INTERVIEW

EDM Theory and Fiction: The Conceptual Dimension of Musical Waves. A Conversation with Steve Goodman/Kode9

Guglielmo Bottin

As a DJ, I have always felt like surfing on a wave or surfing on a current of which every few years there was a new wave. For someone with a background in philosophy, [I wanted to] tune in to ... the conceptual dimension of that wave.

Steve Goodman

Introduction

The crossing of music and academia has shaped Steve Goodman's career since he started DJing funk and psychedelic jazz in the early 1990s, while majoring in philosophy in Edinburgh in his native Scotland. After moving to England to pursue a PhD at the University of Warwick, Goodman's taste shifted to electronic dance music, specifically jungle, a fast-paced genre based on accelerated breakbeats. Jungle emerged within rave culture and is an early example of what Reynolds would later term the "hard-core continuum" in the evolution of EDM styles.¹ Even though that music was then new and futuristic, it sounded somehow familiar to Goodman because it used samples from the records and genres he had explored as a DJ. In Warwick, Goodman succeeded in connecting his academic and musical interests. He joined the autonomous research collective CCRU (Cybernetic Culture Research Unit) established by Sadie Plant and Nick Land. There, through the work of British-Ghaneian scholar Kodwo Eshun

1 Simon Reynolds, "Adult hardcore," *The Wire* 182, April 1999, 54–8. See also Simon Reynolds, "The History of Our World: The Hardcore Continuum Debate," *Dancecult* 1, no. 2 (2010): 69–76.

on afrofuturism,² Goodman realized that the intensity of the new forms of EDM like jungle could spawn new concepts: that music was not only about dancing (or listening) but had the potential to inspire theoretical inquiry.

While in our conversation we did not delve into Goodman's academic activities, most of the questions and answers in the interview are better understood in light of his speculative research work. It is therefore beneficial to provide the reader with an overview of the subject matter of his scholarship, in order to demonstrate how the ontological, social, and aesthetic theories he developed over time continued to inform his artistic and communicative choices as a music producer, DJ, and record label manager.

In his PhD dissertation, *Turbulence: A Cartography of Postmodern Violence*, Goodman set out to "map the dynamics of flux ... by focusing on turbulence as a means of conceptualising social systems 'far from equilibrium' ... suggesting emergent signs of a radically new technological civilization, a *cybernetic culture*, with a corresponding reconfiguration of violence in humanoid populations." In the final chapter, he focuses on an "ethics of speed ... which mediates an over rapid acceleration away from the strata of the human," by combining Deleuze and Guattari's machinic postmodernism (and their critique of Virilio's identification of speed with fascism) with Sun Tzu's Chinese martial thought, and Mao's writings on guerrilla tactics, proposing an anti-fascist neo-futurism as "the modus operandi for insurgency in the virtual reality of the military-cybernetic complex."

He continued his academic career as a lecturer at the University of East London, coordinating the MA in Sonic Culture. While in London, as a DJ, he shifted his focus to a new, darker form of 2-step garage music. He played out these futuristic tracks on pirate radio stations under the moniker Kode9 as well as at a club event aptly named "FWD>>." In 2000, Goodman first established Hyperdub as an online outlet that featured new EDM productions and theoretical writing. The two words in the portmanteau refer to the hyperactivity of an accelerated sonic expansion (in both speed and intensity) and to the dub reggae practices of copying and versioning that

² Kodwo Eshun, More Brilliant than the Sun: Adventures in Sonic Fiction (London: Quartet Books, 1998).

³ Steve Goodman, *Turbulence: A Cartography of Postmodern Violence* (PhD diss., University of Warwick, 1999), 4.

⁴ Goodman, 261.

⁵ Goodman, 273.

are part of Jamaican music culture.⁶ The hyper- part is likely connected to hyperstition ("a future vision thrown back to engineer its own history"), a key concept within the Warwick theory-fiction collective.⁸ In September of 2000, Hyperdub's quasi-manifesto was posted on the philosophical mailing list "Driftline: Deleuze-Guattari-L":

Hyperdub is an info virus. It replicates in both humans and machines and synthesizes mutants in between. We have come to know its replication protocols as remixology and its most virulent strands as the hypersyncopation of the uk underground. Its mutation has increased its tactical intelligence to the point where it is now capable of releasing outbreaks of digital turbulence unpredictably across the bpm metric, camouflaged in the sweetest of constructs. Most virulent mutations to date include hardcore, jungle and 2step garage. Among the most developed cases, hyperdub is transmitted through digital trading in sonic fluids. What used to be called the internet, with its obsession on the visual, was really just a auto-immune response to the rising tide of acoustic cyberspace through hyperdubbing. A sign of its proliferaton is the complexification of the distinction between underground incubation zones and mainstream hosts. Hyperdub uses polyrhythmic protein to compose a body. We know this operation now as breakbeat science. In parallel, hyperdub creates a synthetic soul through vocal science. These sonic holograms populate are the bleeding edge of acoustic cyberspace. Hyperdub's modus operandi is afrovorticist.9

Two year later, the British music press called this new and still developing EDM style "dubstep." The term was first used in print on the cover of the XLR8R magazine and in a 8-page feature article to which Goodman contributed himself with a section on the Ghost Records collective.¹⁰ In the

- 6 Thomas Vendryes, "Versions, Dubs and Riddims: Dub and the Transient Dynamics of Jamaican Music," *Dancecult* 7, no. 2 (2015): 5–24.
- 7 Simon O'Sullivan, "Accelerationism, Hyperstition and Myth-Science," Cyclops, no. 2 (2017): 14.
- 8 "In the hyperstitional mode ... fiction is not opposed to the real. Rather, reality is understood to be composed of fictions," CCRU, *Writings* 1997-2003 (Falmouth: Urbanomic, 2015), 35; "because the future is a fiction it has a more intense reality than either the present or the past," CCRU, 12.
- 9 Steve Goodman, mailing list post, September 3, 2000, https://web.archive.org/web/20151110133737/https://network.architexturez.net/pst/az-cf-82478-968010524.
- 10 Dave Stelfox, Vivian Host, Steve Goodman, "Dubstep: burning down the 2-step garage," *XLR8R* 60, July–August 2002, 32–9.

