On Modes of (Over)Stimulation

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Abstract

This essay provides an introductory account of concerns over media stimulation through a series of critical lenses. Building on theoretical debates concerning the struggle for control of perception and the potential to rewire the human perceptual apparatus, we examine issues such as distraction, shock, and desensitization, and consider their significance in the contemporary mediascape. First, we map historical precedents theorizing the modern sensorium, including Georg Simmel's account of the metropolis, Walter Benjamin's concept of shock, and Marshall McLuhan's notion of numbness. Second, we consider stimulation and overstimulation from a media-ecological perspective, which emphasizes entanglement between human subjects and computational technologies. We then reconsider pessimistic diagnoses of media (over)stimulation, seeking to nuance these accounts, and turn to emerging interfaces, such as neural media, to explore new frontiers of stimulation. Before introducing the inspired contributions to this special issue, we establish some guiding principles for a new media theory of (over)stimulation.

Keywords

media stimulation, overstimulation, attention, shock, numbness, acceleration

After an ill-advised request to watch a video tape of torture and murder, Niki Brand, a character played by Debbie Harry in David Cronenberg's early cyberpunk film, *Videodrome* (1983), whispers "I think we live in overstimulated times…"

> … We crave stimulation for its own sake. We gorge ourselves on it. We always want more, whether it's tactile, emotional or sexual. And I think that's bad (ibid).

Fast forward 40 years from the tabloid culture shock of the "worst excesses of [uncensored] cinema sex and violence"[1] (ibid), and we find a very similar anxious media discourse, now reorientated to market a "sound wellness" phone app (Endel, no date). Remarkably restating Cronenberg's fictionalised apprehension, the advert for the Endel app declares that "we live in an overstimulating world" (ibid). As an exemplar of the current fashion for wellbeing tech, the app promises "personalized soundscapes to help you focus, relax, and sleep" (ibid). Unsurprisingly, perhaps, the technology behind Endel is typically "backed by neuroscience" (ibid). The app is an innovation seemingly supported by scientific studies of sound and flow state theories intended to "help put you in the right state of mind" (ibid). Beyond the techno-solutionist hype, and lack of acknowledgement of neurodiversity, however, we recognize how Endel's claims to provide an "antidote to a distracting world" (ibid) target a prevalent pathogenic cultural panic concerned with media overstimulation. Comparable to *Videodrome's* unleashing of a dystopic sensory overload of culture shock during the video age, resulting in mass addiction to hyperviolent and pornographic imagery, current media technologies are subject to a discourse of moral panic which now offers new ways to resist or manage the dangers of overstimulation.

This special issue of *Media Theory* sets out to frame these concerns over media stimulation through a series of critical lenses. In many ways, our theoretical curiosity is anchored in longstanding debates concerned with the struggle for control of perception, and the potential to rewire the human perceptual apparatus. While the full issue will therefore embrace a much wider remit of media stimulation, our introduction focuses specifically on four key themes: what stimulation and overstimulation comprises, its association with political economies of attention and inattention, the emergence of novel interfaces, and variations and ambiguities surrounding possible modes of resistance.

We begin with some supporting sociocultural historical precedents, including Georg Simmel's metropolis, Walter Benjaman's shock, and Marshal McLuhan's numbness.

Through N. Katherine Hayles, Bernard Steigler and Gilbert Simondon, stimulation and overstimulation are then considered as primarily a media ecological problem (Fuller, 2005). Indeed, along these lines, the theoretical lens moves from humanistic media theory to post-phenomenological and Whiteheadian perspectives, similarly engaged with reassessing lifeworlds in which algorithms and human subjects become interwoven processes.

Following these theoretical contexts, we further discuss how new technological frontiers of media perception often correspond with a persistent pathogenic politics of stimulation, mostly framed by negative affect, surface hyperattention, and profound algorithmic shock. Certainly, in recent decades, media theory has significantly recalibrated its analytical concentration to address critical concerns about algorithmic perception in contrasting ways. On one hand, Hayles (2007) has noted a recent transition from deep attention to hyperattention that brings about (or resumes) certain hardwired perceptual advantages. However, on the other, we acknowledge anxieties about numerous perils associated with the perceptual outsourcing of machine learning interlaced with a capitalist political economy, and the imminent arrival of neural media devices that might bypass cognitive awareness of perception altogether.

Taking a penultimate position, we note how the technological rupturing of perceptual boundaries has also prompted a more nuanced series of questions relating to modes of resistance. Some of this work challenges conventionally pessimistic cultural viewpoints that perhaps too readily assume a prevalent linear denigration of perception through (over)stimulation. It is necessary, we contend, to be cautious of the seemingly technologically deterministic tactics of detox and dopamine fasting, through recognising possible cultural uplifts achieved through, for example, boredom as pleasure, compared to outright abstinence. It is, indeed, through engaging with these minor enchantments of (over)stimulation that we might more effectively manage negative affect and even uncover novel avenues for sabotage, interruption, and neurodivergent repossessions of perception.

Finally, before opening up the discussion to our illustrious list of invited contributors, we try to establish some guiding lines of future enquiry and offer some provocations for a new *Media Theory of (Over)Stimulation*. Looking ahead, the challenge for media

theory is, we contend, to develop a flexible framework that interrogates sensory control, governance, and the weaponization of (over)stimulation, while also acknowledging the emancipatory potential of augmentation and the rewiring of existing perceptual regimes.

Human shock, numbness, and the modern sensorium

There is a clear proto-media theory precedent for widespread concerns about the perceptual tremors activated by an overstimulated sensorium. Prefiguring the traumas of an escalating digital "nervous life", Simmel, in 'The Metropolis and Mental Life', observed how modern urban life imposed a continuous intensification of sensory stimuli. The modern city, with "the rapid telescoping of changing images, pronounced differences within what is grasped at a single glance, and the unexpectedness of violent stimuli", accordingly (1971: 325) creates new "sensory conditions of mental life". This hyper-stimulating urban sensorium forces an adaptive response in the mental life of the city dwellers. Simmel suggested that the metropolitan type develops a barrier against the overwhelming distractions of urban life, "a protective organ for itself against the profound disruption with which the fluctuations and discontinuities of the external milieu threaten it" (Ibid.: 326).

This protective organ manifests as the cultivation of an emotionally detached and impersonal attitude, coupled with "a mental predominance through the intensification of consciousness" (Ibid.). Protection against emotional overstimulation and the depletion of mental energy is thus achieved through a form of *rationality*—a matter-of-fact, pragmatic, and calculative mentality, which, as Simmel suggests, "is the furthest removed from the depths of the personality" (Ibid.). Such a mentality aligns closely with the burgeoning market economy of the city, which transforms everything personal into monetary value, and the standardization of urban life, which is operationalized through schedules, timetables, and pocket watches. This detached disposition of a city dweller characterizes what Simmel terms the "blasé outlook" (Ibid.: 329), a barrier of indifference and apathy that shields the individual from the "rapidly shifting stimulations of the nerves which are thrown together in all their contrasts" (Ibid.).

