

Speculation, Transition, and the Passing of Post-cinema

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Abstract

What comes after post-cinema? Such a question calls for *speculation* as a central mode of inquiry. However, this speculative turn is engaged not only by the question of what comes *after* the 'post'; for post-cinema, at its best, is itself already a speculative term — despite the fact that it grows, historically, out of theories of loss (the loss of the index, the end of celluloid, the demise of cinema as an institution). Against this backdrop of mourning and melancholia, post-cinema is speculative in at least two senses. First, the concept of post-cinema is future-oriented at root, as it purports to gain purchase on movements along an unfinished trajectory, hence speculating of necessity about its own future course as a determinant of present actuality. Second, post-cinema refers to media engaged materially in a speculative probing of the present. The 'presence' of experience is now more radically than ever — because materially, medially — dispersed, not just as a play of signifiers but across and within an ecology that is materially redefining the parameters for life and agency itself in post-cinematic times. Accordingly, the question of post-cinema's passing is the question of time's passing in the space of post-perceptual mediation.

What comes after post-cinema? This question — a pressing one today both for theorists of 'new' media and for those who have identified with the putatively 'old' concerns of cinema studies and film theory — demands *speculation* as a central mode of inquiry.¹ Meanwhile, however, the notion of speculation is overdetermined; it might evoke associations with speculative realism (recent philosophical tendencies such as 'object-oriented ontology'), speculative philosophy (an older philosophical impulse exemplified in the work of Alfred North Whitehead), speculative finance (along with the algorithmic processes that have accele-

¹ On the speculative nature of post-cinematic theory, see Shane Denson, Steven Shaviro, Patricia Pisters, Adrian Ivakhiv and Mark B. N. Hansen, 'Post-Cinema and/as Speculative Media Theory', panel at the 2015 conference of the Society for Cinema and Media Studies, Montréal, Canada, 27 March 2015; video of the complete panel is available online: <<https://medieninitiative.wordpress.com/2015/05/24/post-cinema-panel-complete-videos/>> [accessed 18 October 2016].

rated such speculation and made capital not only ‘inhuman’ in its consequences but a somewhat *nonhuman* affair as well), or speculative media (an as-yet under-defined notion that might draw on any or all of the above in order to think about the predictive, future-oriented trajectory that differentiates contemporary media from the ‘memorial’ functions of phonography, photography, and cinema). However, the speculative turn suggested by this non-exhaustive list is engaged not only by the question of what comes *after* the ‘post’; for post-cinema, at its best, is itself already a speculative term — despite the fact that it grows, historically, out of theories of loss: the loss of the index, the end of celluloid, the demise of cinema as an institution.² Against a backdrop of mourning and/or melancholia, both the notion and the (suspected or only speculated) referent of ‘post-cinema’ are speculative in at least two senses, which I aim to articulate in this essay and to put into conversation with a range of film- and media-philosophical reflections on the fate and future of moving-image media.

First, I hope to show that the concept of post-cinema is future-oriented at root, as it purports to gain purchase on movements along an unfinished trajectory, hence speculating of necessity about its own future course as a determinant of present actuality. But though such might be said of any historical development, since life is never lived in a punctual ‘now’ but always in a thick present that is rich with protentional and retentional traces, there is nevertheless something special about the becoming of post-cinema. This is due to what I have elsewhere termed the ‘discorrelation’ of subjective experience and material substrate that, in a culmination or radicalization of media-historical impulses going back at least to the telegraph, comes to impinge directly upon moving images in post-cinema.³ In contrast to cinema’s photographic images, post-cinema’s computational images are generated in a microtemporal interval that is inaccessible to the macrotemporally constituted self of subjective perception. Thus, the temporal window of experience itself becomes the object of the minutest calculation, ‘premediation’,⁴ or algorithmic pre-processing at a microtemporal level. Time in the post-cinematic era passes faster, it would appear, though precisely appearance or the realm of the phenomenal (and specifically, that of the image) is called radically into question in the post-perceptual space of dis-correlated images.⁵

² For a nuanced theoretical account, see D. N. Rodowick, *The Virtual Life of Film* (Cambridge, MA: Harvard University Press, 2007). For a somewhat skeptical historicizing approach, see André Gaudreault and Phillippe Marion, *The End of Cinema? A Medium in Crisis in the Digital Age*, trans. by Timothy Barnard (New York: Columbia University Press, 2015).

