POV genesis, proliferation and apocalypse: Cinematographic consciousness and refrains via the figure of (archi-)POV between cinema and POV-opticon

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Abstract

In the following article, I argue that Stiegler's cinematographic consciousness finds its formal expression in the cinematic figure of point of view [POV] – or otherwise said, that this type of consciousness is structured according to the aesthetic and formal feature of cinematographic POV. As a consequence, I propose the notion of archi-POV as the bridge between cinematographic consciousness and archi-cinema. From this point of departure, the paper suggests we look at the cinematic technic of POV both as the secret cinematic engine and as the figure of a cinematic apocalypse. Nowadays, POV is proliferating and has become one of the most common techno-aesthetic interfaces across multiple networked platforms, and, as such, one of the most contested political-aesthetic battlefields of our time (POV-opticon). The paper proposes to understand the capability of cinema and new technologies of vision to short-circuit (Stiegler, 2011) archi-cinema, via the re-invention of the figure of cinematic POV which short-circuit the archi-POV. Furthermore, it frames Stiegler's notion of stereotypes and traumatypes produced by cinematic and post-cinematic technologies via Guattari's notion of refrain. Finally, the interest of both Stiegler and Guattari towards the notion of transitional object by psychoanalyst Winnicott is introduced to articulate a schizoanalytic therapy with the forms of stereotypic refrains produced by cinematic and post-cinematic technologies, a therapy that can be activated by the truly transversal (Genosko 2014: 49-87) nature of the figure of the (archi-)POV.

Prologue. Cinematographic consciousness and refrains via the figure of (archi-)POV between cinema and POV-opticon

According to philosopher Bernard Stiegler, cinema has always existed – before its invention, at least since rupestral painting which "appeared during the Upper Paleolithic, [and] brought about the emergence of what the archaeologist Marc Azéma describes in *La préhistoire du cinéma* as the origin of cinema, insofar as it was the discretisation and proto-reproduction of movement" (Stiegler 2014: 14). For Stiegler, the inscription of memories through primitive technical supports, or "mnemo-technical traces" (Stiegler 2011: 35), are archi-cinema. This notion describes the functioning of what he calls cinematographic consciousness (Stiegler 2011: 35) – a consciousness that works cinematographically because it "projects its object [and] this projection is a *montage*" (Stiegler 2014: 8), of

which mnemo-technical traces "form the fabric, as well as constituting both the supports and the cutting room" (Stiegler 2014: 8).

In the development of this article, I argue that Stiegler's cinematographic consciousness finds its formal expression in the cinematic figure of point of view [POV] – or otherwise said, that this type of consciousness is structured according to the aesthetic and formal feature of cinematographic POV. As a consequence, I propose the notion of archi-POV as the *bridge* between cinematographic consciousness and archi-cinema.

From this point of departure, the paper suggests we look at the cinematic technic of POV as the inner engine or *end* of cinema itself. End of cinema intended both as aim – POV as the secret cinematic engine – and as the figure of a cinematic apocalypse[1]. In the context of new technologies of vision, this apocalypse takes the forms of a POV aesthetic proliferation. Nowadays, POV is proliferating and has become one of the most common techno-aesthetic interfaces across multiple networked platforms, and, as such, one of the most contested political-aesthetic battlefields of our time. Digital technologies and algorithmic interfaces re-invent POV and turn it into an aesthetic format enabling new forms of data-veillance (Clarke 1988: 498-512). Thus, from being both the formal externalization of Stiegler's cinematographic consciousness and the inner genetic element of cinema itself, cinematic POV becomes a predictive surveillance mechanism.

The CCTV-opticon (Yar 2003: 254-271) inspired by Bentham's Panopticon turns into POV-opticon[2] (Azar 2018). In this framework, the reflections on cinema by psychotherapist Félix Guattari are put into dialogue with Stiegler's philosophy, and the figure of the POV-opticon is proposed as the ultimate regime of visibility of what the French psychotherapist calls Integrated World Capitalism (Guattari 2009: 229-307). The figure of cinematic POV – especially in the subjective camera shot format – produces the *seamless* overlapping between the camera and the body and provides the ground for the mediation between certain key concepts of Stiegler and Guattari. Cinematic POV presents

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1 The idea to think about the "Ends of Cinema" comes from the participation of the author at the "Ends of Cinema" conference, organized by Richard Grusin and The Center for 21st Century Studies at Wisconsin-Madison university in the Spring of 2018. The focus of the conference was to reflect about the status of cinema and cinema theory in the context of new technologies of vision, their possible end (or death, as Scorsese called it), and how this end could be avoided by understanding the ends of cinema in this new context. The author refers to the apocalypse of cinema – and in particular of cinematic POV – within this theoretical horizon. Cfr. Azar, M. (2018). POV as Inner Engine and Ends of Cinema and New Technology of vision, *Ends of Cinema Conference*, organized by Richard Grusin and The Center for 21st Century Studies, Wisconsin-Madison University

2 Azar has introduced the concept of POV-opticon during a presentation at the 2018 Surveillance and Society conference held in Aarhus. Cfr. Azar, M. (2018). POV as figure of surveillance-assemblage, or POV-opticon. *Surveillance beyond borders and boundaries, 8th Biennial Surveillance Studies Network Conference*, Aarhus University, Aarhus (Denmark). A rewriting of the conference presentation can be found here: https://www.academia.edu/37648284/From_Panopticon_to_POVopticon_drive_to_visibility_and_games_of_truth.

itself as both the techno-aesthetic formalization of the functioning of Stiegler's discretizing mnemo-technical traces as much as the possibility of the body to resist their repressive capture and turn them into a Guattarian-inspired schizoanalytic tool for a therapy empowering the subject and the collective.