Simmel's study is extended by the investigations of Walter Benjamin, whose later work is, as pointed out by Bourland (2023: i), focused on the question of "what is the experience of modernity". Analysing the emerging sites of the modern city life, such as arcades, brothels, casinos, and factories, Benjamin conceptualises the impact of capitalism and its new technologies on the sensorium. These socio-technological pressures have, according to him, subjected our receptivity for the world "to a complex kind of training" (Benjamin, 2006: 191, cited in Ibid.). Bourland (2023) helpfully synthesises Benjamin's fragmented conceptualisation of this experiential training through the interrelated concepts of *shock* and *phantasmagoria*. The permanent state of shock, induced by crowds, traffic, flashing advertisements, but also industrial working conditions, explains Bourland (2023: ii), corresponds to our nervous system being "wound into a state of near-constant expectancy and defensive vigilance".

This exposure to perpetually new stimuli jolts "the nervous system into a state of wariness and reactivity" (Ibid.: ii), creating conditions in which "consciousness's operative function is no longer to register experiences and impressions, but to protect itself against them" (Ibid.: 3). Unlike Simmel's protective barrier against overstimulation, which takes the form of an emotionally detached yet expanded mental activity, Benjamin sees the coping mechanism as primarily a numbing of cognitive response to stimuli. Our diminished capacity to grasp the world is then overlaid by phantasmagoria, the aesthetic and affective dimension of capitalist ideology. These commodified "illusions and dreams which flicker uncertainly across the surface of experience" (Ibid.: 2) further dull critical perception and obscure their origins in exploitation.

In terms of media theory, most readers will already be familiar with Marshall McLuhan's (1964) dictum that technology extends a part of the human—both physical and psychic. However, he is also probably the most significant modern media theorist to stress the issue of media stimulation and overstimulation. At the outset, McLuhan's stimulation may be understood through the sensory metaphor at the core of his influential distinction between hot and cool media (ibid.: 36). The hotter the medium, the more detail it delivers in the act of its reception, and the more it stimulates us, the less we are required to participate actively in its communicative process. Conversely, the cooler the medium, the more space it leaves for the receiver, who is invited, even

compelled, to complete its informational range through active engagement. As follows, the medium emerges through the perceptual and cognitive relation it generates with its user. In some sense, therefore, for McLuhan, media operate as architectures of stimulation, controlling "the thermostat" of the organisation of experience itself:

> We have now become aware of the possibility of arranging the entire human environment as a work of art, as a teaching machine designed to maximize perception and to make every day learning a process of discovery. Application of this knowledge would be the equivalent of a thermostat controlling room temperature. It would seem only reasonable to extend such controls to all the sensory thresholds of our being. We have no reason to be grateful to those who juggle these thresholds in the name of haphazard innovation (McLuhan & Fiore, 1968: 69).

McLuhan's (1964: 52) theory of the perceptual thresholds of extension is prominent in his analysis of autoamputation: a process where the central nervous system numbs itself as a defensive measure against the disruptive force of technological extension so as to protect itself from the shock of these extensions. Drawing on the myth of Narcissus, McLuhan reminds us how numbness has always been a prevalent mode of protection from the shock of these extensions (ibid.: 51). Comparable to this self-absorbed figure of Greek mythology, who becomes mesmerized by his own reflection, humans become captivated by, and desensitized to, their own technological extensions (ibid.). This comparison between Narcissus's misconstrued obsession with his reflected image and the human experience of environmental stimulation is perhaps compounded by McLuhan's (1997) further ecological observation of an anaesthetized fish. Similarly, desensitized by her life inside the medium of water, the fish, like the human, is rendered without sensation, since she has no anti-environment to contrast with her experience of the pond (ibid.: 175.). In our current digital media context, whether considering experiences of virtual reality or mimetic emotional processes of artificially intelligent systems, McLuhan's numbness helpfully implies that while a medium amplifies a sensory function, it does so at the cost of amputating others. Consequently, a McLuhanesque concept of overstimulation is a product of human extension but also conveys a loss of awareness, requiring resistance, it seems, through becoming a fish out of water.

In many quarters of contemporary media theory, and wider discourses, McLuhan's tension between amplification and amputation can be continuously traced to problems stemming from media stimulation and overstimulation. There is, it seems, an unremitting cultural history of the invasion of perceptual spaces by extended media, which persists in reorganizing human attention and inattention into a series of degenerative pulsed flows and stuttering streams of constant stimuli. Again, there is nothing seemingly new here. New technologies have frequently been framed as desensitizing. Derived from perspectives ranging from Heidegger to Agamben, digital tools become technologies of abstraction, making their material effects barely perceptible. If this is the case, then humanity appears to be tumbling down what Günther Anders calls a *Promethean gradient* (Anders cited in Müller, 2015). From top to bottom, there is an escalating gap opening up between individual human agency and the effects of complex socio-technological systems in which agency becomes entangled. As Anders formulates the downward trajectory of his slope:

> The performances of our heart – our inhibitions, fears, worries, regrets – are inversely proportional to the dimensions of our deeds, i.e., the former grow smaller as the latter increase in size (ibid.: 42).

There is, in this way, a decreasing capacity to feel, empathise, or even imagine human agency outside of its coupling to a technological governance of perception. Moreover, the escalating complexity of this technosocial reality precludes any possibility of a bird's eye view on the anaesthetic violence it brings about. The invention, production, and deployment of technology itself become an intricate and highly distributed process, supposedly beyond the grasp, let alone the control, of individual perceptive agency. For example, the scale of the ecological threat posed by "Promethean" data centres the "size of Manhattan" stretches far beyond the limited capacity of human intervention or imagination.[2] In their place, Anders locates a kind of "machine-mediated absence, absentmindedness, and absent-heartedness" (Müller & Mellor, 2019).

Like the modernist urban milieu, and preceding analogue media experiences of McLuhan's media extensions, digital culture is often theorized as a continuum of micro-shocks that similarly desensitizes the relationship between the human subject,

environment, and political economy. Indeed, this mode of theorization raises familiar questions. Over a century after Simmel, as we scroll through the intensified sensory stimuli of TikTok at night in bed, we might be left to wonder whether or not we are still capable of processing these shocks, or have been reduced to organisms reacting in loops, screening out the excess in order not to fall into the void (Heyes, 2020).