³ Shane Denson, ‘Crazy Cameras, Discorrelated Images, and the Post-Perceptual Mediation of Post-Cinematic Affect’, in *Post-Cinema: Theorizing 21st-Century Film*, ed. by Shane Denson and Julia Leyda (Falmer: REFRAME Books, 2016) <<http://reframe.sussex.ac.uk/post-cinema/2-5-denson/>> [accessed 18 October 2016].

⁴ Richard Grusin, *Premeditation: Affect and Mediality after 9/11* (New York: Palgrave Macmillan, 2010).

⁵ Mark B. N. Hansen, ‘Algorithmic Sensibility: Reflections on the Post-Perceptual Image’, in *Post-Cinema*, ed. by Denson and Leyda <<http://reframe.sussex.ac.uk/post-cinema/6-3-hansen/>> [accessed 18 October 2016].

This brings us to the second meaning of speculation, then: post-cinema is not just a future-oriented *concept*, but it refers to media engaged *materially* in a speculative probing of the present. The ‘presence’ of experience is now more radically than ever — because materially, medially — dispersed, not just through a deconstructive play of signifiers but by way of multi-leveled, networked processing operations taking place across and within an ecology that is materially redefining the parameters for life and agency itself in post-cinematic times.⁶ If post-cinema means dis-correlation, however, and this dis-correlation brings with it a transformation of time that necessitates a speculative relation to appearance (because the objects of perception, e.g. images, are generated in a time called ‘real time’ but which is categorically outside our real-time subjective perception), then the concept of post-cinema must finally be seen as a *transitional* concept in a strong sense. For the ‘post’ does not mark so much an end (as in earlier discourses of the end of cinema) but rather has its heuristic value by virtue of marking a difference that *may very well stop making a difference*: as the perceptual technology of cinema is absorbed, resituated, or ‘relocated’⁷ within the post-perceptual ecology of twenty-first-century media, this metabolizing movement implies that the difference ‘cinema/post-cinema’ itself might become not only imperceptible but also ultimately ineffectual. Post-cinema, as a construct, is necessarily transitional: it will pass. When we recognize this basic transitionality, however, then we see that the question of post-cinema is already the question of what comes after post-cinema — and, more fundamentally, that *the question of post-cinema’s passing is the question of time’s passing in the space of post-perceptual mediation*.

Transitional Media

What I have just said of post-cinema might, with some justification, be said of cinema as well: the question of cinema is the question of what comes after cinema. Bazin’s great question ‘what is cinema?’ gives way to speculation on tendencies and trajectories that point beyond — towards speculation, in Bazin’s case, on what he called ‘the myth of total cinema’.⁸ This notion of totalization carries within itself the idea of a situation in which the cinema/not-cinema distinction begins to break down, or in which the phenomenal differences that distinguish the cinema from its environment become imperceptible. Thus, for Bazin, the question of cinema’s nature gives way to reflection on a kind of nature that per-

⁶ On this redefinition of the experiential environment, see Mark B. N. Hansen, *Feed-Forward: On the Future of 21st-Century Media* (Chicago: University of Chicago Press, 2015).

⁷ ‘Relocation’ is one of the ‘key words’ put forward as a defining characteristic of twenty-first-century cinema in Francesco Casetti, *The Lumière Galaxy: Seven Key Words for the Cinema to Come* (New York: Columbia University Press, 2015).

⁸ André Bazin, ‘The Myth of Total Cinema’, in *What is Cinema?* trans. by Hugh Gray, 2 vols (Berkeley and Los Angeles: University of California Press, 1967), I, pp. 17–22.

sists *after* cinema has perfected its ‘total and complete representation of reality’⁹ and hence become indistinguishable from it. Can we say, then, that the idea of cinema itself already leads inevitably to the idea of post-cinema?

It would perhaps be hasty to affirm this suggestion, and it is anyway complicated for Bazin by his insistence that ‘cinema has not yet been invented!’¹⁰ But the anachronism and the paradox of the Bazinian idea — according to which the mythical ideal of cinema precedes its technical implementation, but where the full realization of the cinema (its ‘invention’ in a strong sense) would also imply its end (in the sense that it would no longer make sense to distinguish cinema from nature or reality more generally) — might in fact shed light on what I am calling the *transitionality* of post-cinema.