The paper proposes to understand the capability of cinema and new technologies of vision to short-circuit[3] (Stiegler, 2011) archi-cinema, via the re-invention of the figure of cinematic POV which short-circuit the archi-POV. Furthermore, it frames Stiegler's notion of stereotypes and traumatypes produced by cinematic and post-cinematic technologies via Guattari's notion of refrain. If mnemo-technical traces are pharmaka – both poison and remedy – it means that they need to be treated according to their capability of producing constellations of sense that can appear both as toxic refrain (or stereotypes) – dis-individuating and dis-empowering the subject – and as healthy refrain (or traumatypes) – individuating and producing lines of flight opening to new forms of life for the individual and the collective. Finally, the interest of both Stiegler and Guattari towards the notion of transitional object by psychoanalyst Winnicott is introduced to articulate a schizoanalytic therapy for the forms of stereotypic refrains produced by cinematic and post-cinematic technologies, a therapy that can be activated by the truly *transversal*[4] (Genosko 2014: 49-87) nature of the figure of the (archi-)POV.

Part 1. POV genesis: (archi-)POV between archi-cinema and cinema

1.1 Cinematographic consciousness, tertiary retention and archi-cinema

To introduce Stiegler's concept of cinematographic consciousness intended as the discretization of a temporal flux, let's briefly sum up Husserl's arguments in relation to the temporality of consciousness. As Stiegler summarizes in his *Organology of Dream and Archi-Cinema*,

> a temporal process occurs through the continuous aggregation of primary retentions: time only passes because the present instant retains within it the preceding instant. In the temporal flux or flow of sensible intuition that is perception, consciousness apprehends the perceived by primarily retaining *data* that it selects on the basis of

[3] The concept of short-circuit (opposed to the concept of long-circuit) is approached by Stiegler in various texts, from *Technics and Time* to *Neganthropocene*. For an overview please see Stiegler, B. (2011). Pharmacology of Desire: Drive-based Capitalism and Libidinal Dis-economy. *New Formations 72*, 150-161.

[4] In Guattari, the concept of transversality recurs from the beginning to the end of his work. For an overview to the concept please see Genosko, G. (2014). The life and work of Felix Guattari. From transversality to ecosophy. In Guattari, F. *Three ecologies*, (pp. 49-87). London: Bloomsbury, 2014.

> those secondary retentions (memories of past experience) that constitute the selection criteria in the flow of primary retentions. (Stiegler 2014: 8)

From the specificity of each consciousness's secondary retentions, "two different consciousnesses exposed to the same object experience two different phenomena" (Stiegler 2014: 8). In the same way, the same consciousness exposed two times to the same object experiences two different phenomena. Secondary retention functions as the selective criteria of experience, and enables consciousness to *project* the phenomena (Stiegler 2014: 8). "secondary retentions inhabit the process of primary retention in advance" (Stiegler 2011: 19), Stiegler says, enabling the protentional attitude of consciousness during the *projection* phase: "this projection […] projects protentions, that is, expectations" (Stiegler 2014: 8). This architecture builds upon Husserl's conviction that consciousness is always consciousness *of* something, and that it needs to be investigated via temporal objects, such as a musical melody (Stiegler 2011: 12-13). For Stiegler, though, these temporal objects are technological and do more than exteriorize time, because they also shape it and project it back onto the subject – in a way, externalizing consciousness itself. This *quasi-thing* which consciousness becomes, is the archi-cinema Stiegler identifies in the technical temporal object from rupestral paintings to cinema and new digital technologies. To explain this new *phase* of consciousness, Stiegler introduces the concept of tertiary retention into Husserl's schematism. What is tertiary retention? Tertiary retention, Stiegler says, is "the material inscription of the memory retentions in mnemotechnical mechanisms" (Stiegler 2011: p 4). This form of memory, appearing in the form of "rupestral mnemo-technical support" (Stiegler 2014: 10) is exteriorized in technical object which enables its *grammatization*._"Grammatization […] refers to the process by which the mental temporal flows experienced by the psychic individual are recorded, reproduced, discretized and spatialized" (Stiegler 2014: 11). It is the grammatization of memory that transforms consciousness cinematographically and allows it to produce a "montage through which a unified flux is constructed (as "stream of consciousness"), but which is identical in form to the cinematic flux of an actual film, as a temporal object and as a result of a constructed montage" (Stiegler 2011: p 17-18).