> Do we attempt consciously to process this shock experience, or do we, at a certain point, need to rely on our ability to parry the bombardment of our senses, to protect ourselves as sense-perceiving subjects from the technological overwhelm of modern experience? (ibid., 2).

Is there still space for sentient engagement, for resisting the pull toward perceptual deadening and reclaiming attention as a site of agency? Certainly, in the far more complex entanglements of our digital ecologies, in which multiple, layered media operate simultaneously to construct ecosystems across synaptic, cognitive, affective, and bodily planes, there is surely a need to redefine what can be perceived, desired, and acted upon in overstimulation.

While it seems a given that media stimulation must never be approached as simply neutral, the stimulating mediation that characterizes contemporary techno-extended media environments has also not occurred in a deterministic space. On the contrary, throughout Western modernity, and beyond, stimulation has emerged through a complex chronicle of socio-economic alterations, infrastructural modulations, recalibrations, and manifold sensory manipulations. From urban shop windows to print, moving images, and our current experience of wellbeing apps, AI and neural interfaces, the senses seem to have been reworked, or as McLuhan puts it, *massaged*, by media infrastructures functioning as perceptual regimes. But again, we do not see this as an exclusively mechanistic amplification or amputation of the human sensorium. The governance of the senses imposes on, and culturally inscribes sensorially within political economies of attention, surveillance etc., but does so in accordance with the co-constituting and recursive conditioning of technocapitalism.

(Over)Stimulation as media ecology

One way to understand the complexity of these cultural inscriptions has surfaced in media ecology perspectives, which similarly interrogate the capacity of media to stimulate, anesthetize, and normalize the sensory body as a perceptual environment. For media ecologists, media operate in a field of affordances, as vectors of affect and cognition. Every stimulation therefore occurs in a relational spatiotemporality in which organism and environment are co-determined by what becomes perceptible, sensorily relevant, and practically accessible (Bateson, 1972). In this mode of co-determinacy, media function in a space of possibility that conditions and orientates perception itself. Within the media ecologies framework, then, Matthew Fuller (2005) does not locate media as discrete entities, but sees them instead as aggregates of material, energetic, and semiotic forces, which modulate the sensory conditions of subjectivity and the grammars of action.

Two important figures in the development of similar media ecological perspectives can be identified in Gilbert Simondon (2017; 2020) and Bernard Stiegler (1998a; 1998b). Both of whom, albeit in different ways, implicate stimulation in the very production of subjectivity.

Perception is an integral part of a more far-reaching process of Simondonian individuation, the process through which a metastable system, made up of potentialities, organises itself into an individual while maintaining an active relation with its environment through the co-constitution of subject and *milieu* (Simondon, 2020: 21). While for Simondon individuation concerns the emergence of subject and milieu, for Stiegler the same dynamic extends to the technical constitution of existence itself. For Stiegler (1998a; 1998b), existence is constituted also through *tekhnê*, a process expressed in the concept of tertiary retention—and elaborated in his extended dialogue with Heidegger and Husserl—as the externally stored memory, recorded in technical supports. As Stiegler writes, "to think time in terms of time is to think it first in terms of the clock" (1998a: 212).

It appears then that an account of material synthesis, as it was for Stiegler in relation to time, must also take the form of a material sensibility in line with the process of individuation. Not only (Husserlian) intentions, time, and space but the senses

themselves are reorganised within computational synthesis, both across our small screens and within vast cloud storages. In the same way as in the Stieglerian account of memory, perception too is shared and recorded outside of us through media and technology, so that the subject becomes part of a subjectless transcendental field, one that is constructed by the media themselves (1998b: 241). We are in fact returning to Stiegler's questions, but reframed as an inquiry that, from our perspective, centres on the problem of sensibility.

> What happens to re-constitution, however, and consequently to epochal doubled re-doubling, in the age of retentional finitude's industrial synthesis? (ibid.: 240).

The (over)stimulation of perception, in this view, can be considered a dynamic, metastable field where multisensory, affective, and technical forces converge, producing new configurations of possible subjectivity.

If the human capacity to respond to stimulation is as prearranged as these commentors propose, then ecological approaches might help us expand the theorizing of media stimulation beyond humanistic renditions of the amplification/amputation binary. Various ecological, post-humanist, and post-phenomenological scholars have opened up different ways of conceptualizing stimulation in post-anthropocentric terms. For instance, in his new materialist approach to digital media, Levi Bryant (2014) shows how to conceptualize contemporary media ecologies of human and nonhuman entities in terms of their co-determining Spinozian capacity to affect and be affected by their environment. His post-human media ecology extends this conceptual pairing by suggesting that every human or nonhuman entity can be defined by means of two complementing aspects: its *structural openness* (ibid.: 55), the spectrum of stimuli that the entity is receptive to, and its *operational closure* (ibid.: 56), which concerns the specific way in which the entity perceives and processes this stimuli.

"Because of the selectivity of structural openness", suggests Bryant (ibid.: 59), "as well as the self-referential nature of operational closure, each [entity] is blind to much of the world". This blindness, he claims, poses two main risks to the ecological stability of perception itself. While the first (epistemological closure) dangerously filters out relevant data as mere noise, the latter (confirmation bias) implicates a perceptual

apparatus that only selects data that reinforces the entity's existing operations (ibid.: 60-61). As these approaches are equally applicable to humans, machines, and organisms, they provide a productive lens for examining current media ecologies. These ecological perspectives draw attention to structures of stimulation in digital environments, constituted by a first wave of non-human sensors of perception, like wellbeing phone apps, chatbots, smart thermostats, as well as applications such as Google Maps that sense movement, aggregate it, and return it in the form of a real-time services like directions and traffic reports. To examine the structural openness and operational closure of these non-human sensors, data collections, and technologies of capture (and the political-economic stimulations that orient them), is to develop an understanding of dynamics and politics of their operations.

Of interest to a developing approach that considers the latest wave of AI cognizers is Hayles's (2022: 647) suggestion that the non-human intelligence of large language models (LLMs) could be better understood by trying "to recreate the bases on which machines experience and interpret the world". What this seems to amount to is post-phenomenological reconstruction of a Husserlian lifeworld or "umwelt" that technologies now inhabit (Uexküll, cited in ibid.: 647). In this AI context, LLMs could also be conceptualized in respect to their lifeworld of electrical inputs, algorithmic architectures, training data, and human prompts, all of which co-determine their experiences of the world. Along these lines, Hayles (ibid.: 648) suggests that although the "slice of the world [LLMs] can apprehend and process is minuscule compared to the world that humans have", LLMs' perceptive apparatus has some similarities to that of human cognizers. Certainly, the way these models infer patterns from vast quantities of training data by endeavouring to separate signal from noise is inevitably not dissimilar to some aspects of human politics.

