesired aspects of digital culture while getting a glimpse into how you could change its technological workings and logics to counter the profit-driven machinery of mainstream digitality.

Algorhythmics has been theorized by myself as an analytical tool and aesthetic approach to inquire ‘what is going on’ in digitality in order to hear and listen to

³ Franco Bifo Berardi, *Heroes: mass murder and suicide* (London ; New York: Verso, 2015); or Franco Bifo Berardi, *Breathing — Chaos and Poetry*, intervention series 26 (Semiotext(e), 2018).

⁴ A ritornello is a musical genre with a rich history mainly between the 14th and late 18th century. It is a diminutive of the Italian word ‘ritorno’, meaning return. The common principle of all ritornelli is therefore repetition and iteration, which connects the term conceptually to rhythm. See Shintaro Miyazaki, “Ritornelli of Everyday Life. Epistemic Experiments with Information Technology,” *Artnodes 12* (2012), <https://doi.org/10.7238/a.v0i12.1585>.

⁵ Media Archaeology is inspired by Michel Foucault’s concept of archaeology of knowledge applied to media. The notion of an archaeology of knowledge was formulated against histories of knowledge, which were more interested in the documents of the past, but not the materials of the past, as archaeologists would do, due to the lack of written documents. See Michel Foucault, *The Archaeology of Knowledge and The Discourse on Language*, trans A.M. Sheridan Smith (New York: Pantheon Books, 1972), here 138f.

the rhythms of machines, algorithms, computational networks and systems. In turn, counter-algorhythmics attempts to theorize how to counter, resist and transform undesired, discriminating, and extractive algorithmic systems and computational media into more desired, solidarity- and commons-oriented media environments. These alternative ways of living together are often called 'commoning'.⁶ To counter means 'to go' or 'to engage against', while to encounter means 'to meet' or 'to come across', and thus is less aggressively narrow-minded, but more open and vague. As a noun, 'counter' refers to a tabletop over which accounts are made or persons meet — thus an object which stands in opposition. A counter is also a device that counts — a repetitive task for a human. As an adverb, it describes a way that opposes something. It operates as a prefix to something to oppose or to react to. So, counter-algorhythmics wants to propose alternative rhythms, timings and even dances, which oppose those offered and imposed on us by capitalist, profit-driven technology, media and networks.

Why dance?⁷

Dance provokes me to think about countering capitalist, profit-driven digitality in a fully embodied way: dancing as resistance of the body, but also of social organization as a dance of movements (uprising) and cooperation (self-organization). Dance is solidarity-driven. You dance together and not against each other. Here, I follow German dance scholar Gabriele Klein, a rather new intellectual ally for me, who theorizes dance as critical practice. Dance, according to her, "experimentally structures spaces of experiences [...] with different mode[s] of socialisation [and] communitarianisation of subject formation."⁸ Dance is made by muscular, mental, somatic and neural operations in our whole bodies, and in a group setting, requires multiple bodies co-operating together. Even a solo-dancer has learned to dance with other humans, not alone. Humans do not exist in isolation. I see dance not only as a social, but also media-based practice. If you want to dance, you need a space — an environment for it — and some sort of rhythm. In order to learn a dance, you need some sort of language and media. These are ways to store, transmit and process experiences. Dance is environmental, therefore mediating, it requires agency and is therefore not a sequence of spasms as a vegetative, involuntary reaction to passively received stimulation, but an active and learned act of encountering.

Dance starts with a position, a tension countering gravity, but then continues as an active oscillation of movement and counter-movement. A dance, furthermore, is made of instructions, of algorithms or operations, which invokes images of a choreography of automated machines, but this is only half of the picture. Dancing involves active work and energy, so it is coupled with an impulse, a signal from within an organism's environment (or its network, in case you see its whole body as a vast somato-sensory network) and

⁶ See for further literature on 'commoning' a collaboratively written article from a research project I directed in Basel, Switzerland (2018–2021), Selena Savic et al., "Toys for Conviviality. Situating Commoning, Computation and Modelling," *Open Cultural Studies* 4/1 (January 2020): 143–53, <https://doi.org/10.1515/culture-2020-0015>.