1.2 From cinematographic consciousness to cinematic POV and archi-POV

In this section, I argue that Stiegler's cinematographic consciousness can be formally described by the figure of cinematic POV, and that the aesthetic and formal features of cinematic POV in its originary form of archi-POV lie at the root not only of cinema but also of Stiegler's archi-cinema.

What is POV in cinema? In conventional cinematic POV, viewers see what the character sees from the character's perspective. There are various forms of cinematic POV (Branigan 1984). Nevertheless, the type of cinematic POV defined by A. Galloway

(Galloway 2006) and others (Eugeni 2012) as *subjective camera shot* is the type of cinematic POV I'm the most interested in, not only because it mirrors in cinema the structure of the archi-POV enabling the interaction between archi-cinema and cinematographic consciousness, but also because it presents the aesthetic and formal features at the root of new technologies of vision (Galloway 2006), as I will show in a moment.

POV functions as a *subjective camera shot* when it is capable of generating images which simulate the movement of an actor within a space, creating a sense of continuity between viewers and what is viewed, as if viewers are *embodied* in the images they're looking at. By doing so, cinematic POV images generate the *seamless* overlapping between camera, actor's body and spectator's body, formalizing for the first time in the history of technology not just the overlapping between the human and the technological, but their *seamless* imbrication due to the ability of technology to disappears. *Seamless,* here, means invisible. While when we use tools we are aware that we're using them and in this sense the overlapping is not *seamless* (the hammer does not disappear), the cinematic POV is a technical format which disappears in its technological aspect and thus provide a *seamless* overlapping between the body and the technological (the audience feels embodied in the image, inside the screen). If for Stiegler this overlapping has always been there, cinematic POV simply render it flawless. Cinematic POV exteriorizes the structure of cinematographic consciousness as archi-POV into a concrete formal and aesthetic figure.

The very collapse and overlapping between the embodied point of view of the audience and the machinic regime of visibility produced by cinema is the main feature of the cinematic technics of POV. This very collapse echoes the functioning of the figure of the archi-POV between primary and secondary retentions and protentions via tertiary retentions, giving shape to Stiegler's archi-cinema. In a sense, it seems possible to maintain that cinematic POV is the contemporary techno-embodied instantiation of a most rudimentary form of archi-POV intended as the place where the *transduction*[5] (Barthélémy 2002) between cinematographic consciousness and archi-cinema take place. Otherwise said, cinematographic consciousness and archi-cinema operate via the figure of archi-POV.

[5] The meaning of transduction is glossed from Simondon, and refers to "the process of individuation of the real itself. This is why transduction is defined as 'a physical, biological, mental, social operation through which an activity propagates gradually within a domain, by founding this propagation on a structuration of the domain that is realized from one place to the next". Barthélémy, J.-H. (2002) *Fifty Key Terms in the Works of Gilbert Simondon*, in by De Boever, A., Murray, A., Roffe, J., Woodward, A. (edited), *Being and Technology*. Edinburgh: Edinburgh University Press, 203-232. For Simondon's reflections on the concept, please see Simondon, G. (2005). *L'Individuation à la lumière de la notion de forme et d'information*. Grenoble: Édition Jérême Millon.

1.3 Cinematic POV as inner engine of cinema

In its *Organology of dream and Archi-cinema*, Stiegler recalls how "cinema is seen by Adorno and Horkheimer as a functional element of a system the aim of which is to *disseminate an ideology* and *stimulate consumer behavior*" (Stiegler 2014: 20). Stiegler locates this very function in the ability of cinema to short-circuit the underlying archi-cinema at the base of the functioning of our (cinematographic) consciousness (Stiegler 2011).

Following the arguments of section 1.2, it seems reasonable to argue that cinema is capable of doing so because of the very structure of cinematic POV. In a way, it seems possible to claim that the repressive role of cinema highlighted by Adorno and Horkheimer is related to both the seamless overlapping between human and technology produced by cinematic POV and by its removal as the *genetic* element of cinema as such. This removal is functional to the concealing and simultaneous exploitation of the affective charge of both cinematic POV and cinema itself.

Guattari's position is not far from the one of Adorno and Horkheimer when it comes to mass media – while it differs in relation to new technologies, as I hope to show in section 2.2 of this article and in relation to Guattari's notion of Integrated World Capitalism. "Cinema, television, and the press have become fundamental instruments of forming and imposing a dominant reality and dominant significations. Beyond being means of communication, of transmitting information, they are instruments of power" (Guattari 2009a: 238). From this point of departure, Guattari focuses his attention on the question of desire[6] (Deleuze & Guattari: 1983), claiming that cinema (and mass media in general) "not only handle messages but, above all, libidinal energy" (Guattari 2009a: 238). In this libidinal framework, the secret function of cinematic POV is to produce a "libidinal organization of technical life" (Stiegler 2014: 17) able to "control and channel the desire of the masses" (Guattari 2009a: 246).

This desire can be oriented towards *disseminating an ideology and stimulating consumer behavior*, or towards its opposite. On one side, cinematic POV is a form of *grammatization* of the body where the body is *flawlessly* subsumed by the machine, and the machinic fold of cinematic POV takes control of the bodily fold. When this happens, to say it with Guattari, cinema "mold[s] the collective imaginary, [and] topples over to the side of meaning" (Guattari 2009a: 242).