Hyperattention, algorithmic shock, and pathogenic infospheres

Despite this ecological view, there is a persistent splintering of debates concerned with the acceleration of new forms of digital stimulation. These debates can be crudely divided according to a tripartite naïve optimism, cultural pessimism, and attempts to develop more nuanced conceptualizations of changes to perception. Perhaps these

various fissures in opinion become most prominent in an initial comparison we make between Hayles and the political and cultural theorist Mark Fisher. Certainly, in her work reflecting on the transition from deep attention to hyper attention, Hayles (2007) is careful not to frame an apparent pervasive hyper-attention as a regression of sensory perception. Unlike subsequent popular pessimistic discourses (e.g., Carr, 2010), Hayles frames the assumed rewiring of deep to hyper-attention as a partial return to earlier pre-linguistic human cultures. Herein, the necessity of flitting attention between peripheral objects for survival predates the latter development of deep attention to religious and scholarly texts. On one hand, therefore, deep attention is associated with learning to be literate, and characterized by:

> […] concentrating on a single object for long periods (say, a novel by Dickens), ignoring outside stimuli while so engaged, preferring a single information stream, and having a high tolerance for long focus times (Hayles, 2007: 187).

In contrast, like its pre-linguistic antecedent, digitally-native hyper-attention is more dynamic and dispersed. It is marked by "switching focus rapidly among different tasks, preferring multiple information streams, seeking a high level of stimulation, and having a low tolerance for boredom" (ibid.).

Fisher (2009: 22-25) similarly recognises how this kind of digital hyperstimulation challenges aspects of perception, particularly the attention of his students, who are, now more than ever, confronted with an exponential growth in "cognitive" devices. Unlike Hayles, however, Fisher locates hyper-attention within an anxious discourse in which students have become a 'post-literate "New Flesh" that is often "too wired to concentrate" or connect [their] current lack of focus with future failure, [and] their inability to synthesize time into any coherent narrative" (ibid.: 24).

Fisher explicitly links his concerns about student hyper-attentiveness to a "video-drome-control apparatus" responsible for a widespread denigration of culture in late capitalism (ibid.: 73). Indeed, for him, hyper-attentiveness is a "pathology of late capitalism" in which students are "wired into the entertainment-control circuits of hypermediated consumer culture" (ibid.: 25). They seek out multiple streams of stimulation, making them seemingly incapable of deep concentration. Their

inhabitation of a *perpetual now* is characterized by a constant micro-dosing of pre-digested joys, administered by digital devices, rendering them unable to project themselves into the future (ibid.: 24).

Along similar lines, Franco "Bifo" Berardi's (2009: 98) concept of *Aphasia* points to the integration of the human mind into the processes of "capitalist valorisation", appearing to produce a profound "anthropological mutation" and "above all a transformation in the perception of time" (ibid.: 69). As Bifo puts it in his own words:

> The conscious and sensitive organism is submitted to a competitive pressure, to an acceleration of stimuli, to a constant attentive stress. As a consequence, the mental atmosphere, the info-sphere in which the mind is formed and enters into relations with other minds, becomes a psychopathogenic atmosphere (ibid.: 34–35).

Aphasia is thus interpreted by Bifo as a:

> […] consequence of the growing distance between info-stimulation and the time needed for the elaboration of info-stimuli (ibid.: 98).

Comparable in many ways to Benjamin's overstimulated urban environment, the contemporary technical configurations of Aphasia produce a pathogenic sensory landscape composed of continuous flows of micro-shocks, calculated distractions, and instantaneous attentional peaks. It is a deceptive immersive experience, culminating in an algorithmic aesthetic of perturbation, a site of systematic production of psychic distress that exhausts the body, overloads the mind, and produces diffuse atmospheres of burnout and permacrisis. It is an info-sphere that ultimately does not care for human perception, since as Bifo contends, "the time for empathy is lacking, because stimulation has become too intense" (ibid.: 85). Human perception is instead forced to adapt to increasingly frenetic perceptual rhythms and operates through algorithmic systems that maintain a continuous state of cognitive alertness. Like Hayles's hyperattention, then, perception needs to constantly and rapidly switch from one environmental event to another. However, in sharp contrast to the hardwired advantages of hyperattention, and like Fisher, Aphasia brings about widespread attentional depletion, symptoms of anxiety, emotional instability, and depression.

By delegating ever more perception time to computational devices, it seems that a relational estrangement has opened between direct and mediated experiences of perception. The cultural volatility of perception to 24/7 visual regimes of capitalism has also been extensively examined in the work of Jonathan Crary (2013), Joanna Zylinska (2023), Jonathan Beller (2012), and Yves Citton (2017). Zylinska (2023), for example, stresses that machine vision systems automate the process of seeing and interpreting visual data, thereby suspending, altering and superseding the agency of attention usually associated with human observers. Machine vision systems can detect, classify, and act upon visual information in ways that humans cannot, leading to new forms of surveillance and control (Zylinska, 2023: 96). Thus, overstimulation of this kind forces a neoliberal pressure on perception, playing a key role in further anthropological mutations. Along these lines, overstimulation might feasibly restructure the neurophysiological plasticity of the perceiving subjectivity. The perceiving mind, reduced to an operational interface, becomes progressively disconnected from embodied and affective experience, and is redirected toward a perceptual regime that is as productive as it is destructive.

Perception increasingly inhabits a reticular topology in which fragmented attention, multitasking, and stacks of unfinished tasks in the inbox become normative. Perceptual overload may itself be conceived as a condition of use and subjectivity: a moment in which McLuhan's anaesthesia coexists with a state of permanent hyperstimulation. To be sure, contemporary practices of resistance, from dopamine fasting to digital detox strategies, signal a growing awareness that the alternative to continuous excitement is not abstinence, but the recurrent reinvention of rhythm.

Neural media, augmented perception and the frontier of stimulation

If we follow to the letter the definition of stimulation in the physiological domain as something "that excites an organ or tissue to a specific activity or function; a material agency that produces a reaction in an organism" (Oxford English Dictionary, 2025), we can see how media stimulation can fall outside the contours of a material epiphenomenon. It occupies a space concerned with the reconfiguration of the ontological and perceptual thresholds, where technical infrastructures, sensory

protocols, and semiotic regimes predetermine the field of the perceptible, what appears, when it appears, and in what form. In this sense, (media) stimulation is primarily an ecological problem—not only environmentalist but ontogenetic—concerning the co-determined conditions of experience within a technical-sensory environment that precedes and exceeds us (Simondon, 2017; Stiegler, 1998a; 1998b).