Consider, in this connection, the strangely incompatible set of definitions that Wiktionary, the collaborative dictionary companion to Wikipedia, offers for the term ‘postcinematic’.¹¹ On the one hand, the adjective is said to mean ‘after the decline of cinema’; on the other hand, however, and far more surprisingly, it is also defined as ‘after the invention of cinema’. But if this latter definition is surprising, it is not for all that illogical: while terms like *postmortem* and *posthumous* imply that something happens after the *conclusion* of something else (when life is *over*, for example), other uses of ‘post-’ imply only that something happens after the *advent* or *occurrence* of something (for example, *post-Kantian* philosophy refers to philosophy conducted in the wake of Kant’s influence; it commences not with Kant’s death but with the publication and reception of the *Critiques*). Seen thus, these are two completely distinct meanings of the term ‘postcinematic’ — implying, by extension, two distinct notions of post-cinema: either the post-cinematic era commenced in 1895 or thereabouts, with the invention and public exhibition of the *Cinématographe*, or it commenced much more recently, for example with the demise of celluloid and photographic indexicality, or by virtue of some other hypothesized decline (e.g. a waning of the collective audience, the eclipse of the big screen by a plethora of little ones, or the decline or downfall of some set of properly cinematic values). One of these meanings is therefore predicated on the birth of cinema, while the other is predicated on its death.

Accordingly, the two meanings on offer here are clearly contradictory with respect to one another, but perhaps there is some truth to be found in the contradiction. Again, I am interested in thinking about post-cinema as an essentially speculative notion, not so much as a state attained definitively in connection with some determinate event, and certainly not one that would be defined in terms of an absolute historical break, but more perhaps as one of the inherent questions of cinema. Taken together, the two definitions might nudge us towards this spe-

⁹ Ivi, p. 20.

¹⁰ Ivi, p. 21.

¹¹ ‘Postcinematic’, in *Wiktionary: The Free Dictionary* <<https://en.wiktionary.org/wiki/postcinematic>> [accessed 18 October 2016].

culative and transitional understanding: by focusing alternately on cinema's birth and its death, i.e. on the beginning or end of its 'life', they suggest significantly that post-cinema is central to the cinema's very existence, to its being or becoming. Nevertheless, the two definitions are hardly saying the same thing; with respect to periodization, as we have seen, it makes a huge difference whether we define post-cinema in relation to cinema's birth (let us call this definition 1) or in relation to cinema's death (definition 2). However, we might pair definition 1 with Gaudreault and Marion's observation that cinema has died at least eight 'deaths' in the course of its life, the first being pronounced right at the moment of its birth — by none other than the father of the Brothers Lumière, who said that 'Cinema is an invention with no future'.¹² In this sense, all of cinema has been post-cinema not just in the sense of coming after the advent of moving images but in the more common meaning of *after cinema* (i.e. 'after' in the sense of following its demise). Definition 1 and definition 2 therefore merge or converge in this unorthodox historiography of cinema.

But things get even more complex when we take into account Gaudreault and Marion's notion of the 'double birth' of cinema.¹³ On this account, cinema was born first as an apparatus (ca. 1895) and then as an institution (in the 1910s). It is this second birth that, for Gaudreault and Marion, is the authentic birth of cinema. Thus, cinema's first death comes *before* its actual birth, and the advent of post-cinema is therefore rendered, paradoxically, a pre-cinematic reality. This view might be seen as a sort of distant cousin of Bazin's notion that the cinema is itself a speculative ideal that has not yet been invented; in Gaudreault and Marion's alternative, cinema's death is likewise a speculative ideal that precedes the cinema's invention. Taken literally, this would imply a *reductio ad absurdum* of definition 2 (according to which post-cinema is 'after the decline of cinema'); for what is after the decline can hardly come before the advent, except in some metaphorical or conceptual sense (for example, as an inherent trajectory or conceptual inevitability, the way that death might be said to be inseparable from life *in general* and therefore precedes any *actual* or *individual* birth). But though it would be wrong to take Gaudreault and Marion's suggestion in an overly literal sense (indeed, their point is to cast doubt on the notion of cinema's 'death' in the first place), their history of cinema's multiple births and deaths might help us to see post-cinema neither in terms of everything that follows the invention of cinema (definition 1, a 'nominal' and relatively uninteresting definition) nor as something that follows the demise of cinema (definition 2, the more common but 'vulgar' definition) but as a potential or speculative possibility inherent in cinema itself.