On the other side, cinematic POV is the place where the affective charge of the body can be put to work to resist the "[…] mediatic pollution of collective subjectivity" (Guattari 2009b: 300). In this last sense, and again paraphrasing Guattari's words, POV could be addressed as a "political technology of the body [which allows one] to move from forms of

[6] Deleuze and Guattari reworked the concept of desire away from its Freudian understanding especially in *Anti-Oedipus*. Cfr. Deleuze, G. Guattari, F. (1983) *Anti-Oedipus. Capitalism and Schizofrenia*. Minneapolis: Minnesota University Press.

power to investments of desire" (Guattari 2009b: 300). In the economy of cinematic POV. the bodily fold of cinematic POV is what "permits cinema to escape the semiologies of meaning and to participate in the collective arrangement of desire" (Guattari 2009a: 241). It is not that the body per se allows one to leave what Guattari calls the domain of signification and to move towards "pre-signifying symbolic components as well as its asignifying ones" (Guattari 2009a: 244) – on which, in any case, the effectiveness of signification and its exploitation is built[7] (Guattari 2009a: 242). However, within the two-folds structure of POV, the bodily fold can open a breach towards what the French psychotherapist calls "cinema of desire" (Guattari 2009a: 235-246). Here, it is important to notice that the machinic and bodily nature of POV is beyond dualities, because the seamless overlapping happens via the *folding* of one dimension into the other, and in a form akin to the description of POV Deleuze gives in his book on Leibniz[8] (Deleuze [1988] 2003).

The double nature of cinematic POV as a grammatizing machine and as a desire machine matches Guattari's conviction that "the history of desire is inseparable from the history of its repression" (Guattari 2009a: 235). More than that, it actually suggests that the inseparability between desire and repression can be drawn from the structure of cinematic POV and of archi-POV. Cinema is effectively capable of short-circuiting the archi-cinema the way Stiegler infers from the reflection of Adorno and Horkheimer exactly because of the continuity between the formal and aesthetic structure of cinematic POV and of archi-POV and their affective charge. Cinematic POV becomes the place where this charge can manifest itself in both its repressive and emancipatory roles – as I will show in relation to the pharmacological and transitional nature of POV towards the end of this article.

The history of cinema itself can be read as an attempt to both direct and control this charge by hiding or foregrounding the figure of cinematic POV. Cinema, thus, appears as the history of the technics designed to hide or foreground the emergence of cinematic POV, in their ambivalent function of hiding any human presence behind the camera or, on the contrary, of making it *sensible*. Hence, tripods, cranes, dollies, and drones work towards concealing the presence of a human body behind the camera, and in so doing, the role of cinematic POV as the inner engine of cinema as such. Why, however, does cinematic POV not appear in early cinema if it is – as I claim – the genetic element of cinema itself? Beside technical issues related to the bulkiness of the cinematic gears, which wouldn't allow the reproduction of bodily movement in space the way a subjective camera shot

7 "Yet, its own effectiveness continues to depend on its presignifying symbolic components as well as its asignifying ones" Guattari, F. (2009a). *Chaosophy*. Los Angeles. Semniotext(e).

8 I can't go here into detail about the relation between the form of cinematic POV I'm attempting to describe and the notion of POV described by Deleuze in his book on Leibniz – besides saying that the concept of fold is key in my understanding of the structure of cinematic POV and archi-POV. Cfr. Deleuze, G. [1988] (2003). *The Fold, Leibniz and the Baroc*. New York: Continuum.

does, the affective force of cinematic POV could not be fully disclosed at the beginning of cinema without risking the disruption of the invisible conditioning of the audience that Adorno and Horkheimer point to. In fact, this conditioning would be destroyed in early cinema by the figure of cinematic POV because the new audience wouldn't be able to process the level of realism of this format within the already extremely high realism of the new medium. In a way, too much realism would have destroyed the illusion by making the illusion too real for the unacquainted eye of the young cinematic audience[9].

Stiegler grasps the genetic force of POV in a passage of *Organology of dream and Archi-cinema:* "the film-lover, the *amateur de cinema*, would like to get behind the camera or into the screen. […] What […] Godard, Resnais and Kiarostami want, what all *amateurs du cinéma* want [is] to get behind the camera" (Stiegler 2014: 36). Cinematic POV is the figure which realizes the desire to be behind the camera and simultaneously in the screen. This is also what new technologies of vision promise, as I will show in a moment, together with the conditioning allowed by the aggressive forms of immersivity they are capable of producing.

Things have changed since the beginning of cinema. The audience got used to cinematic POV (especially in its *subjective camera shot* format) both in cinema – where it has been booming in recent times[10] – and in new technologies of vision which design its re-invention. For example, mobile phone images are characterized by the perceivable presence of a body behind the camera, and so are VR images where, similarly, the presence of a body giving orientation to the image is crucial – with the difference being that in this case the image is computer-generated.

This question is due: why, after hiding in the history of cinema for at least its first fifty years, has cinematic POV become nowadays a prominent aesthetic and formal figure in relation to contemporary cinema and algorithmic POV technologies? Or, as Stiegler would say, "what happens to archi-cinema in the age of digital tertiary retention?" (Stiegler 2014: 19).