In the case of emergent neural media (McDowell, 2023), we may describe a domain of medial objects that ranges from generative AI to electromyography (EMG) systems. These systems read motor intentions at the level of motor units prior to movement, translating micro-potentials into interactional commands. To be sure, non-invasive neuromotor interfaces use perceptual engagement pre-kinaesthetically, which is to say, stimulated impulses are captured before their somatic execution and lived phenomenological registration. In parallel, emerging devices are moving beyond a classical Human–Computer Interaction towards an interaction mediated by an algorithmic structure; ultimately, a Human–AI interaction (HAII). Whether in the form of Meta's latest neural wristband controller (Meta, 2025) or Neuralink's most recent implantable model (Musk, 2019), these technologies of sensibility inaugurate a modality of economic exploitation that does not depend exclusively on attention but on the capacity to process sensibility into computable data in order to generate new forms of sensibility.

Expanding on Tony Sampson's (2020: 150-168) non-phenomenological Whiteheadian analysis of HCI, we can again reappropriate terms from process philosophy to grasp modes of stimulation from a HAII perspective. To begin with, for Whitehead, human perception is not a "command post"; it simply provides just a "foothold" in reality (Stengers, cited in ibid.: 159). Perception "merely" operates "by means of a sensum", which "rescues from vagueness a contemporary spatial region" (Whitehead, 1929 [1978]: 170). The "perspective from the percipient" of this "spatial shape" offers no more than a mode of "presentational immediacy" (ibid.). Indeed, by espousing these high-theory technical terms from process philosophy, in direct relation to processual *prehension* (Sampson, 2020: 164-166), modes of stimulation appear to prioritize causal efficacy over presentational immediacy. In other words, what is phenomenologically perceived becomes only a fraction of what is—in Whitehead's wider sense of the word—actually *felt*, momentarily crowning an experience of relational *temporal thickness*

(Sampson, 2020: 158). This is an experience which is currently, we contend, increasingly densified and entangled within computational processes.

By way of these processual ontological interpretations of neuro-emergent technologies, we can see how neural interfaces and computational systems do indeed produce representations in forms of computed data. At the same time, they establish regimes of Whiteheadian prehension within space. As follows, a muscular signal captured through EMG, a cortical pattern inferred by an algorithm, or a spatial field rendered in augmented reality through a neuro-visor, are not neutral outputs but processual events in which perception is actively constituted. In each case, the datum is prehended and transmuted into a symbolic form, so that perception itself emerges in what Whitehead describes as a *concrescence* (Whitehead, 1929 [1978]: 312), which is to say, a broadly understood subjective *feeling* of objective datum, composed in this context by bodily processes and computational operations. Importantly, then, perception is not prior to the capture of biometric data but co-constituted within it; an instance of experience in which organic and technical occasions are bound together. From this perspective, computation becomes part of perception in its own becoming, as an operator that selects, amplifies, and temporalises sensations.

A process theory of perception introduces a number of important questions for a media theory of (over)stimulation. For example, how do we theorise media and mediation if we cannot separate them as clearly as McLuhan's seminal analysis? The processual repositioning of perception within computable, computed, and agentic infrastructures seems to give rise to new overstimulated medial forms. In lieu of amplification and annihilation, we might revise Peter Weibel's (2003) anticipation of neurocinema. In some respects, like Whitehead's conceptual leanings, Weibel similarly draws on principles of quantum mechanics to imagine a form of media stimulation that exceeds physical space and conventional modes of perception. The hypothesis of neurocinema is set in a future where advanced neurotechnologies have allowed cinema to be experienced internally, without the mediation of screens or projectors (Quehenberger, 2022). Like an almost direct anticipation of a form of Neuralink, neurocinema was, for Weibel, a *trompe le cerveau* "[where] the cinematographic apparatus will deceive the brain, not the eye" (ibid.: 599). This included a temporal code of neuronal spikes directly modulated and simulated through a form of

magnetoencephalography, in which the image is already a neuro-interface (Weibel, 2003).

The leap "from the machinery of movement to the machine of vision" (2003: 594) that Weibel announced coincides, in part, with contemporary neural media and high-bandwidth brain–machine interfaces. It includes attempts at full-stack sensing of the peripheral nervous system, and non-invasive EMG as in the recent neuromotor controllers presented by Meta (Kaifosh et al., 2025). From this perspective, it would seem that we need to regard stimuli from emerging media technologies as an integral part of an inclusive perceptual field in which world, body, and devices co-individuate before stabilised perceptual and presentational immediacy arise. This is perhaps a form of sensibility in which twenty-first-century media act prior to conscious perception, operating as extended prostheses of the environment.

In the age of neural media, the edge of stimulation is, it appears, the site of the politics of experience. To regulate access, to calibrate levels, to saturate, or to rarefy signal cycles means to organise in advance the distribution of the perceptible.

Resistance and recalibration

In a world suffused with data-collecting computation and sensing technologies that reproduce asymmetries of power, leaving traces of usage inevitably puts users at a disadvantage. As Toni Pape (2024) suggests, in such an environment, tactical imperceptibility—or *stealth*—has emerged as a key form of resistance. Examining stealth as a means of evading surveillance and tracking technologies, Pape suggests that to effectively manage "one's perceptibility [to resist] data capture and algorithmic prediction" one has to be able to "predict the predictions" and "move with its algorithmic environments and occupy their negative space" (2024: 6). In the context of this special issue, becoming imperceptible also requires users to learn how to evade stimulating pervasive technologies of sensing and tracking before they are even activated.

Yet, to become imperceptible, to disconnect (Karppi, 2018), or even to vanish entirely, may not capture the full nature of what exactly is being resisted. We will possibly need to expand our tactical repertoire a little by recalibrating the theoretical frame to account

for the nuances of (over)stimulation. In *Dependent, Distracted, Bored*, for example, Susanna Paasonen identifies and maps a wide range of (journalistic, academic and philosophical) narratives of loss linked to the rise of networked technologies. According to these bleak cultural diagnoses, digital media is, among other things, "atrophying our affective, cognitive and somatic capacities through its distracting, rapid speeds" and "addicting us, boring us, and stealing our time" (Paasonen, 2020: 11; 2021: 1). According to these pessimistic perspectives:

> … the excessive and ever accelerating volume of stimuli rendered available in networked media is seen to result in sensory and cognitive overload, portrayed largely as a paralyzing force rendering extended or deep focus difficult, if not impossible, to achieve… The prognosis, it is said, is poor" (Paasonen, 2021: 1).