What can we say, then, to flesh out an alternate definition of post-cinema — a 'definition 3', so to speak? First of all, the lesson to be learned from these paradoxes of births and deaths, beginnings and ends, would seem to be that life

¹² Gaudreault and Marion, p. 26.

¹³ Ivi, pp. 31–35.

happens in the middle; we should accordingly shift our focus away from the limit cases and think about cinema and post-cinema in the course of their becoming, as they exist *in transit*. We need to look at things *in medias res*. There is a temptation among critics to mark the limits, to define a period or constellation as a closed unit, but this fails to capture the reality of being-in-the-middle, of finding oneself somewhere along an unfinished trajectory (which is the only place one can really find oneself), trying to intuit what that trajectory might be, where it started and where it might lead. We should be guided by this in our attempts to describe post-cinema, which is nothing if not a moment of radically unresolved change. Let us start, then, from the following question: how does it feel to be in the middle of change?

In the Middle

We might take a cue from Steven Shaviro, who in his reflections on ‘post-cinematic affect’¹⁴ refers to Raymond Williams’s notion of a ‘structure of feeling’.¹⁵ It is worth returning to Williams’s explication of this concept, which is designed to militate against dichotomies such as that between the ‘social’ and the ‘subjective’ — dichotomies which according to Williams attempt to account for the present at the expense of reifying the past, i.e. through the ‘conversion of experience into finished products’.¹⁶ There is something similar at work, I suggest, in reifying the cinema as past in order to either celebrate or condemn our post-cinematic condition. This involves an exaggeration of the fixity of the object called ‘cinema’, a denial of the inherent flux and openness of its borders. And this media-historical impulse both draws upon and feeds back into a media-ontological fetishization of film, especially pronounced with respect to the question of indexicality.

Without a doubt, the very real material connection between pro-filmic reality and its imprint on celluloid was capable of giving rise to those powerful and uncanny experiences described so eloquently by Stanley Cavell¹⁷ and, more recently, David Rodowick:¹⁸ the continuity of recorded and projected image placed viewers in the strange temporal situation of being ‘present’ at past events. And this situation is, I think, directly relevant to an assessment of cinema’s particular ‘structure of feeling’, to the temporal quality of being-in-the-middle of a cinematic experience and, by extension, in the midst of a cinematic era. But it should be emphasized that this description privileges one level of the overall reality, that of subjective perceptual experience, at the expense of another, that of the microscop-

¹⁴ Steven Shaviro, *Post-Cinematic Affect* (Winchester: Zero Books, 2010).

¹⁵ Raymond Williams, ‘Structures of Feeling’, in *Marxism and Literature* (Oxford: Oxford University Press, 1977), pp. 128–35.

¹⁶ Ivi, p. 128.

¹⁷ Stanley Cavell, *The World Viewed: Reflections on the Ontology of Film* (New York: Viking Press, 1971).

¹⁸ Rodowick, *The Virtual Life of Film*.

pic physical interactions between light, silver halide, and retinal rods and cones. The latter level is of course outside the realm of normal phenomenal experience, but it is not altogether different in this respect from the digital substrate of zeroes and ones that is commonly held responsible for destroying the indexical relation and, by some accounts at least, for destroying the cinema itself as an experience and an era.

My point is not that nothing has changed, that there is no difference between cinema and post-cinema; on the contrary, I think that the intercession of digital processes changes things quite radically. But the difference is not to be located solely in the *interruption* of analogical processes or experiences, for as I have suggested already, those experiences were themselves undergirded by material processes that are discontinuous with respect to integral or ‘molar’ experience. On the other hand, though, it is true that the *encoding* of images is quite different from the apparently far more contingent capture of light in photochemical processes, where the array of crystals forming the images is different not only from frame to frame but also from print to print. Rodowick has highlighted this contrast between code and crystalline contingency and argued that digital images lack the materiality, and the attendant entropy, of photographic images — for digital information is capable of being copied exactly, and without loss, in a way that photographic images are not.¹⁹ Accordingly, Rodowick suggests that digital images, as informatic inscriptions, are no longer indexical but belong to the symbolic register (in the categories of Charles Sanders Peirce’s semiotics).²⁰