[9] Something similar happens with 4K High Definition images in recent cinema, leaving the spectators with a feeling of "fakeness" towards the images. Cfr. Moynihan, T. (2014). Wtf just happened: my new hdtv makes movies look unnaturally smooth. *Wired*. Retrieved from https://www.wired.com/2014/08/wtf-just-happened-soap-opera-effect/.

[10] From Lady of the Lake by R. Mongomery in 1947, the first movie shot entirely in POV, a lot of examples has followed, especially in recent time and in relation to horror movies – for example in the case of The Blair Witch Project by Myrick & Sanchez in 1999 and of V/H/S by Brad Miska and Bloody Disgusting in 2012, to name only a couple.

Part 2. POV proliferation and apocalypse: POV-opticon between pharmaka and refrains

2.1 Algorithmic POV and POV-opticon

The figure of (cinematic) POV – specifically in the form of the *subjective camera shot* – proliferates as a familiar aesthetic format in the context of new technologies of vision, and becomes one of the most common interfaces across multiple networked platforms. Algorithmic technologies re-invent cinematic POV in a way that re-articulates the interaction between body and technology and re-defines the relation between human and machinic agency. The unstable relation between the machinic and bodily fold constituting the structure of cinematic POV and archi-POV operates at the root of the POV-opticon. The POV-opticon is a new regime of visibility that replaces the Panopticon intended as the form of visual governmentality of modernity (Foucault 1978), and which is characterized by the ambiguous political role of algorithmic POV technologies. In fact, the contemporary surveillance-assemblage (Haggerty & Ericson: 2000) seems to be described well formally by the deployment of POV technologies of vision oriented towards data-veillance (Clarke 1988).

I do believe it is possible to look at the POV-opticon as the ultimate regime of visibility of what Guattari calls Integrated World Capitalism, where "[a]utomatized and computerized production no longer draws its consistency from a basic human factor, but from a machinic phylum that traverses, bypasses, disperses, miniaturizes and co-opts all human activities." (Guattari 2009b: pp.249-250). The idea here is that the figure of cinematic POV and the seamless machinization of the body it operates, turns into the figure at the root of the "fundamental modes of semiotization" (Guattari 2009b: p.262) of Integrated World Capitalism, a phase of Capitalism that makes explicit the fact that "capital is not an abstract category: it is a semiotic operator at the service of specific social formations" (Guattari 2009b: p.244). POV, thus, functions as the operator of semiotization and as the most diffuse "technical modalit[y] of the construction of subjectivity" (Guattari 2009b: 244).

In fact, one of the reasons for the transformation of the Panopticon into the POV-opticon is the passage from a surveillance system based on CCTV technology to a surveillance system based on POV technologies of vision. In the 2017 film *The Circle* by James Ponsoldt, from the 2013 homonymous book by Dave Eggers, Eamon Bailey, CEO of the Google-like social network The Circle, presents to his employees a new technology called *SeeChange* – an internet tethered POV-like (GoPro-like) micro-camera recording everything all the time everywhere, invisibly. "Camouflaging is essential" says Eamon Bailey, whose vision is that of a world where "knowing something is good, but knowing everything is better". In another scene, the young and rampant worker Mae, manages to witch-hunt a fugitive prisoner in ten minutes and twenty-one seconds by accessing in real

time 14 million POV mobile phone images in England and one billion World-wide, all devices being, in fact, connected in real time to The Circle. The so-called *SoulSearch* technology proceeds, live, to scanning the images produced by the community through a machine vision technology trained to recognize the fugitive's facial features. The example resonates well with the transformation of cinematic POV into an algorithmic tool capable of harnessing the "collective assemblage of enunciation" (Guattari 2009b: 244) and of producing molecular forms of control as much as "serialized individuation" (Guattari 2009b: 244) – in Stiegler's terms, proletarianization (Stiegler 2010).

The shift from CCTV technologies to POV technologies as instrument of control and proletarianization is evident in the case of the new Chinese Social Credit System, according to which citizens are tracked by a mobile phone app which datifies a stunning variety of actions (from buying alcohol to paying the bills in time) to generate a citizen's data double and a consequent *social credit* aimed at controlling the overall citizen's agency (Rollet 2018) – from being allowed or not to travel, to surfing online slower or faster than others, to having access or not to certain types of jobs. The Chinese social credit system works by overlapping the security quality of CCTV technologies with the real-time access and proximity provided by POV technologies to their subjects. The POV-opticon shrinks the distance between body and interface and converts the securitarian features of CCTV technologies into POV technologies of vision turned first-person tracking mechanisms. If the *American way of life* was produced via a reduction of variability of secondary retentions operated by the cinematic apparatus at a molar[11] level – turning the molecular into the molar –, processes of datification operate similarly but inversely – turning the molar into the molecular –, compromising what Guattari calls "the right to singularity" (Guattari 2009b: 206) and the possible processes of bifurcation emerging from the widening of the pool of secondary retentions at the base of them.