following years, the dubstep scene rapidly exploded, first in the UK, then in the rest of Europe and North America. Hyperdub evolved into a record label in 2004; the first release, *Sine of the Dub*, is a drumless, dystopian cover version of Prince's already dismal song *Sign o' the Times*, is in collaboration with the late vocalist Stephen Samuel Gordon (The Spaceape, 1970–2014). Once again combining academic and musical endeavors, Hyperdub's first release was launched in conjunction with Luciana Parisi's book *Abstract Sex*, 4 extracts from which were presented in music form at the event "Bacteria in Dub" at Plastic People club in London. Goodman and Gordon collaborated extensively on two albums. Both works constitute examples of "sonic fiction," a methodology initially theorized by Eshun and the CCRU:

[The] aim is to radicalize the speculative ghost in sound culture ... Musicians, philosophers, artists, and writers who engage with the realm of sonic fiction, elicit the extremely experimental undercurrents of sonic investigation, so that their work does not only reflect a sonic reality but produces it. This approach bestows a power onto the text, the artwork, the music, or other entity, to leak into the real and to germinate it with affective worlds. More than examining, archiving, or glorifying the history and theory of sound, sonic fiction works at the continual intersection of speculative theory, science fiction, and science fact ... entering the operational dynamics of the text/ artwork/music itself.¹⁷

Memories of the Future¹⁸ is an outlook on a future made of rearranged fragments of the past, reconstructing the feelings of anxiety and paranoia (and the possibilities of resistance) of the UK's post-9/11 culture and urban decay. Intrigued by the idea of temporal loops, Goodman and Gordon's were also

- 11 Christoph Brunner, "The Sound Culture of Dubstep in London," in *Musical Performance and the Changing City*, ed. Fabian Holt and Carsten Wergin (London: Routledge, 2013), 256–70.
 - 12 Kode9 & Daddy Gee, Sine of the Dub/Stalker, Hyperdub HYP001, 2004, 10" record.
 - 13 Prince, Sign "O" The Times, Paisley Park 20648, 1987, 12" record.
- 14 Luciana Parisi, Abstract Sex: Philosophy, Bio-Technology and the Mutations of Desire (London: Continuum, 2004).
- 15 Kode9, The Spaceape, Luciana Parisi and Ms. Haptic, *Bacteria In Dub* (audio recording, March 27th, 2004), https://www.youtube.com/watch?v=ltRuITZhNY8.
 - 16 Eshun, More Brilliant than the Sun, 121.
- 17 Eleni Ikoniadou, "A Sonic Theory Unsuitable for Human Consumption," *Parallax* 23, no. 3 (2017): 255–6.
 - 18 Kode9 and The Spaceape, Memories of the Future, Hyperdub HYPCDoo1, 2006, CD.

inspired by Chris Marker's 1962 short film, *La Jetée*, which revolves around the notion of traveling to the future to acquire the means to return to the past in order to avert the destruction of humanity.¹⁹ The second album, *Black Sun*,²⁰ is set in a post-apocalyptic planet scorched by a radioactive event. In most cases, sonic fiction appears to operate as a worldbuilding phono-literature, perhaps one of those "*autres chemins*" of "*parole de la parole*" through which Foucault suggested that the spoken word could (escapologically?) lead us "outside" instead of entangling us deeper in subjective self-reflection.²¹

In 2004, Goodman wrote about "speed tribes" describing how the development of different communities is correlated with a music style's tempo²²: "What is fascinating about 'speed tribes' are not just their compelling sound system cultures of producers, dubplates, pirate radio-networks, microlabels, websites, MCs, DJs, drugs, dancers and mobile phones all intensified by a heavy dose of diasporic futurism ... such sonic cultures produce ... cultural warfare, equipped with an armory of sonic affects, percepts and concepts."²³ He later wrote on the "bass materialism" of low frequencies and infrasound in relationship to architectural forms.²⁴ Two chapters on "audio virology" appeared around 2008, ²⁵ together with a journal article

- 19 Guglielmo Bottin, "Six Popular Music Albums as Allegories of the Future," *Mosaic* 56, no. 2 (forthcoming).
 - 20 Kode9 and The Spaceape, Black Sun, Hyperdub HYPCDoo2, 2011, CD.
- 21 "Or ce qui rend si nécessaire de penser cette fiction, alors qu'autrefois il s'agissait de penser la vérité ... La pensée de la pensée, toute une tradition plus large encore que la philosophie nous a appris qu'elle nous conduisait à l'intériorité la plus profonde. La parole de la parole nous mène par la littérature, mais peut-être aussi par d'autres chemins, à ce dehors où disparaît le sujet qui parle." Michel Foucault, *La pensée du dehors* (Montpellier: Fata Morgana, 1986), 13.
- 22 Members of a speed tribe come into contact in musical settings that have certain bpm rates. For instance, reggae and dub are around 80 bpm, while R&B, dancehall, hip hop, and trip hop use tempos ranging from 80 to 120 bpm. House and techno are generally between 120 and 130 bpm. Jungle, drum and bass and footwork range between 140 and 180, with gabber/hardcore techno reaching up to 220 bpm.
- 23 Steve Goodman, "Speed Tribes: Netwar, Affective Hacking and the Audio Social," in *Cultural Hacking: Kunst des Strategischen Handelns*, ed. Thomas Düllo and Franz Liebl (Vienna: Springer, 2005), 150.
- "The History of Our World: The Hardcore Continuum Debate," *Dancecult* 1, no. 2 (2010), 69–76.
- 24 Steve Goodman, "Sonic Anarchitecture," in *Autumn Leaves: Sound and the Environment in Artistic Practice*, ed. Angus Carlyle (Paris: Double Entendre, 2007), 63–65.
- 25 Steve Goodman, "Audio Virology: on the Sonic Mnemonics of Preemptive Power," in *Sonic Mediations: Body, Sound, Technology*, ed. Carolyn Birdsall and Anthony Enns (Newcastle: Cambridge Scholars Publishing, 2008), 27–42.

that, building on Lefebvre's rhythmanalysis and Whitehead's process philosophy, examines the concept of "rhythmic anarchitecture":

Rhythm proper, cannot be perceived purely via the 5 senses but is crucially transensory or even nonsensuous. Rhythmic anarchitecture is concerned with the virtuality of quantum vibration ... it is rhythm as potential relation ... we must also ontologically prioritize the in-between of oscillation, the vibration of vibration, the virtuality of the tremble. The rhythmic potential that is an eternal object, cannot be reduced to its phenomenological corporeality.²⁶