⁷ See my earlier work on counter-dancing, Shintaro Miyazaki, *Counter-Dancing, Architecture and Naturing Affairs* (Birkhäuser, 2020), <https://doi.org/10.1515/9783035622164-023>

leads to a reaction to this impulse, usually a body movement, but then the body needs to resist and instead actively move, foresee further movements and beats. It needs to learn to move with the signals — sounds, vibrations, waves, flashes, quakes and much more from the surrounding environment — by generating its own signals. Otherwise, we need to speak rather of synchronization, or alignment, or resonance. Dance goes one step further. It can begin with reaction and synchronization, but then also involves adaptation and somatic-neural plasticity. Dance is able to adjust, transform, change, design, improve. Dancing involves learning and pedagogy, thus knowledge production, but operates not purely discursively — meaning language or sign-based — but in a somatic, affective, and experience-based way.

My proposal is that dance in the context of counter-algorhythmics becomes a prefiguration of how an alternative digitality, and an alternative technological operativity could unfold in time and space. Prefiguration here is meant as an experimental practice and "a radically open-ended process, which nevertheless is oriented toward a plurality of distant, radically different futures."⁹ Prefiguration is an attempt to embody the transformation one aspires to realize "on a much grander scale in the future" within one's own organisation, its structures, procedures, and protocols.¹⁰

Body and Media

I imagine counter-algorhythmics as a dance, where instead of bodies, whole media environments, networks, and infrastructures are cooperating via an ensemble and multitude of (bio)electromagnetic signals. Electricity generates a continuum and medium between electronic circuits and biological organisms. That is, for example, the basis upon which technological miracles such as cochlear implants are operating. These implants for humans suffering from severe hearing loss, where the mere amplification of the sound signal is not sufficient and neural hair cells are damaged, consist, firstly, of an hi-tech electrode surgically implanted into the cochlea. Secondly, a receiver part is also implanted into the head region above the ear; thirdly, a small digital signal processing device with an antenna is attached magnetically outside to the skin surface. Finally, a small wearable with a microphone is worn close to the ear. The signal transduction happens here not acoustically, but electronically via a direct stimulation of the nerve cells close to the hair cells by the electrode, which gets the algorithmically pre-processed and synthesized signals from the device with the microphone and therefore can, to a certain degree, simulate undamaged hearing ability.

While cochlear implants are highly embedded within profit-driven medical-electronics industry and are a part of the health and medical governance perpetrated by companies and the state, they build an interesting example for media situated between digital processing and biological organisms. Other examples for such media are bioelectric sensors, which measure

⁸ Gabriele Klein, "Dance Theory as a Practice of Critique," in *Dance and Theory: Conference, Berlin, April 2011*, ed. Gabriele Brandstetter and Gabriele Klein, *Critical Dance Studies* 25 (Bielefeld: Transcript, 2013), 137–49, here 139.

⁹ Mathijs van de Sande, "Prefiguration," in *Critical Terms in Futures Studies*, ed. Heike Paul (Cham: Springer International Publishing, 2019), 227–33, https://doi.org/10.1007/978-3-030-28987-4_36, here 232.

¹⁰ Ibid. 227.

muscle tension, turn the signals into data and are used for example to control a sound synthesizer. When data gets typed into an Excel sheet, the fingers dance on the keyboard. Similarly but in a reverse manner, built-in weight sensors on dance floors turn dance activity into data. Most of these examples are situated in a feedback loop, and in terms of body function, such feedback loops include a bodily ability called proprioception, the sense of self-movement and body position. Dancing with machines involves learning, as dancing without machines also does. A cochlear implant does not work immediately, otherwise one would merely react to machinic signals. Instead of 'becoming a machine,' one needs to describe the process a cochlear implant user goes through as an effect of learning, of adaptation and of resistance, and indeed, therefore as a process of 'dancing with the machine.'

Counter-algorhythmics as a dance conceptualizes computational media networks such as social media as somatic body-technology feedback systems.¹¹ When you dance, you are continuously changing your standpoint. You are in control, but you also get influenced by your co-operating agents. Dance is about self-determination in relation to others and the environment. Dance, then, is a performance of your self or what you think your 'self' is in order to lose yourself a bit. Dancing here becomes operational and becomes a program or body-mental script, with rules and open instructions for self-organization, cooperation and solidarity-oriented co-living. I propose that in order to gain full control of digitality and digital media, we need to imagine, and prefigure counter-algorhythmics as a dance of commoning.