2.2 Integrated World Capitalism and tertiary protention

Cinematic POV harnesses the embodied – or phenomenological – POV on the side of perception, and aims at shrinking the distance between technology and the body. The *seamless* overlapping between camera, actor's body and spectator's body gives cinematic POV the ability to modulate the affective charge of the cinematic apparatus.

[11] Deleuze and Guattari's understanding of the distinction (and imbrication) between molar and molecular as outlined in *Anti-Oedipus* is here applied to the functioning of cinema and new technologies of vision. Deleuze, G. & Guattari, F. (1983) *Anti-Oedipus. Capitalism and Schizofrenia*. Minneapolis: Minnesota University Press, 181-182-183-184. Guattari talks extensively about molar and molecular in relation to "existential micropolitics" in *The Machinic* Unconscious. Guattari, F. (1979 [2011]). *The Machinic Unconscious*. Los Angeles: Semiotext(e), 149-199.

Twenty-first-century digital and algorithmic POV technologies, instead, attempt to harness the embodied POV *directly* on the side of affection. To do so, these technologies try to *prehense* the affordances defining the relation between phenomenological POVs and their *Umwelten* by designing (POV) data doubles retroactively producing the affective subjects they're generated from. This is the way in which the cinematic POV-apparatus turns into the POV-opticon. In this sense, algorithmic POV technologies enable a form of surveillance which is not limited to tracking behaviors and analyzing data, but which actively aims at constructing the subject by designing her (POV) data-double, and the custom-made (POV) *post-truth*[12] reality tailored around her. Guattari foresees the prehensive feature of capital: "a calculator, Capital has also become a prediction machine, the computer of the socius, the homing head of innovative techniques" (Guattari 2009b: 267). In cinema too, as I've mentioned in section 1.2, the affective – which for Guattari are broadly intended as pre-signifying and a-signifying semiotics – is the ground from which the effectiveness of the signifying semiotics is built. What changes with algorithmic POV technologies is that this affective pre-signifying and a-signifying semiotics can now be engineered molecularly without the need to pass through perception the way it was happening with cinema. The affective is now addressed as the explicit field of exploitation and this directedness allowed by new technologies is the reason behind their surgical precision in targeting and personalization. If in the past the affective qualities were extracted from perception – and this second degree extraction was, as a consequence, imprecise or molar – with algorithmic POV technologies the extraction is molecular and happens without the mediation of perception or independently from it.

In this new technological context, philosopher and computer engineer Yuk Hui argues that Stiegler's tertiary retentions characterizing both the archi-cinema and the cinematic POV-apparatus support a new form of machinic protention, or tertiary protention. The concept of tertiary protention aims at explaining the functioning of algorithmic predictive technology based on "forms of anticipation made possible by algorithms" (Hui 2018: 144) which "becomes increasingly active, to the point of displacing or marginalizing active directedness" (Hui 2018: 144). Algorithmic POVs manufacture an "automatic future, in which our selections will be to a large extent, if not completely, predefined according to a specific schema and index" (Hui 2018: 150).

In Arkangel directed by Jody Foster in 2017 – the second episode of the fourth season of Black Mirror – a mother implants her daughter with a device which allows her to see in real time the images she is looking at from a POV perspective. The mother is provided

[12] Post-truth is a concept introduced by Steve Tesich in 1992 in an essay wrote for The Nation, and popularized by Ralph Keyes in 2004 in a book titled Post-truth. The same expression has been used recently by Steve Fuller for a book that investigates "knowledge as a power game". Cfr. Tesich, S. (1992). A Government of Lies. *The Nation*. Keyes, R. (2004). *Post-truth era. Dishonesty and deception in contemporary life*. New York: St. Martin's Press. Fuller, S. (2018). *Post-truth*. New York: Anthem Press.

with a user's friendly interface that gives her the possibility of deleting from the daughter's sight stream images she thinks could traumatize her. As a consequence of this technology, the kid grows incapable of recognizing conflicts or violence and indeed incapable of behaving accordingly when they appear in front of her eyes, after having been freed from the device. In Arkangel, algorithms learn from the mother's choices and implement a reality creating a bubble around the children that is perceptively different from the reality lived in by other kids. In this example, the directedness I was referring to in the capturing of affects by algorithmic technologies is beyond perception in the sense that perception appears here as a malleable context to fully engineer[13] in order to access affects directly. The bypassing of perception is here happening via its full design in terms of the retentional and protentional possibility offered to the kid, reduced once compared to the reality of other kids before the algorithmic capture.

Even though Guattari couldn't imagine the violence of such devices – and even though such devices are still fictional and yet frighteningly close to reality in terms of technological possibility and political will – he definitely senses the direction towards which the technological development was pointing at in relation to its ability to manufacture tastes and ultimately reality. The similarity between Guattari and Adorno and Horkheimer mentioned in section 1.2 is here challenged by Guattari's notion of Integrated World Capitalism. Guattari senses that Adorno and Horkheimer's position would need to be rethought in the current technological context. In fact, this new form of "machinic enslavement" (Guattari 2009b: 261) and "miniaturization" (Guattari 2009b: p.262) proves that "we cannot accept the theoretical explanations of subjugation of the masses in terms of ideological deceit" (Guattari 2009b: p.262) the way Adorno and Horkheimer talk about it. Instead, "capitalism seizes individuals from the inside" (Guattari 2009b: p.262), beyond perception and via the functioning of algorithmic POV technologies and statistical *apparatuses* of modelization capable of shaping collective taste by breaking it into its molecular pieces[14].