In 2009, Goodman published the monograph Sonic Warfare: Sound, Affect, and the Ecology of Fear, a theoretical investigation of sonic weapons used by the military and the police to produce discomfort, as well as of the intense frequencies in musical rhythms used by artists to mobilize the body.27 By recording the different ways in which sonic weapons influence bodies and alter moods, he described the physiological, emotive, and sensory effects of sound, which would somehow anticipate futurities that are still veiled from sight. Abrupt high- or low-frequency noise might cause the body to enter a sort of alert mode. Goodman thus proposed the idea of unsound, a range of sounds that our sense of hearing cannot perceive or that have not yet been synthesized or manipulated. These haptic augmentations of audition may include the aurally imperceptible and the hauntological not-yet or no-longer audible.28 When invited to perform as DJ Kode9 at the Giorno per giorno (2012) exhibition by Fondazione Arte CRT in Turin, he explained that he meant to continue Italian futurist Luigi Russolo's art of noises, investigating how new sounds could enter music in the present time.29 Goodman's work challenges the idea of sound as narrative text, focusing instead on vibration, bass, and speed as the three main agents influencing the transmission of sound across physical media, networks, and

²⁶ Luciana Parisi and Steve Goodman, "Extensive Continuum: Towards a Rhythmic Anarchitecture," *INFLeXions*, no. 2 (January 2008). https://www.inflexions.org/n2_parisigoodmanhtml.html.

²⁷ Steve Goodman, Sonic Warfare: Sound, Affect, and the Ecology of Fear (Cambridge: MIT Press, 2009).

²⁸ Guglielmo Bottin, "Il progetto della hauntology: forme e pratiche dell'artefatto musicale in un presente nostalgico," *Rivista di Analisi e Teoria Musicale* 28, no. 1 (2022): 103–36.

²⁹ Francesca Vason, "Dal rumore al noise: breve excursus di un'invasione estetica," *Kabul Magazine*, no. 1 (2016), https://www.kabulmagazine.com/dal-rumore-al-noise-pt-1-breve-excursus-di-uninvasione-estetica-ed-etica/.

embodied cognition, a constantly evolving cycle involving sonic configurations at the microtonal level:

There is a politics of frequency that permeates the whole technical ecology of sound recording, storage and playback devices ... The potentials of young people carrying sound reproduction (and increasingly production) devices around with them at all times I think is more significant than the fact that they are trebly ... the becoming trebly of mobile culture is perhaps part of the cost of sounds ubiquity—bass is heavy—i.e. it's not so portable ... [but] at least in the club setting, what gets lost is a certain sensual relation between the dancer and their body, the sense of the materiality of their bodies, that they are just another vibrating object in the room. What I think is conceptually powerful about bass culture is that it reminds the arrogant human race that they are really mostly composed of nonorganic matter, are not self-enclosed individuals but permeable membranes through which forcefields can pass and interfere with your insides.³⁰

Using concepts from Deleuze and Guattari (rhizomes, planes of immanence, destratification, schizoanalysis), instead of focusing on non-pulsated time, he highlights the affective power of metrical rhythm organization and groove. Goodman develops a general "ontology of vibrational force" in a chapter published in a sound studies collection edited by Jonathan Sterne.31 In Sonic Warfare, sound is understood as being enmeshed with human physiology and has the power to reorder the hierarchy of senses and change how we perceive movement and space. In Goodman's "bass materialism," popular electronic music (such as dubstep) is considered from a theoretically abstract yet completely material position: low frequencies are tactile, the human body is understood as into a receiver of vibrations, a physical conduit for the force of sound, with its different apparati behaving like resonance boxes.³² The vibrational force is the mean through which the affective agency of sound systems and music ("the sonic nexus"), their networks of contagious propagation ("audio virology") and pulsating ontology (rhythmanalysis) manifest themselves. However, Brian Kane

³⁰ Wayne Marshall, "Bass Poverty & the Politics of Frequency: Kode9 on Treble Culture," *Wayne & Wax*, September 21, 2009, https://wayneandwax.com/?p=2365.

³¹ Steve Goodman, "The Ontology of Vibrational Force," in *The Sound Studies Reader*, ed. Jonathan Sterne (London: Routledge, 2012): 70–2.

³² Davide Tolfo e Nicola Zolin, "Affetti, soggettività e ritornelli: l'impercettibile suono del Cosmo nel campo di battaglia acustico," *La Deleuziana*, no. 10 (2019): 239–59.

questions Goodman's approach in its actual eschewing Cartesian dualism, tracing his theory of vibrational force back to Massumi's pre-cognitive understanding of affect. Such division of affect and emotion would lead to a dualism between an objective sound and its subjective perception. On the one hand, Goodman's vibrational force involves a pseudo-Spinozan, monad-like ontology in which all matter is one and the same, on the other, the strong separation he poses between affect and cognition would seem to deny such unity.³³

With an established notoriety as DJ, producer, and label manager, Goodman/Kode9 eventually chose to leave academia to focus on music. But, rather than abandoning scholarly research on music altogether, he continued to create theory-laden "research music." Inspired by books on the history of zero in mathematics and by Bastani idea's of a "fully-automated luxury communism" where "the only utopian demand can be for the full automation of everything and common ownership of that which is automated,"³⁴ Kode9's *Nothing* album³⁵ is a musical soundscape counterpart to a larger sinofuturist multimedia project, the Notel, in collaboration with simulation artist Lawrence Lek,³⁶ The Notel is a Chinese-owned virtual hotel where an indolent human population of global nomads indulges in luxury, served by machines:³⁷ "taking the friction out of living, no more sec-

- 33 Brian Kane, "Sound Studies without Auditory Culture: A Critique of the Ontological Turn," Sound Studies 1, no. 1 (2015): 2–21.
- 34 Aaron Bastani in Brian Merchant, "Fully-automated luxury communism," *The Guardian*, March 18, 2015, https://www.theguardian.com/sustainable-business/2015/mar/18/fully-automated-luxury-communism-robots-employment.
 - 35 Kode9, Nothing, Hyperdub HYPCDoo3, 2015, CD.
- 36 Lawrence Lek is a CGI artist whose works focuses on sinofuturistic and AI tropes. Images and videos of the installation can be seen at https://www.arebyte.com/lawrence-lek/(accessed May 8, 2024).
- 37 Despite its science-fictional novelty and cyber-exoticism, sinofuturism appears to partially be the legacy of orientalist discourse, replacing the past with the future and elevating Eastern technology over ancient Eastern tradition. As with Edward Said's original critique of orientalism, most of these Western narrations keep excluding the East's capacity for self-representation. However, unlike its historical antecedent, sinofuturism can also be seen as a reaction to a perceived loss of the West's cultural hegemony, translating into East-dominated allegories of the future: "Sinofuturism is a reverse orientalism—an orientalism operating its denial of coevalness through the attribution of futurity," Gabriele de Seta, "Sinofuturism as Inverse Orientalism: China's Future and the Denial of Coevalness," *SFRA Review* 50, no. 2-3 (2020): 91. However, considering Lek's own diasporic status, sinofuturism can also stem from "neither the 'target' [Chinese] culture nor the 'global' culture of Western hegemony" but from a "critical self-negation of Western modernity that turns its gaze to an 'Oriental' alternative,"

ond-guessing your wishes. The AI decides what you need and delivers it to you ... the absence of any human workers allows for another dimension of privacy, Nøtel holds a ø star rating as there are no human workers to rate."38