And as Paasonen (ibid.) sums up, "if things are currently bad, they are only getting worse".

To counter the pervasiveness of cultural pessimism, Paasonen begins by observing how disenchantment accounts of digital hyperstimulation are often articulated against a construction of an unmediated idyllic past. These accounts rest on projections that overlook past social inequities while ignoring similar complaints once levelled at technologies that were themselves—*back then*—new! To avoid such totalizing interpretations of the past and the present, Paasonen's approach foregrounds "ambiguity and contextual nuance over generalizations and reductive conclusions" (2021: 4). In the context of this study, we could add that, whatever the content to be consumed, media consumption is never inherently passive. It is always possible that (over)stimulation could provide the user or spectator with a space Jacques Rancière (2021) describes as available for emancipatory activities. From this perspective, we might look to YouTube, for instance, which affords both the rapid consumption of choppy shorts and the reflective experience of eight-hour Autonomous Sensory Meridian Response (ASMR) soundscapes: two very different forms of media stimulation conducive of two distinct sensory and mental states.

Following Paasonen's emphasis on ambiguity, context, and nuance, we can further complexify our own understanding of what are often assumed to be media experiences

that lack stimulation. The experience of boredom, for example, once considered a typical affective tonality of Modernity, is now often perceived as a ubiquitous numbing effect of digital media.[3] It is, nevertheless, boredom's capacity for both, (a), anaesthesia, and (b), resisting overstimulation that opens up our debate. On one hand, then, as Fisher (2009: 24) suggests, "to be bored simply means to be removed from the communicative sensation-stimulus matrix of texting, YouTube and fast food". It means the momentary denial of the "constant flow of sugary gratification on demand" (ibid.). Yet, on the other hand, Paasonen draws attention to the multiplicity of boredom, proposing that experiencing it can be pleasurable and stimulating as well as anesthetising. "By examining mundane microevents involving minor enchantments", Paasonen (2021: 19) argues that "boredom and excitement (interest, pleasure, and fascination)" can be seen as "two sides of the same coin". Instead of being seen as pre-packaged boredom-sedating amusement, a minor enchantment, brought about by a meme or a cute animal video, can, in Paasonen's view, contain a seed of political potentiality.

> In both increasing one's capacity to act and in transforming available modes of experience, these microevents [mundane instances of marvel, wonder, and shocked surprise] are key to how we take interest in and become excited about the world (ibid.: 119-20).

Our concluding example of how socio-technological assemblages become embedded in the sensorium helps articulate one more mode of resistance to emerging regimes of (over)stimulation. Drawing on Andre Gorz, Gilles Deleuze and Félix Guattari (1983) sketch out what they call "the double portrait of the 'scientific and technical worker'", a figure some of us might despairingly recognize in ourselves. This cognitive worker, they suggest, "has mastered a flow of knowledge, information, and training", but:

> […] he [sic] is so absorbed in capital that the reflux of organized, axiomatized stupidity coincides with him, so that, when he goes home in the evening, he rediscovers his little desiring-machines by tinkering with a television set—O despair (1983: 236).

The double nature of this portrait can be framed from the perspective of McLuhan's conceptual couple of amplification and numbness/amputation. On the one hand,

networked technologies afford us with an abundance of cognitive and sensory stimulation—from micro to macro-shocks. As information, knowledge, and content circulate, they offer us the potential for intensifying our Spinozian capacities to affect and be affected. But, on the other hand, these flows of information are now utterly inseparable from the circuits of capital (be it monetary or symbolic). Put differently, capital's incentive structures channel and shape our affective capacities, steering them toward activities that can be monetized from data amassed by a platform, a pay cheque collected by an influencer, or even a paywalled publication reliant on free academic labour to make a profit. Masterful navigation of the flows of information thus coincides with a production of a certain numbness, or, to put it in Deleuze and Guattari's terms, stupidity.

This stupidity is a matter of desensitization, an incapacity to be affected by anything that is not aligned with the incentive structures of techno-capital. Outside of these incentive structures, our desiring machines barely produce or even remain mute. In other words, they are not moved or stimulated by what resistance could offer to, or even overthrow, the incentive structures of capital. Scientific or technical knowledge, and other forms of digitally-cultivated general intellect (Virno, 2003), are thus co-opted and serve to produce surplus value, and reproduce the power asymmetries in which we are inserted. "Of course," Deleuze and Guattari (1983: 236) continue, the cognitive worker "has no revolutionary potential; he is the first integrated agent of integration, a refuge for bad conscience, and the forced destroyer of his own creativity".

In order to detach from our own stupidity, to disconnect from our co-optation by the dominant, algorithmically mediated "distributions of the sensible" (Rancière, 2004), this special issue calls for a recalibration, extension, or deterritorialization of our capacities for being stimulated. Put differently, we ask for an interrogation of the politics of a sensorium that reorganises what can be perceived, reshaping what counts as signal, and what counts as noise. As this special issue demonstrates, such politics takes on multiple forms.

Contributions to the debate

For this special issue of *Media Theory* we welcomed provocations that help to shift the dial of analysis from the subject/object perceptions to sensitive infrastructures. This

seems crucial since whoever controls these sensory augmentations controls the perceptual form of life. The dilemma is what kind of perceptual style we institute when the threshold of stimulation becomes the new commons or the new enclosure. As follows, our main provocation remains: is the *overstimulated subject* a crisis, or a new way of life, or both? Our contributions engage with, extend, or elaborate on the issues of stimulation and overstimulation, and their politics as sketched above.

Geert Lovink describes copium as the dominant affect of the digital permacrisis. In 'Copium Compendium: How Do You Cope in this Digital Age of Permacrisis?', it is presented as a symbolic substance that regulates modes of survival under conditions of stalemate, transforming defeat and paralysis into a social metabolism. Through memes, shitposting, binge-watching, and micro-doses of online interactions, copium shapes a *Vita Nonactiva*, where time stretches without producing collective action. This *pharmakon* generates political anaesthesia but also opens unexpected spaces: aesthetics such as hopecore and corecore, distributed forms of waiting and suspension that make new temporal practices possible. The essay argues that contemporary coping functions less as an individual mechanism and more as a collective infrastructure mediated by platforms and memetic cultures. Digital hyperstimulation produces shock and panic while simultaneously generating social rituals that restructure the relation between stimulus and stasis. Copium becomes both a symptom of exhaustion and a resource of resilience.