2.3 From stereotypes and traumatypes to refrain and schizoanalysis

The play between primary and secondary retentions harnessed by tertiary retentions – in the form of what Adorno and Horkheimer call the *culture industry* – and by tertiary protentions – in the form of algorithmic POV technologies and what I call POV-opticon – is

[13] The idea of reality as a context to engineer via technology is borrowed from Carl Smith, Principal Research Fellow and Director of the Learning Technology Research Centre (LTRC), Ravensbourne University London. https://www.ravensbourne.ac.uk/staff/carl-smith/

[14] "L'opinion et le gout collectif, de leur cote, seront travaillés par des dispositifs statistiques et de modélisation tels que ceux qui sont produits par la publicité [opinion and collective taste will be worked out by statistical apparatuses in the same way today they're produced by advertisements]". Guattari, F. (1987). De la production de la subjectivité. *Chimères, 4,* p. 13.

crucial for what Stiegler addresses as the process of psycho-social individuation (Stiegler 2015). The process of psycho-social individuation is at the same time individual and collective, and produces trans-individuation when it is open to the future and transforms simultaneously the I and the We via a pattern of diversification (Stiegler 2015). The process works by first dis-individuating the individual (stripping the individual of previous layers of individuation) and then re-individuating it (injecting new layers of individuation) according to the alteration of secondary (collective) retentions from which new processes of individuation and trans-individuation can effectively take place[15] (Stiegler 2010). According to Stiegler, the process of psycho-social individuation can contribute to enriching the field of secondary collective retentions, or impoverish it, reducing the chance of individual and collective trans-individuation.

Thus, if "transindividuation works by socialising and transindividuating the tertiary retentions of the epoch in terms of reinforcing psychic individuation as well as collective individuation, rather than in the sense of disindividuation" (Stiegler 2014: 26), the process can also work the other way around, and can produce what Stiegler calls stereotypes. A stereotype is the outcome of the reduction of secondary collective retentions producing automatic behaviors (Stiegler 2015). Impoverished secondary retentions produce secondary protentions "which become practically automatic" (Stiegler 2014: 9), and turn into *ideology* and *consumer behavior*. In the case of new algorithmic POV technologies, secondary collective retentions are reduced to datasets tailored around the individual. Algorithmic POV technologies are thus able to mirror and anticipate the individual's tastes and beliefs via tertiary protentions that reinforce stereotypes at a molecular level.

Stereotypes, indeed, are secondary (or tertiary) protention becoming automatic, becoming habits. As a consequence, "the phenomenon of the object is its impoverishment, and […] the attention that consciousness has for this object fades away, disindividuating itself by reinforcing these stereotypes" (Stiegler 2014: 9). In a process of trans-individuation, instead, secondary protention can constitute traumatypes, "which means that […] the phenomenon that it engenders constantly differentiates itself by intensifying itself, and that consciousness projects itself into the object by individuating itself with it" (Stiegler 2014: 9).

It seems possible to draw a parallel between Stiegler's notion of stereotypes and traumatypes and the Guattarian notion of refrain. Philosopher Franco Berardi Bifo

[15] Mark B. N. Hansen explains this mechanism well in a note to Stiegler's contribution to "Critical Terms for Media Studies": "For Simondon, transindividuation comprises a collective individuation that requires first a disindividuation of individual (psychic) individuations and draws directly on the preindividual, i.e., that which exceeds but nonetheless remains bound to any given process of individuation. Simondon theorizes transindividuation in *L'individuation psychique et collective* and correlates it with the functioning of technical objects in *Du mode d'existence des objets techniques*". Cfr. Stiegler, B. (2010). Memory. In Mitchell, W. J. T. & Hansen, B. N. (Eds). (2010). Critical Terms for Media Study. Chicago: University of Chicago Press.

explains well the concept of refrain in his introduction to the Italian edition of *Chaosmosis*: "to *grab* the temporal flux, the mind has to build his own temporalities: Guattari calls refrains these singular temporalities which allow possible orientations" (Bifo in Guattari 1995b: 9). According to Guattari, a refrain aims at individuating consciousness in time: "the polyphony of the modalities of subjectivation corresponds to multiple modalities of 'beating time'" (Guattari 1995a: 63). The rhythms associated with the different ways of 'beating time' are refrains, and refrains are – if intended this way – an editing problem. Such a notion of refrain as an editing problem resonates well with Stiegler's notion of cinematographic consciousness, and suggests we push the parallel towards the specific functioning of this editing process.