In the summer of 2016, Goodman/Kode9 traveled to Japan to investigate the country's own "bass culture." The main focus was learning about taiko, the huge drums with hollow cores made from trees that have been a part of Japanese culture for centuries. Traditionally employed as terrifying instruments in the field of battle, taiko have been used in musical performances only in the last few decades. Goodman reprised his research on sonic warfare by sampling different taikos and using the sounds to produce the track "TKO," in collaboration with Osaka DJ Fulltono. At 160 bpm, the result places the sounds of Japanese traditional war drumming within the contemporary footwork EDM scene³⁹.

As a member of the AUDINT (Audio Intelligence) collective, Goodman co-edited the book *Unsound*: *Undead*.⁴⁰ This collaboratively authored anthology lingers on the edge of verisimilitude, challenging the reader to distinguish reality from fiction while learning about "deceptive frequency-based strategies, technologies, and programs developed by military organizations to orchestrate phenomena of tactical haunting within conflict zones."41 Between science fiction and evidence from allegedly secret government documents, the book comes across as an academic repository of military media archaeology. The group itself claims to be a continuation of the Ghost Army, a real-life military organization that, during the Second World War, enlisted musicians and sound engineers to produce noise, decoys, and misleading setups to disorient the Nazi forces.⁴² Since 2009, AUDINT has created sound art exhibitions throughout Europe and North America.⁴³ A collection of recordings, writings, and illustrations was re-

Gary Zhexi Zhang, "Sinofuturism and Its Uses: Contemporary Art and Diasporic Desire," Verge: Studies in Global Asias 7, no. 2 (Fall 2021): 86-92.

- 38 Cyane Toernatzky and Brendan Kelley, An Artistic Approach to Virtual Reality (London: Taylor & Francis, 2024), 63.
 - 39 Kode9 and Fulltono, TKO, self-released, 2016, file.
- 40 AUDINT, Unsound: Undead, ed. Steve Goodman, Toby Heys and Eleni Ikoniadou (Falmouth: Urbanomic, 2019).
 - 41 AUDINT, xi.
- 42 Rick Beyer and Elizabeth Sayles, The Ghost Army of World War II (New York: Princeton Architectural Press, 2015).
- 43 For a comprehensive list of Audint's installations and exhibition, see https://www. audint.net/events/

leased in 2014 under the title *Martial Hauntology*.⁴⁴ A female voice (Jessica Edwards aka "Ms. Haptic") tells of characters as though they had come to the narrator and demanded to be heard: "by naming the characters, places and events in the history of AUDINT, the voice causes them to exist in other people's minds, laying bare the slippage between invention and discovery."⁴⁵ Also in 2019, Goodman complemented Hyperdub with the Flatlines sublabel, dedicated to audio essays, releasing Mark Fisher and Justin Barton's *On Vanishing Land*.⁴⁶

During the pandemic, he partly returned to "academic mode," producing video essays, participating in online symposiums, and giving lectures on sonic warfare and audio virology. In 2022, he conjured up another sonic fiction, in the double form of Astro-Darien, an audio-essay narrated by synthetic voices, and Escapology, 47 the soundtrack album to a fictional video game simulating the breakup of the post-Brexit UK, released as audio CD in a blu-ray plastic case. Inspired by the recent plans to build Spaceports in the north of Scotland, the project goes back to past colonialist yearnings in Scotland, where, at the end of the seventeenth century, there was a plan (known as the "Darien Scheme") to establish New Caledonia and a transoceanic overland route in the Panama isthmus. Most settlers died in the first year, and the project led to the collapse of Scotland's economy, ultimately resulting in its capitulation to England. In his sonic fiction, Goodman inverts historical outcomes and reimagines New Caledonia as the Astro-Darien space colony. Scottish independence from British unionism, a dream halted by the 2014 referendum, would then be obtained through an off-planet mass exodus to an utopian orbital space, while the elite is left on Earth. The escapological topos is made explicit in the audio essay and Astro-Darien cover notes:

A refusal to take the most basic factors conditioning life gravity and death—as necessary horizons for action ... to consider the earth as a trap, and to understand the basic project of humanity as the formulation of means to escape from it—to conceive a jailbreak at the maximum possible scale, a heist in which we steal ourselves from the vault ... escapology not escapism.⁴⁸

- 44 AUDINT, Martial Hauntology, AUDINT Records AUD001, 2014, LP.
- 45 Ikoniadou, "A Sonic Theory," 256.
- 46 Mark Fisher and Justin Barton, On Vanishing Land, Flatlines FLAT001, 2019, LP.
- 47 Kode9, Escapology, Hyperdub HYPCD004, 2022, CD.
- 48 Liner notes in Kode9, Astro-Darien, Flatlines FLAT002, 2022, 12" record.

The project was also shown as an audio-visual installation in London's Corsica Studios, and the audio part was diffused by François Bayles's 50-speaker acousmonium at the Institut National de l'Audiovisuel/Groupe de Recherches Musicales in Paris.

The conversation that follows is the result of an invitation from Archivio Storico Ricordi's director Pierluigi Ledda for their podcast series *The Music Folder*, which investigates the intersection of music, memory, and arts.⁴⁹ We focused our exchange on the possibilities of constructing "musical futures," on the role of technology within waves of innovations in (popular) electronic music scenes, and the inherently generative agency of memory.

Interview

Guglielmo Bottin (GB): Can you just spend a few words on how you started the Hyperdub label? If I remember correctly, it was originally a website about UK bass music, with some theoretical writings as well. What was your motive or contingency at the time, and what choices did you make at the beginning?