Building on the Benjaminian account of hyperstimulation, Tina Kendall's contribution engages with the internet aesthetics of brain rot and lobotomycore to examine how users interpret the supposedly stupefying effects of contemporary media. By analysing brain rot and lobotomy, which each aestheticize cognitive degradation and emotional numbness, she develops the concept of anaesthetic media. This concept refers to "media forms and practices that highlight social media's role in numbing cognitive and sensory experience" (Kendall, in this issue) and offers users means of withdrawal from the pressures of infinite scroll. While social platforms offer sensory hyperstimulation, the anaesthetic desires in brain rot and lobotomycore seek refuge from this, expressing a desire for numbness, passivity and self-erasure. Kendall concludes that while these anaesthetic impulses do not actively undermine the neoliberal regime of self-

optimization, they nevertheless contain a seed of resistance that should not be overlooked.

Attempts to shelter from the onslaught of digital stimuli are also explored by Jernej Markelj and Jakko Kemper, who focus on the TikTok trend of rawdogging flights. This trend, popular mainly with male users, involves enduring a flight without any entertainment or comforts like music, movies, books, food, or water. Participants typically just stare ahead and sit silently through the entire journey. Markelj and Kemper use this trend to explore the gender politics of digital detox. They suggest that hegemonic masculinities often experience digital stimulation as emasculating and interpret rawdogging as a push-back against these undermining forces. The authors locate these threatening forces in the scattered attention encouraged by networked media, their algorithmic traps, and the "zany" affectivity of feminized digital labour. They argue that such digital disconnection is framed as a strategy to reassert masculinity and reinforce fantasies of autonomy, rationality, and self-control.

Constructing a media-theoretical framework of possession and mesmerism, Malcolm Ogden analyses the hypnotic stimulation of ASMR (autonomous sensory meridian response) NPC streams and their relation to data capitalism. ASMR NPC streamers roleplay as automatons (non-playable characters) and perform repetitive phrases, sounds, and actions when triggered by subscribers through donations. Situating his argument in relation to religious practices like demonic possession, Ogden claims these streamers are possessed by their viewers, compelled to endlessly recycle a limited set of scripted slogans. Drawing on affect theory and Italian Operaismo, Ogden suggests the fundamental possession is not between viewers and streamers but happens at a more systematic level. At this level, both streamers and viewers are subsumed under the regime of data capitalism, its incentive structures, and models of monetization.

The contribution by Ganaele Langlois, Rory Sharp, Craig Fahner, Alexandra Juhasz, Ioana Juncan, and Roopa Vasudevan traces their collective critical technical practices, which explore alternatives to the binary of either enduring or rejecting platform stimulation. Their project assumes that digital sociality is based on a destructive logic of equivalence established through user data. It then explores three ways of challenging this. First, it investigates parasitising social media infrastructures with software tools

like dataDouble and Agnostic Scraper, which subvert their functioning. Second, it examines disrupting engagement-maximizing incentives through an interactive play featuring bots trained on polarized data, seeking to encourage wonder and complexity. Finally, it experiments with collaborative poetry workshops to counter the individualizing power of social media and experience the self in a more distributed manner.

Theresa M. Senft, Christopher John Müller, and Benjamin Nickl analyse the media stimulation of laughter, from the television laugh track to the recommendation systems powering feeds. By examining the *They're Eating Dogs* meme cycle, the authors interrogate issues of power and ethics in our datafied attention economy. They develop the concept of "franchised laughter" to describe the platform-driven circulation of laughter as a standardized, replicable form of engagement that co-brands users and content, generating economic value. Starting from this, they discuss the ethics of online laughter as a potent way of drawing boundaries between in-groups and out-groups, questioning how we can respond within engagement-maximizing systems knowing laughter can disenfranchise.

In 'Countering Chaotic Hyperstimulation with Noise', Michael Goddard analyses hyperstimulation in digital cinema and media, showing how noise, flicker, strobe, and drone can function as strategies of counter-stimulation. These practices operate at a pre-perceptual level to recalibrate the sensorium, constructing experiential spaces that exceed dominant regimes. The creative use of glitch demonstrates that sensory saturation can become a terrain of liberation. The essay offers a genealogy of techniques that transform noise into an aesthetic and political resource, from 1960s artistic experiments to contemporary VJing and neuro-wearables, providing an arsenal of practices to interrupt accelerative aesthetics and open alternative perceptual pathways.

Nick Seaver's contribution, 'Keep Computer Awake: Mouse Jigglers and the Technicity of Attention', examines mouse jigglers, devices that simulate activity to circumvent workplace surveillance. The essay demonstrates that attention is not an inner mental attribute, but an object distributed along technical and semiotic chains. Jigglers show how a simple signal can be interpreted as proof of attention even when

none is present. Seaver expands on the conflict between workers and monitoring systems, where attention emerges as a contested field. These practices are not only defensive strategies but acts of distributed agency that destabilise the presumed natural link between technical input and human behaviour.

Diana Lengua's 'Presence Without Consciousness: Media, Machines, and the Metaphysics of Synthetic Experience' reconceptualises presence as an operational and relational process rather than a correlate of consciousness. Drawing on radical empiricism the essay explores how presence arises from perceptual coupling, prediction, and social interaction across biological and artificial agents. The work integrates phenomenology, synthetic phenomenology, and android epistemology to examine post-biotic forms of experience. Presence hence becomes a distributed condition within computational ecologies, an epistemic relation that supports agency beyond conscious awareness, offering a metaphysical frame for understanding synthetic, relational, and technologically mediated existence.

References

Bateson, G. (1972) *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology*. Chicago: University of Chicago Press.

Beller, J. (2012) *The Cinematic Mode of Production: Attention Economy and the Society of the Spectacle*. Hanover, NH: UPNE.

Benjamin, W. (1999) *The Arcades Project*. Cambridge, MA: Harvard University Press.

Berardi, F. (2010) *Precarious Rhapsody: Semiocapitalism and the Pathologies of the Post-Alpha Generation*. London: Minor Compositions.

Bourland, J.D. (2023) *Shock, Illusion, and the Commodification of Experience: Walter Benjamin's Theory of Modernity*. [Doctoral Thesis, The University of Western Australia].

Bryant, L.R. (2014) *Onto-Cartography*. Edinburgh: Edinburgh University Press.

Carr, N. (2010) *The Shallows: How the Internet is Changing the Way We Think, Read and Remember*. New York: W.W. Norton.

Citton, Y. (2017) *The Ecology of Attention*. New Jersey: John Wiley & Sons.

Crary, J. (2013) *24/7: Late Capitalism and the Ends of Sleep*. London: Verso Books.

Cronenberg, D. (1983) *Videodrome* [Film]. Canada: Universal Pictures.

Deleuze, G. and Guattari, F. (1983) *Anti-Oedipus: Capitalism and Schizophrenia*. Translated by R. Hurley, M. Seem and H.R. Lane. Minneapolis: University of Minnesota Press.