It seems wrong, however, to reduce (or inflate) digital information or data to an exclusively symbolic register, because like the crystals of silver halide that give photochemically based images their characteristic ‘grain’, digital information too retains its materiality, even physicality. To begin with, digital images are not ‘really’ reduced to zeroes and ones in the first place (as Rodowick says); *that* is indeed a symbolic rendering of them, such that we can grasp them cognitively, but a string of binary digits (such as ‘1111 0011 0010 1010’) is merely a representation — as should be clear from the fact that it can be converted to a hexadecimal value (‘F32A’) or decimal number (‘62250’). With respect to the algorithmic processes of encoding and decoding, zeroes and ones stand in as proxies for material processes, for a much less binaristic flux of voltage differentials, the actualization of which is never as neat and clean as any of these representations would suggest. And in terms of storage, the code base is likewise subject to material processes of entropy and decay, as Matthew Kirschenbaum has emphasized in his forensically based ‘reading’ of hard drives.²¹ It is thus simply untrue that digital images are *immaterial* entities, so rather than follow Rodowick in tracing a shift from the indexical (associated with Peirce’s ontological category of Secondness) to the

¹⁹ Ivi, pp. 110–24.

²⁰ Ivi, p. 120.

²¹ Matthew G. Kirschenbaum, *Mechanisms: New Media and the Forensic Imagination* (Cambridge, MA: MIT Press, 2012).

symbolic (associated with Thirdness), we might instead follow Mark Hansen in his suggestion that digital images in fact produce new Firstnesses.²² That is, far from being immutably inscribed in an unchanging codebase, digital images are imbricated in highly volatile and *generative* algorithmic processes that fail to reproduce ‘the same’ image over and over but in fact produce entirely new images with each playback. Glitches and compression artifacts give us a glimpse of this generative processuality and point us towards a new temporal quality of moving-image media and our experience of them.

I will turn in a moment to this new temporality, which I argue ushers in and exemplifies the new speculative quality of post-cinema. Before doing so, however, I want to emphasize what I take to be the significance of this discussion of indexicality. In highlighting the microscopic processes at work in both cinematic and post-cinematic media, I am trying to counter a certain fetishization of the index, which perpetuates unrealistic stories about the mechanisms both of cinema and of digital computation alike. One conclusion to be drawn from this is that we should not exaggerate the clarity and precision of the dividing line between cinema and post-cinema. But this should not lead us to conclude that there is simply no difference, or that the term post-cinema is gratuitous and serves only to exaggerate the distinction in precisely this way. There are very real differences: material differences, as well as social, contextual, and perceptual ones. And even if, as I suggested at the outset of this essay, these differences are destined to fade (especially if ‘convergence’ is thought not in terms of a homogenization but rather a multiplication of media forms, among which the cinema/post-cinema distinction becomes less central or pronounced), the term post-cinema nevertheless serves an important heuristic function at present in not only highlighting these differences but pointing to their role in this multiplication of media-technical capacities (or affects: the power to affect and to be affected). In short, the term post-cinema serves to focus our attention on the transitional flux in which we currently find ourselves.

And the debate over indexicality and encoding, far from being beside the point, is symptomatic of this transitional experience — part of what it feels like to be in the midst of this change. Much of the debate has been conducted — whether for celebratory or elegiac purposes — towards the goal of delineating our medial past from our present. This goal, as I have suggested, is misguided in its reifying impulse. But the positive upshot of the debate, as I see it, is that it causes us to recognize that there are always microscopic or extra-perceptual processes happening right ‘in the middle’ of mediated perception: between subjective experience and the objective event or situation that is being presented to us. This insight, I suggest, is essentially *anti-reificational* with respect to subjective experience, which it shows to be founded upon volatile pre-subjective processes that are capable of unsettling the supposed fixity or transhistorical stability of

²² Hansen, ‘Algorithmic Sensibility’.

the subject. In other words, we discover here the transformative agency of a mediating layer between subject and object, and this discovery should be seen as an integral part of the post-cinematic 'structure of feeling'. Finally, though, we need to look closer at the way in which the transformation of this mediating layer is reconfiguring our experience, especially with respect to temporality.