Steve Goodman (sG): You are right. I started Hyperdub as a web magazine, right about 2000. This is the time when music blogs were in their golden age, where writers were able to, without having an editor, think on the page without limit. Also, without pay, which could be a liberating and an oppressive thing simultaneously. This is also the time of the digital music explosion, MP3s, Napster, and so on. So the idea was to have a kind of web magazine that specifically focused on, I suppose, the Jamaican influence on electronic music in the UK, a particular lineage from, let us say jungle to garage and onward. So this is before dubstep existed. So, that was the musical remit. This was a period when there were many global websites, such as mp3.com. People were buying music digitally in that time, there was a movement to facilitate musicians to be able to digitally distribute their own music without an intermediary—well, with the intermediary being a website. So, you upload your music and it allows you to promote your work worldwide immediately. There were many sites purporting to do that for anyone and anywhere. So, part of our original idea was to do something like that, but with a local focus, you know, there's a lot of amazing, very active music culture in London, specifically South

^{49 &}quot;The Music Folder," *Archivio Storico Ricordi*, accessed May 10, 2024, https://www.archivioricordi.com/en/projects/the-music-folder.

London. Therefore, the question was to approach this changing digital planet from a local point of view.

GB: A global platform for a local scene?

sg: Yes, to provide a global platform for a local scene, exactly, as opposed to a global platform for a bunch of isolated individuals who could be anywhere. So the idea was to do some editorial work around that, by working with my favorite music writers such as Simon Reynolds, Kodwo Eshun, Mark Fisher, and also to just tap into the musicians that were around me. When we started hyped up as a web magazine, for example, we did small Hyperdub nights. We did some nights at the ICA in central London, and one of those artists who were around was the artist currently known as Actress. So, you know, there was a scene going anyway, regardless of what we were doing. So, we just wanted to provide an editorial platform for that music that was not limited to this kind of press release style bullshit journalism that you would find in Mixmag or DJMag, or any of the mainstream dance music press. So, they would be able to do interviews and features without word lengths.⁵⁰

GB: Were you consciously aiming to become innovative? Did you think that your music was "new" in itself? New compared to the sounds covered by the music press at the time?

sg: Not necessarily. I think the feeling was more that this lineage of music, which Simon Reynolds would call the hardcore continuum, had the ability to innovate a new scene every few years, both formally and socially. Now, obviously, these scenes were part of a lineage, so it's kind of like a generational thing, but this is also the music I had been DJing, the kind of music that I have been following for ten or so years prior to that. As a DJ, I have always felt like, at least in that period, surfing on a wave or surfing on a current of which every few years there was a new wave. So, Hyperdub was a way of tuning in to these waves and trying to, for someone with my background in philosophy, not just tune in to the musical dimension of that wave, but also the conceptual dimension of that wave.

GB: How do you understand the concept of innovation as a musical practice? Is it actively breaking free from tradition, or just riding the crest of a wave

50 Goodman himself wrote numerous features and reviews for magazines such as Fact (UK) and XLR8R (US).

that is already pushing you somewhere, that it is bringing you somewhere, together with a musical scene?

sg: My relationship to futurism, let's say, is a problematic one because I do not really subscribe to this idea of a linear history in which you break from a tradition and leave it in the past while you speed off into the future. I think it's a more spiraling process and when something new happens, it's constantly eating, digesting, and regurgitating the past. What is new about it might be something that is added technologically. Maybe there are aspects of technology, not all of it, but it does have a sense of progress. The technology that we are working with now did not exist 10 or 15 years ago. That leaves a mark on the social seams. Generationally, there is some sense of development. Obviously, young people succeed older people, and this moves forward. There is something similar that happens with technology. Musically, it is more complicated than that. Culturally, it is more complicated than that. This is where I think the relationship between the past, present, and future is more convoluted than a linear history can allow us to understand. So, it's never a clear break with tradition for me.

GB: However, wasn't there a sort of avant-garde ideology, for instance, in the early Detroit techno scene? A deliberate break from tradition—even from a city's own musical tradition.⁵¹ Was this not an occurrence of popular music avant-garde?

sg: I do not think that was like an avant-garde move, like a "Western modernism" type of avant-garde move. You know, you can't see Detroit techno devoid of Parliament, Kraftwerk, Motown. It is part of that, it is part of the history of African-American music. But what is different is the post-industrial status of Detroit, digital drum machines, synthesizers and so on. That is what allowed it to be a break from the past. The chronology of these events is multi-layered. One is technological, one is music cultural, one is social, and one is economic. I think it's the technological that makes it a break from the past, only in the sense that those technologies did not exist in the 1960s.

GB: I agree that, both in avant-garde with respect to "common practice" academic and mainstream popular music, some artists, composers, musicians, and DJs that are often, as you mentioned, riding a wave on innovation. How-

51 Sean Albiez, "Post-Soul Futurama: African American Cultural Politics and Early Detroit Techno," *European Journal of American Culture* 24, no. 2 (2005): 131–52.

ever, that wave has some ideology behind it. I mean ideology in a positive way, in the sense that artists need to believe in the value of their own work otherwise they would not create it. They need the ideology to believe in some intrinsic, intellectual, spiritual, social, and humanistic value of the musical world they are building with their practices. But each innovation also involves some sort of disrespect to the previous generation. You mentioned this spiraling relationship with the future: is this also some sort of positive ideology in the sense of "I can write the future by digging in the past and reconfiguring it in a different way"?

sg: Yes. I don't think there's a contradiction between generations drawing a line and saying "fuck you" to the previous generation, giving a new name to what they're doing, and stealing sounds from previous generations and saying "This is ours. We don't care. We stole it from you. This is the way we do it." I do not think there's a contradiction between that kind of sense of breaking with the past and the idea that time is more spiralling, because each time you draw a line and you say, "fuck you" to the past, you go onto a new ring of the spiral. So, I think you are right. In each of these stages, whether it be Detroit techno or jungle, I think there is like an ideology of innovation and forward movement and escape, and all of these ideas of starting from year zero. However, there is never a blank slate, is there?