Dancing and Commoning

Commoning is the activity of sharing, organizing, operating, and transporting so-called commons. Commoning is about dancing with, in and through these commons, which are firstly resources, data, organisms, but also structures and media such as a network, a machine or a factory. Secondly, they are owned by an open field of users, consumers, ordinary people, and activists. In my terms, commoning is an attempt to prefigure a society with less private property, no market, but more commons. Thereby, commoning attempts to untie societal networks from capitalist dictates and is about regaining self-control, solidarity-oriented freedom and bringing life into the cold, hostile, alienating space of neoliberal techno-capitalism. Therefore, commoning denotes the bigger scale and framework of what I described as counter-algorhythmics, but contrary to it, it often lacks the technological aspects.¹² Approaches and works describing practices of commoning sometimes ignore issues of technological mediation, and concentrate on cases where low-tech or even no-tech is favoured over hi-tech environments, assuming that many issues can get solved by direct face-to-face communication.

Theoretical work on commoning is mostly anchored in the social sciences, architecture or urban studies, which are less interested in what happens in-between humans, machines, technology and environment

¹¹ See for a seminal introduction into the interferences of dance and technology, *Transmission in motion: the technologizing of dance*, ed. Maaike Bleeker (London; New York, NY: Routledge, 2017).

¹² Commoning has been theorized by many scholars and activists, but most importantly by Silke Helfrich, who adapted the term from Elinor Ostrom, who in 2009 won the Nobel Memorial Prize in Economic Sciences.

and how these mediatic signals become operational. But in order to imagine how organisation as rhythm and dance would unfold on bigger scales, careful practices and critical knowledge about the media of visualization, modelling, networking and computation are needed.¹³ The notion of counter-algorhythmics as prefigurative dances of commoning wants to fill that lack of technology in commoning and at the same time attempt to keep a critical perspective on digitality. Furthermore, a commons is not merely something rational and instrumentally shared together, but forms an affective and somatic environment and network of users and consumers — of people in need and those who produce or can offer goods and commons. Counter-algorhythmics is made of movements and signals which dance along, in and between such commons. These movements and signals are similar to processes of peer-to-peer-production as they try to bring production and consumption closer again without profit-driven price-mechanisms, competition, markets and ownership. They establish an attempt to form new networks of somatic body-technologies for living, surviving, and enjoying life.

Commoning is, in my opinion, a variant of the manifold manifestations of counter-algorhythmics, which is specifically adapted to operationalize both a dance of and within somatic body-technology-networks and a social movement of humans together with machines, animals, plants and more. Therefore, it is based on modes of storing, transmitting, processing, computing, networking and mediating commons in ways that foremost meet our needs and desires of food, housing, caring, reproduction, travel, culture and art without relying on the automatisms and algorithms of capitalist machinery. These are tasks asking for forms of computation, which dance with us, not against us.

By proposing counter-algorhythmics as prefigurative dances of CommOnism, I want to contribute to the planetary issue, that such an alternative form of society would not operate without a profound re-structuring and undoing of our current technological entanglements with capitalism and the affective-somatic realm of everyday life. The letter O in CommOnism signals a difference from communism, which as a term lost its prefigurative power a long time ago, at the latest in 1989. But this time, in 2022, it might be different... Counter-algorhythmics as prefigurative dance of CommOnism aims therefore for full development on all planetary levels of our media environments in our bodies, buildings, cities, landscapes and continents, and therefore could bring us to finally suspend and transform these matters, ourselves included, into something more adequate than what we have and are now. We need to start as soon as possible.

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¹³ See for more literature on modelling and media irony, Shintaro Miyazaki, "Critical Re-Modelling of Algorithm-Driven Intelligence as Commonist Media Practice," *NECSUS: European Journal of Media Studies* 9, no. 1 (July 6 2020): 237–57, <https://doi.org/10.25969/mediarep/14309> and Shintaro Miyazaki, "Solidarity-Driven Media Ironism and the Future Architect-Hacker-Citizen," *Contour Journal* no. 6 (November 18 2020), <http://www.contour-journal.org/index.php/contour/article/view/media-ironism>.