Speculative Temporality

Let us recall the uncanny cinematic experience of being 'present' to past events, an experience attributed to the indexical ontology of photographic images. As we have seen, this paradoxical temporal experience rides atop a layer of complex material interactions that, in some respects at least, are not all too different from the computational materiality of digital images' encoding. Nevertheless, it would be wrong to suggest on this basis that post-cinema's temporality has not been subjected to a radical transformation. And this temporal shift, as we shall see, explains in large part the renewed urgency of speculative thought in the post-cinematic era.

The question of what I am calling post-cinematic temporality is something that Maurizio Lazzarato has dealt with under the heading of his 'video philosophy' — a philosophy of what he calls 'machines to crystallize time'.²³ These machines, which are exemplified in the video camera and further perfected in digital cameras and computer processors, have a direct line on our becoming-in-time, as they operate at speeds that far outstrip our cognitive processing and, on this basis, are in fact capable of modulating our perception itself. For rather than tracing pro-filmic objects and fixing them photographically as the perceptual objects of vision, such time-crystallizing machines operate directly on the sub-perceptual flux of matter, producing images and other sensory contents through material operations that in no way resemble the perceptual acts to which pre-electronic analogue media (phonography, photography, etc.) are held to be analogous. At stake, above all, is the increased speed and precision of the microtemporal operationalization of the mediating layer or interval that, as we have seen, exists between the integral subjects and objects of any mediated perception. Post-cinematic machines dilate this interval and hence bypass the molar perspective of the subject. And not only do they do so at the stage of image capture, but also in computationally based playback, which is not categorically different in terms of generating images on the fly, in a carefully timed balancing act between the computational resources and demands of processors, graphics cards, and competing processes, among other things. Effectively, then, though these images may be based on a binary code that serves as a sort of script, they must be generated in 'real time' by means of an error-prone and always imperfectly instantiated act of algorithmic 'interpretation'.

²³ Maurizio Lazzarato, *Videophilosophie: Zeitwahrnehmung im Postfordismus*, trans. by Stephan Geene and Erik Stein (Berlin: b_books, 2002).

Such images are ‘executed’ more than they are ‘screened’. These acts of processing and execution are a part of the materiality of post-cinematic images, part of their volatility and excess with respect to the symbolic register.

There is, of course, a cinematic moment that persists in post-cinematic mediation. Digitized films still present themselves to us as quasi-filmic events, and the sub-perceptual materiality of computational image processing, logically enough, goes largely unnoticed in subjective perception. But there is nevertheless a kind of displacement, a non-actuality, a lack of positivistic self-presence, or what Derrida might call a ‘spectral’ logic implicit in this view of post-cinematic mediation, and it is important to account for it if we are to understand our current transitional moment. In its absorption into a post-cinematic media ecology, cinema does not end, but its persistence is less as an actuality than as a quasi-*virtual* moment, a kind of memory-image that supplements and explodes the confines of a punctual present or a concluded past. Moreover, post-cinema’s relation to cinema is not just one of retention (or memory) but also of protention (or anticipation). It implies what Mark Hansen has called the ‘feed-forward’ logic of twenty-first-century media²⁴ — the logic of predictive analytics and algorithmically generated timelines, playlists, and newsfeeds. It is in this respect, above all, that the temporality of post-cinema diverges from that of cinema.

Post-cinema, with its microtemporal processing, produces essentially post-perceptual images; here, what Deleuze called the ‘dividuality’²⁵ of formerly discrete subjects is enacted at the level of the perceptual object, which is no longer stamped as a discrete photographic entity but *modulated* as a variable and infinitesimally divisible quantity. Such modulation is dependent upon codec settings, available processing power, bandwidth limitations, and buffering, so that the pixillated images we see on our digital devices are in a very real sense ‘data visualizations’. And all the while they generate a further stream of data or metadata that delivers information about our attention and perception to corporate interests like Google, Facebook, Microsoft, or Netflix. This metadata, it should be pointed out, is not ‘meta-’ in any metaphysical sense of a detached second-order register; in many ways, it is the *primary* data, while our sense data has become secondary or supplemental for the purposes not only of the money-making machine but also for the production of sense data to come. Futurity is implied in this equation in a way that explodes the simple feedback loop as we have known it. This is not only about surveillance, but about control in a newer, non-deterministic and non-disciplinary sense — in the sense described by Gilles Deleuze in his ‘Postscript on the Societies of Control’. Wendy Chun reminds us that ‘the English term *control* is based on the French *contreroute* — a copy of a roll of an account and so on, of the same quality and content as the original’.²⁶ As

²⁴ Hansen, *Feed-Forward*.