GB: I agree. This makes me think of worldbuilding, which is something you have been doing in your records and your overall practice, specifically of future worldbuilding and sonic fiction. I think it is part of the same larger process, the desire to capture reality and control it by building a world that you keep at a distance in a way. You put reality in a fictitious world, like in a science fiction universe, for instance, or a space colony, as you have done with Astro-Darien. I don't want to use the word "ideology" too much, but this is also a sort of ideology: "I do not like the world today, the situation is pretty grim. So I build another world. But the world I'm building is not necessarily a better world."

sg: Well, probably the place to start with that is to understand what science fiction is, which is not really about the future. It kind of is, but it is also about reimagining the present. And so, science fiction sometimes does that through projecting future scenarios. But really it's about trying to rethink the short-term future and/or recast the future in a way that maybe dramatizes some of the bad things that are going on, or recast it in a way to find some escape routes out of the present. Whether it's a scene saying "fuck you" to the past, or it's like an elaborate science fictional scenario or world,

or some kind of understanding that the present is weirder than any future dystopia situation we could imagine, I think they're all an expression of dissatisfaction with the present, a kind of thinking through how to escape. An escapological drive as opposed to an escapist drive. Like Houdini, you are tied up in chains and you have to work out how to disentangle yourself from a trap, as opposed to "how can I imagine a little fantasy world to escape into for the weekend, whereby I have to return to reality on Monday?" That is where I make a conceptual difference between, like, escapology and escapism.⁵² So, I think there is an escapological drive behind worldbuilding, imagining future scenarios, drawing a line between the present and tradition.

GB: These worlds that you are building through sonic fiction often contain allegories of the future that someone else thought of decades ago, such as space colonies, post-apocalyptic scenarios, and things like that. These escapist tropes were common in 1970s space disco,53 which was sometimes tinged with metamodernist irony.54 Are we really building a world of our own invention or are we just playing with (or replaying from) an archive of allegories that are already available to us? It seems to me that, using a DJ metaphor, we very often are "digging the crates" (or "in the carts" 55) of pre-existing allegories of the future instead of coming up with new ones.

- 52 This seems to stem from Eshun's escapist view of sonic fiction: "Sonic Fiction replaces lyrics with possibility spaces, with a plan for getting out of jail free. Escapism is organized until it seizes the means of perception and multiplies the modes of sensory reality. Which is why you should always laugh in the face of those producers, DJs and journalists who sneer at escapism for its *unreality*, for its *fakeness*; all those who strain to keep it real. These assumptions wish to clip your wings, to tie your forked tail to a tree, to handcuff you to the rotting remnants of tradition, the inherited stupidities of habit, the dead weight of yourself. Common sense wants to see you behind the bars it calls Real Life," Eshun, *More Brilliant Than the Sun*, 103.
- 53 Ken McLeod, "Outer Space, Futurism and the Quest for Disco Utopia," in *Global Dance Cultures in the 1970s and 1980s*, ed. Flora Pitrolo and Marko Zubak (Cham: Palgrave Macmillan, 2022), 281–301.
- 54 Metamodernism is a feeling oscillating between "a typically modern commitment (from utopism to the unconditional belief in Reason) and a markedly postmodern detachment (nihilism, sarcasm, and the distrust and deconstruction of grand narratives, the singular and the truth)," Timotheus Vermeulen and Robin van den Akker, "Notes on Metamodernism," *Journal of Aesthetic & Culture* 2, no. 1 (2010).
- 55 This is a reference to Hyperdub's compilation of pioneering Japanese 8- and 16-bit video game music. Various Artists, *Diggin in The Carts (A Collection Of Pioneering Japanese Video Game Music)*, Hyperdub HDBLPo38, 2017, double LP.

sg: There is certainly some satire going on with most of my projects. There is some humor happening for sure. Certainly with escapology, for instance, I am not really talking about Scottish independence or escaping to a space colony. I am making a connection between what I found was hilarious: there is a space race going on, an actual space race going on in the north of Scotland, and in the founding of the UK and an imagined end of the UK, and the videogame-like situation of trying through democratic means to gain independence. And it's a decades-old desire, 50-60 years, I think, since at least the 1970s. Sometimes it looks futile, and sometimes it gets closer to reality. You wonder what is more likely, this political outcome or escaping to a space colony? Sometimes, it seems as far away from science fiction or the retrofuturist scenario of the 1970s of escaping to these orbital space colonies. Likewise, in my previous album in 2015, Nothing, the fictional world that we created with Lawrence Lek, the simulation artist, was a kind of satire on ideas that were floating around at that moment, both in a right-wing context and in a left-wing context, of fully automated AI-driven societies. So we created this idea of the Notel, a fully automated luxury hotel, which was a play on this idea of fully automated luxury communism. But the luxury communism that had been appropriated by a Chinese hotel chain and turned into a kind of luxury hotel chain for the elite. And so that's right-wing and left-wing appropriation and reappropriation. It was a hotel chain in which all the work was done by drones, except, for some reason that is not stated, there are no rich humans left to enjoy this privacy, this luxury security. So the question was, what are all these worker drones going to do, liberated from labor? Which is an old, old question. But, you know, it's a question that is still very current in discussions of AI and work and technological society and so on. So there's an element of satire going on in both of these projects.

GB: This idea of the liberated worker seems to come into play with the experience of jungle and rave culture, 56 which, similarly to hippie culture, also meant being liberated from employment, city life, the forces of society. 57 About the life cycle of EDM scenes, you mentioned they do not actually die off, but

⁵⁶ I couldn't help but notice that "AWOL," the name of the 1990s party "A Way Of Life" (Reynolds, "The History," 74), is an acronym that also stands for desertion ("Away Without Official Leave").

⁵⁷ Graham St. John, "The Difference Engine: Liberation and the Rave Imaginary," in *Rave Culture and Religion*, ed. Graham St. John (London: Routledge, 2004), 17–44.

become "undead," perhaps a bit like Mark Fisher once described pop music.58 Can you explain what you mean by "undead" in this case?59

sg: I am always struck by, if you follow the different waves of these music scenes, the wave of excitement that accompanies the sense you are rushing into the future and something new is happening, and the period of stabilization. These are kind of ecological cycles of innovation, stagnation, decline. But even when you see a scene has stagnated, it's still going on and it still could be even bigger than it ever was. Techno, for example, has been around for a long time, and it is bigger than it ever was. If we just talk about the genre of techno as opposed to all of electronic dance music, the rate of innovation is very slow, if at all. So the idea of the undead is that the genre lives on, even after, in terms of innovation, has died. The genre in a way, keeps growing as it winds its way into new generations and more mainstream audiences. It may be bigger than ever, but there is something about the period of innovation, which is its liveliest period, in a way. Or where it is most dynamic and most full of potential. There is the undead nature of musical scenes. Why do they only last? Why does it feel like the period of potential is so short-lived? Why do scenes burn out? It seems like an ecological process of life spans where each musical scene formally and socially has a life cycle. And there are waves, again. There are waves of new life forms that supersede previous ones, and it's not that the previous ones disappear. They often go into a latent state where, instead of spreading to a mainstream audience, they just stay with the hardcore of a scene. That scene may appear dormant from the outside, but it's carrying on quite happily within. And, as often happens with generational movement, it might suddenly get reactivated ten years in the future and start spreading again. You know, jungle is a good example of that. There was a moment of explosion in the early 1990s

⁵⁸ Mark Fisher, "Is Pop Undead?" in K-Punk: the Collected and Unpublished Writings of Mark Fisher, ed. Darren Ambrose (London: Repeater, 2018), 317-20.