Endel (no date) *Personalized soundscapes to help you focus, relax, and sleep. Backed by neuroscience*. Available at: endel.io (Accessed: 25 September 2025).

Fisher, M. (2009) *Capitalist Realism: Is There No Alternative?*. Winchester: Zero Books.

Fuller, M. (2005) *Media Ecologies: Materialist Energies in Art and Technoculture*. Cambridge, MA: MIT Press.

Guardian Staff and Agency (2025) 'Zuckerberg says Meta will build data center the size of Manhattan in latest AI push', *The Guardian*, 16 July. Available at: https://www.theguardian.com/technology/2025/jul/16/zuckerberg-meta-data-center-ai-manhattan (Accessed: 21 October 2025)

Hayles, N.K. (2007) 'Hyper and deep attention: The generational divide in cognitive modes', *Profession*, 2007, pp. 187–199.

Hayles, N.K. (2022) 'Inside the Mind of an AI: Materiality and the Crisis of Representation', *New Literary History*, 54(1), pp. 635–666.

Heyes, C.J. (2020) *Anaesthetics of Existence*. Durham, NC: Duke University Press.

Kaifosh, P., Reardon, T.R. and CTRL labs at Reality Labs (2025) 'A generic non-invasive neuromotor interface for human–computer interaction', *Nature*, 645, pp. 702–711.

Karppi, T. (2018) *Disconnect: Facebook's Affective Bonds*. Minneapolis: University of Minnesota Press.

McDowell, K.A. (2023) 'Designing Neural Media', *Gropius Bau Journal*, [online]. Available at: https://www.gropiusbau.de/en/journal/designing-neural-media (Accessed: 25 September 2025).

McLuhan, M. (1964) *Understanding Media: The Extensions of Man*. New York: McGraw-Hill.

McLuhan, M. and Fiore, Q. (1968) *The Medium is The Massage: An Inventory of Effects*. London: Penguin.

McLuhan, M. and Fiore, Q. (1997) *War and Peace in the Global Village*. San Francisco, CA: Wired Books, Incorporated.

Meta (2025) *Meta Ray-Ban Display: AI Glasses With an EMG Wristband*, [online]. Available at: https://about.fb.com/news/2025/09/meta-ray-ban-display-ai-glasses-emg-wristband (Accessed: 25 September 2025).

Müller, C. (2015) 'Desert ethics: Technology and the question of evil in Günther Anders and Jacques Derrida', *Parallax*, 21(1), pp. 42–57.

Müller, C.J. and Mellor, D. (2019) 'Utopia inverted: Günther Anders, technology and the social', *Thesis Eleven*, 153(1), pp. 3–8.

Musk, E. et al. (2019) 'An integrated brain–machine interface platform with thousands of channels', *Journal of Medical Internet Research*, 21(10), e16194.

Oxford English Dictionary (2025) 'stimulus, n., sense 3.a', Oxford English Dictionary Online, Oxford University Press, September. Available at: https://doi.org/10.1093/OED/1135588297 (Accessed: 13 August 2025).

Paasonen, S. (2020) 'Distracted present, golden past?', *Media Theory*, 4(2), pp. 11–32.

Paasonen, S. (2021) *Dependent, Distracted, Bored: Affective Formations in Networked Media*. Cambridge, MA: MIT Press.

Pape, T. (2024) *The Aesthetics of Stealth: Digital Culture, Video Games, and the Politics of Perception*. Cambridge, MA: MIT Press.

Petley, J. (2012) 'Are we insane? The "video nasty" moral panic', *Recherches sociologiques et anthropologiques*, 43(1), pp. 35–57.

Quehenberger, R.C.-Z. (2022) 'Quantum Cinema and Quantum Computing', in Miranda, E.R. (ed.) *Quantum Computing in the Arts and Humanities: An Introduction to Core Concepts, Theory and Applications*. Cham: Springer International Publishing, pp. 227–276.

Rancière, J. (2004) *The Politics of Aesthetics: The Distribution of the Sensible*. London: Continuum.

Rancière, J. (2021) *The Emancipated Spectator*. London: Verso Books.

Sampson, T.D. (2020) *A Sleepwalker's Guide to Social Media*. Cambridge: Polity Press.

Simmel, G. (1971) 'The Metropolis and Mental Life, in *On Individuality and Social Forms*. Edited and with an introduction by Donald N. Levine. Chicago: University of Chicago Press, pp. 324-340.

Simondon, G. (2017) *On the Mode of Existence of Technical Objects*. Translated by C. Malaspina and J. Rogove. Minneapolis: Univocal Publishing.

Simondon, G. (2020) *Individuation in Light of Notions of Form and Information*. Translated by T. Adkins. Minneapolis, MN: University of Minnesota Press.

Stiegler, B. (1998a) *Technics and Time, 1: The Fault of Epimetheus*. Translated by R. Beardsworth and G. Collins. Stanford: Stanford University Press.

Stiegler, B. (1998b) *Technics and Time, 2: Disorientation*. Translated by S. Barker. Stanford: Stanford University Press.

Virno, P. (2003) *A Grammar of the Multitude*. Los Angeles: Semiotext(e).

Weibel, P. (2003) 'The Intelligent Image: Neurocinema or Quantum Cinema?', in Shaw, J. and Weibel, P. (eds.) *Future Cinema*. Cambridge, MA: The MIT Press, pp. 594–601.

Whitehead, A.N. (1978) *Process and Reality: An Essay in Cosmology*. Corrected edition, edited by D.R. Griffin and D.W. Sherburne. New York: Free Press.

Zylinska, J. (2023) *The Perception Machine: Our Photographic Future between the Eye and AI*. Cambridge, MA: MIT Press.

Notes

[1] Cronenberg's film was a timely intervention since it coincided with the *video nasty* moral panic in the UK. A UK-specific media phenomenon in the early 1980s, occurring when early VHS tapes of horror and exploitation films circulated widely, often imported without regulation. UK tabloids whipped up moral panic, claiming these videos would corrupt children. The Director of Public Prosecutions (DPP) even issued a list of films that could be prosecuted under the Obscene Publications Act. Titles like *Cannibal Holocaust* (1980), *I Spit on Your Grave* (1978), and *Driller Killer* (1979) became infamous. This led to the Video Recordings Act (1984), which required all home videos to be classified by the BBFC. (See Petley, 2012)

[2] The first Meta multi-gigawatt data center, dubbed Prometheus, is expected to come online in 2026. (See Guardian Staff and Agency, 2025)

[3] For a discussion of boredom as an affective experience of Modernity, see Paasonen (2021: 101-13).

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