²⁵ Gilles Deleuze, ‘Postscript on the Societies of Control’, *October*, 59 (1992), 3–7 (p. 5).

²⁶ Wendy Hui Kyong Chun, *Control and Freedom: Power and Paranoia in the Age of Fiber Optics* (Cambridge, MA: MIT Press, 2006), p. 4 [emphasis in the original].

a verb, to control enters into English in the sense of ‘to check or verify accounts’, in particular by referring to a duplicate register. But in post-cinematic media the idea of the register, the record, or the memorial function more generally of control shifts to a future-oriented, protentional one, whereby the subject of perception is actively anticipated or called into existence by means of microtemporal calibrations of data and sensory streams.

Portending the future, or better: *protending* it, these media synthesize time or becoming through the real-time generation of data that point backwards and forwards at once. Perception itself is dispersed, along with the data of its generation, between here and there, now and then, between the two rolls or scripts, where the acts of reference and correlation between them explodes the static ‘now’ of either one and enables the generation of new experiences and affects in real time (or, what amounts to the same, in a microtemporal duration that is outside the window of subjective perception).

This describes the temporal/experiential dynamics of Autotune, a popular algorithmic voice-modulation program, which Lisa Åkervall has recently analyzed as an exemplary medium of post-cinematic modulation.²⁷ In this software-based process, a real-time input (an audio signal) is analyzed and compared to a set of possibilities (the discrete notes or values inscribed on the *contreroule* or control script), subjected to modulation accordingly, and made to correspond to the acceptable values before the signal is even made available for perception. Past, present, and future are synthesized here, their discrete natures dissolved in the interplay of script and counter-script. Of course, it is possible to analyze the situation logically or algorithmically, and to study the exact path of the signal with the help of technical instruments, so that we might claim that it only *appears* that time is subject to transformation. But since it falls beneath the temporal threshold of perception and thus undercuts or bypasses appearance itself, this microtemporal processing does indeed revolutionize time for all intents and purposes — which is to say, for all human intentionalities and telic goals, which are structured in the molar temporal space of gross phenomenality. But what does this have to do with the moving-image media we are considering under the rubric of post-cinema? In short, the microtemporal ping-pong that characterizes the Autotune process also conditions digital images in computational video playback, which is especially evident in processes like motion smoothing, where new images are generated on the fly and interpolated between a just-past image and one that is just-to-come, which means that both of them must be assessed before any image is made available for perception.²⁸ In both cases, what we find is a situation very different from that of cinema: for it is not just that post-cinematic media operate according to a temporality that is faster than that of photographic

²⁷ Lisa Åkervall, ‘The Truth of Autotune’, paper presented at the 2016 conference of the Society for Cinema and Media Studies, Atlanta, Georgia, 3 April 2016.

²⁸ See also Denson, ‘Crazy Cameras’, which deals with these processes in greater depth and explores the ways they inform particular movies.

processes, but that they actively generate the objects of our perception in a microtemporal interval — effectively anticipating the subject and modulating the intentional relation of perceptual experience itself.

Conclusion

What this means, finally, is that we are forced to assume a speculative relation not only to the future but also to the present. In a post-cinematic media regime, we can henceforth only speculate on the objects of our perception, on the *present* image itself, whose momentary presence eludes us in the feed-forward process of image generation. In his theorization of the dilation of affect and concentration of temporality in image-processors or time-crystallizing machines, Lazzarato notes the essentially speculative project that these machines make thinkable: namely, the possibility of discovering in them a Benjaminian ‘messianic time’ beyond the chronological time of the clock, an opening of the present onto a utopian, speculative future, which amounts to the harnessing (or unleashing) of the power of temporality itself.²⁹ And while this remains a somewhat cryptic possibility, hence a speculative project in a strong sense, it is precisely in this sense, I suggest, that *the question of post-cinema’s passing is the question of time’s passing in the space of post-perceptual mediation.*

²⁹ Lazzarato, pp. 157–82.