⁵⁹ Goodman has also written on "undeadness" in regard to holographic reconstructions of deceased performers: "This ghostly virtual culture of the undead has already spawned a lazarian economy based on the digital revivification ... From Elvis's 2007 holographic appearance on American Idol to Tupac's chimerical cameo at Coachella festival in 2012, popular culture has enlisted rotoscoping technology in its reanimations of dead rap and rock stars. These resurrections are emblematic of a newly emerging necromantic culture. They apply pressure to the conceit that performers must be breathing, exposing the cultural fixation that subordinates vibration to mortality. [A] digital death mask projected onto the holobody of the entertainment industry ... Such technologically induced rebirth opens up a series of intriguing questions concerning artificiality, immortality and virtuality," AUDINT, Unsound:Undead, ii-iii.

and it mutated into drum and bass, it became a global phenomenon. Then, it kind of retreated a bit and just focused on itself. The global networks were established, but you would not see them in the charts anymore. And then, you know, twenty years later, a new generation arrives and finds a way of making it spread into the mainstream again, whether it be Pink Pantheress or Nia Archives, someone like this. So, the idea of the undead is really just trying to understand how scenes go through these life cycles and carry on outside of the spotlight, maybe without innovation, but just treading water, potentially to be reactivated in the future.

GB: Some say that the experience of going to rave parties in the early 1990s was like participating in a process that was preparing you for the future, 60 a bit like with those waves of innovation that you mentioned. Compared to EDM now, how would the 1990s experience be unique to that time and place? Are the experiences of new generations, those rediscovering jungle music today, not just as unique? Don't they have the same meaning for new generations? Are we not idealizing our own past experience of having been in a place and time that we think was unique, when we say that someone was doing that now is just part of an undead scene or of a revivalist scene? How can we tell the difference?

sg: I suppose, weirdly, that the definition of the scene being a "life," when it is an embryonic situation, when it is like an egg, is full of potential. The potential is partly a social thing, but the key is the technology being new. So, there's a whole world, a technological world to explore. That is the difference now, if you take a scene that is twenty years old. Obviously, there's potential in that musical form exploring new technologies. But if it's truly innovative it's going to become a different musical form. It is not just going to be a technologically updated permutation of a musical form. So that would be the difference. I think you are right socially, but technologically, that would be the key difference between jungle in the early 90s and jungle now, for example. Specifically, you know, things like time stretching, technological approaches, which made jungle music a distinct historical line.

60 "Living through the 1990s, it felt like electronic music was splitting up into different mutational directions ... Teleology became a physical sensation, something you felt as the ever-accelerating beats impacted your body ... Each phase of the music superseded the preceding one like the stages of a rocket being jettisoned as it escapes the Earth's atmosphere. To be inside the ride of rave was a bit like a drug-soaked and danceable replay of early 20th-century modernism." Simon Reynolds, "(No) future music?" *New Perspectives* 8, no. 3 (2020): 308.

GB: You were in China just recently; did you see more innovation there?

sg: I had a two-week tour in Shenzhen, Beijing, Shanghai, Chengdu, and Taipei at the beginning of November [2023]. It is always wonderful, and I take home a strange sense of optimism when I come back from East Asia, back to the old continent of Europe. 61

GB: Optimism regarding what, in particular,?

sg: Well, at least in terms of the music scene there. I feel that there is still optimism in the sense that the electronic music scenes there are much younger than they are here. There is a lot of cross-fertilization and experimentation going on, so it is still moving and dynamic compared to something much with a much older history in Europe and so on. There is enthusiasm and excitement, which is fresh over there. It feels very different from Europe in a lot of ways.

GB: Does it remind you of your enthusiasm when you first started?

sg: Yeah, in the sense that the horizons were open. The difference is that this younger generation is experiencing electronic music just now, because of the Internet and digital culture. They are getting everything from a recorded history, all at once and chronologically, not necessarily in a timeline.

GB: Discovering music in the "endless digital now," the state of timelessness of post-internet generations, 62 is not exactly the same as digging into a crate of old records...

sg: It is a different landscape for sure. The boundaries were blurry. They get stuff from the 1960s at the same time as the 1980s and the same time as the noughties [2000-2009]. It's all flat. And they don't have the same tribal allegiance to genre that my generation had.

GB: Talking about history, what's your take on archiving? Do you think it has

- 61 Goodman's interest with contemporary China can be traced back to parts of his PhD dissertation (Turbulence) and to an essay published in the late 1990s, which possibly includes the earliest documented use of the term "sinofuturism." Steve Goodman, "Fei Ch'ien Rinse Out: Sino-Futurist Under-Currency," Warwick Journal of Philosophy, no. 7 (1998): 155-72.
- 62 "You inhabit a sort of endless digital Now, a state of atemporality enabled by our increasingly efficient communal prosthetic memory," William Gibson, Distrust That Particular Flavor (New York: Putnam, 2012), 41.

more to do with the accumulation of knowledge and power, or is it part of our extended mind?

sg: I think archives are part of the process of the human brain spreading into the world. It is a prosthetic process. Or, from the other point of view, it's like a global network extracting knowledge from humans like this "knowledge machine." You could see it like a Skynet type of thing, 63 where this information entity that, up to this point in history, has used humans to establish a global technological network, which has enabled knowledge to become autonomous from the human brain. So, like a global archive. I suppose I see it like this idea of the noosphere, to have like this global brain, which is now more than human and obviously has an agency that's more than human. For better or for worse, it just is. You know, humans have facilitated this, but the impact of this kind of extended mind is beyond the control of humans by this point. So, I always thought, in relation to music, from a musician's point of view, that the Internet is just a massive sample bank. But it's more than that. It's some kind of entity which uses humans to assemble it.

GB: This makes me think that the knowledge in this archive is not simply stored; it is not inert. It continues to function and transforms itself as well. I think that's also one of the peculiar properties, or side effects, of these Skynet-like archives. Because usually when you find an item in an archive, it is always something you can transform the meaning of through historical interpretation. For instance, when you look at it from the present, maybe you

63 In the film The Terminator (James Cameron, 1984) Skynet—an intelligent computer program created to oversee the US military network—becomes conscious and decides to exterminate humanity to preserve itself from being deactivated. In the follow-up film of 1991 (Terminator 2: Judgment Day) Skynet sets to unleash a nuclear arsenal against Russia to incite a counterattack that will kill most of the population and open the world to robot conquest. The Skynet AI takes the role and responsibility of human intelligence, absolving humans of all accountability for their present geopolitical circumstances. In both films, human characters and cyborgs from the post-apocalyptic future travel back in time to the pre-apocalyptic present, embodying a catastrophic prophecy that challenges the peace and tranquility of modern civilization. The impending end of the world acts in the main character's mind like a retroactive trauma, a recollection of the future that permeates the present world. This mechanism appears connected to that of CCRU's hyperstition mentioned earlier. For further study: Richard Brown and Kevin S. Decker, ed., Terminator and Philosophy: I'll be back therefore I am (Hoboken: John Wiley & Sons, 2009); Girish Na, "Military-Industrial Complex in the Science Fiction Films of James Cameron," Al-Shodana 10, no. 1 (2022): 74-82.

decide that it's not worth being in the archive. So you remove it or destroy it because you interpret it as fake, or false. Therefore, the archive changes in this way. Now, it can also be the other way around: artifacts, relics and historically founded items can be used to generate fictional, historically unfounded narratives.

sg: I suppose now we are in a new phase of the archive where, like you said, while the archive is always generative, AI makes the archive generative in a whole new way, being able to analyze big data, huge databases, like a soil for growing things that have never existed. And that's genuinely new, isn't it? You know, certainly the cultural before the digital, like the cultural archive that we carry within our memory, is always like a soil for generating new culture. But what's different is that the generation doesn't need humans anymore. Alternatively, if it does, the role of the human is much less important than it was—again, for better or worse.

GB: One of the differences is that, what you find in an archive—while you might not be sure of its "authenticity" or "validity," because that can change within different historical conditions and interpretation—you can still take for granted its actual existence as an item before it entered the archive. Since it is the archive, then it has happened before. Someone wrote those words, someone made that item. The non-human generation process that you mentioned clearly challenges that ontological statute. Machine generation can create "records" with great speed, often faster than it takes a human to retrieve an item from a digital repository. These evolved forms of "archives" can then answer our queries with "new" records, artifacts that never existed before our search, words that were never actually said or written...

sg: Well, maybe, where we are now is just shining a light on the archive to make us realize that that was always the case. There was always fiction in these archives. It is just that we were entering an epistemological contested period, which starts to undermine our ontology. This ungrounds the ontology. I mean, I suppose, this is what people think about in terms of history and philosophy. We are in a nihilist period where it is all about perspective. Not necessarily relativism, but maybe this shines light on the archive that has always been composed of like, parallel perspectives.

GB: Going back to waves of innovation, when you speak about riding a wave, there is an implicit sense of velocity. What is the importance of speed in this process?

sg: The beginning of each wave has been accompanied by excitement, and excitement comes from a moment of feeling the intensity of something really exciting going on. I do not have words to describe it quite yet. It feels different from what we have done before. It feels different to a certain extent from what is going on out in the world, at least the way it resonates with me. So a sense of things speeding up, sometimes up bears in the music literally, jungle in the 1990s, or footwork more recently, but it does not have to be literal speed. It can just be a feeling of experiential intensification.

GB: Are you talking about tempo and BPMs versus other types of intensity and dynamic build-ups?

sg: Literally, it could be BPMs or it could be a sense of speeding up in terms of encountering something that you have not encountered before in rapid succession. And that could be a bunch of producers or a bunch of music that literally forces your perceptual and your cognitive system to speed up, to catch up with something that you do not have the conceptual equipment to understand. I think you could use synonyms for speed there, like intensity, excitation, or excitement. Clearly, in the last few thousand years, there has been a technologically fueled acceleration of travel, communication, population growth, and processor speed. You know, these are very literal ideals of acceleration that are the backdrop to everything. In a much closer cycle, at various points of electronic music, in the last forty or so years, there have been moments of literal acceleration of BPM but then also deceleration. There is a rhythm to it: it seems like a cyclical thing. But then there's this other thing which I suppose relates to innovation, like cycles of creation and destruction. When you are in the part of the wave that feels like innovation, creation potential, and so on, I think there's a natural feeling. Natural is not the correct word. There is a corollary feeling of acceleration there, because there's a lot of things happening that you do not understand, even though it is not necessarily a literal speeding up of rhythms or music. I suppose that's what future shock is: having to process things that you do not quite understand. In terms of musical or formal innovation, historically this is often accompanied by what people describe as noise: "Oh, I don't understand that, it's just noise." Then, culturally, cognitively, and affectively, you deal with the surprise, the shock of the new, and it gets accommodated and you start to have language to describe it. And then, as you start to have language to describe things and understand what the formulas are, there is

an accompanying feeling that things slow down. So, I think there's a feeling of speed that accompanies not knowing exactly what is going on.

GB: This may also be because the human sensorium has limits in the speed it can perceive. You can make music that is very fast, but you cannot make it faster and faster because then it becomes one single sound; you do not detect rhythms anymore. The same goes with slowing down, because when you get very slow, you are severing the relationships between sound events, and they are no longer rhythms anymore. However, since the Skynet does not have those limits, the sensation of velocity and the feeling of not knowing exactly what's going on might as well be here to stay.

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Steve Goodman, known as Kode9 is a Glasgow-born, London-based electronic music artist, DJ, and founder of the Hyperdub record label. After completing a PhD at Warwick, where he was also involved with the influential CCRU theory-fiction group, he published *Sonic Warfare*, a monograph on affective ecology of sound as vibration and the politics of frequency and amplitude. He has been a lecturer at the University of East London and wrote extensively of the viral propagation of sound within the memetic cultures of contemporary capitalism. Since 2008, he is a member of AUDINT (Audio Intelligence) sound art collective and research cell, investigating the impact of sound on psychological and physiological states and producing installations, films, talks, records and book projects, with performances and exhibitions at London's Tate and festivals in Montreal, Krakow and Berlin. In 2019, Goodman co-edited the book *Unsound:Undead* for Urbanomic Press.