Refrains can be of many types, or *orientation*, but can generally fall into two categories. Neurotic refrains are those rhythms that, starting from "the ordinary modelization of everyday existence" (Guattari 1995a: 63), turn into "cages, rigid systems […] [an] obsessively repetitive existential path" (Bifo in Guattari 1995b: p.10). Psychotic refrains, instead, are those rhythms that emerge when the "standardized Dasein loses its consistency" (Guattari 1995a: 63) and "alterity, as such, […] become[s] the primary question" (Guattari 1995a: 63). Guattari doesn't take psychotic attacks as a model, straightforwardly[16] (Guattari 2009b: 302). Rather, he sees in the mechanism of psychosis the possibility to intervene in the rigidity of the neurosis via a 'beating time' which re-injects a "singular temporality" (Bifo in Guattari 1995b: 9) as "the niche of individuation of the self" (Bifo in Guattari 1995b: 9). Although in Guattari refrains are "incorporeal" and related to "existential territories" and "coefficients of intensity" (Guattari 1995a), they could be subsumed and externalized into tertiary retentional or protentional devices. It's in this sense that neurotic refrains produce what Stiegler calls stereotypes, whereas psychotic refrains produce traumatypes.

The difference between stereotypes (neurotic refrains) and traumatypes (psychotic refrains) consists not only in the type of 'beating time' but also in its directionality. While the obsessive repetitions of neurosis and stereotypes plunge the refrain into an extended past, psychosis and traumatypes are open to the new and orient themselves towards the future. This openness is the type of openness required for trans-individuation to happen, and in this sense a form of *minor psychosis capable* of suspending the *standardized Dasein* stands at the core of trans-individuation. In Stiegler's *schematism*, refrains become the complex mechanisms of feedback loop and feed forward loop happening between human consciousness and technology. If in Guattari's "production of subjectivity" (Guattari 1987), refrains are an "existential function of intensive repetition" (Guattari 1995b: 66) defining a 'beating time', in Stiegler refrains become externalized and the 'beating time' subsumed into the machine as the "conditions of repetition" (Stiegler 2014: 12).

[16] "I did not intend to tie it down to exclusively psychosis. Rather, I wished to open it to a maximum variety of schizzes, like love, childhood, art, etc". Guattari, F. (2009b). *Soft Subversion*. Los Angeles: Semniotext(e), p. 302.

Psychosis's tendency towards the different and its orientation towards the future provides the basis for Guattari's schizoanalytic therapy. For Stiegler, trans-individuation is a process oriented towards the future because it implies the openness of the traumatype, an openness which is instead lacking in the opposite process of dis-individuation, grounded in the repetition of the same, or stereotype. In a way, then, it is possible to say that Guattari's schizoanalysis can function as a therapy for Stiegler's stereotype, and as a tool for modulating processes of *minor* psychosis that could allow new bifurcations that is to say new forms of trans-individuation to emerge: "schizoanalysis, rather than moving in the direction of reductionist modelisations which simplify the complex, will work towards its complexification, its processual enrichment, […] bifurcation and differentiation" (Guattari 1995a: 61).

What is the subject of such a schizoanalysis turned therapy for Stiegler's proletarianized cinematographic consciousness? I argue that the subject of such a schizoanalysis is the archi-POV, because the structure of the archi-POV itself is composed by stereotypic and traumatypic 'beating time[s]', neurotic and psychotic refrains. The unstable relation between the machinic and bodily fold of the archi-POV is at the core of the production of stereotypes and traumatypes, and as such is the subject of the schizoanalytic practice to heal the cinematographic consciousness. Schizoanalysis works on the transitional nature of archi-POV and archi-cinema, and attempt at disentangling the machinic and bodily fold of the archi-POV to modulate the neurotic or stereotypic and the psychotic or traumatypic refrains emerging from the relation between the folds and the modulations of the technical devices operating on them.

The process of grammatization and discretization operates at a molar level via cinema and mass media in general and produces "petrification" (Guattari 1979 [2011]) or proletarianization (Stiegler 2010) via the technological, discrete and signifying fold of the archi-POV. New technologies bypass the molar mass-media technological fold to operate directly on the asignifying affective bodily fold. Schizoanalysis is the moment of a possible minor psychosis or "schizo-revolutionary diagrammatization" (Bifo 2008) for grammatization , capable of activating the status of transitional object defining the notion of archi-POV, as I hope to show in the closing sections of this article.

> Here there is a primary begging of the question, an incontrovertible micropolitical axiom: the refusal of legitimating the signifying power demonstrated by the 'evidences' of dominant ' grammaticalities'. […] Rather than remaining prisoner to the redundancy of signifying tracings, we will endeavor to fabricate […] new asignifying diagrammatic coordinates. (Guattari 1979 [2011])

2.4 (Archi-)POV, pharmaka and transitional object

Refrains are built by tertiary retention (and protention), which act as *pharmaka* – both poison and cure – capable of producing stereotypes and traumatypes, neurotic refrains

dis-individuating the subject or (*minor*) psychotic refrains opening to processes of individuation and trans-individuation. Stiegler notice that the nature of pharmaka is somehow similar to that of the transitional object Winnicott introduces in his *Playing and Reality* to explain the nature of the object the infant adopts to move from the mother-infant relation to the infant-object relation.

> The transitional object – often some kind of comfort blanket – represents a position midway between the subjective and the objective: it comes from without from our point of view, but not so from the point of view of the baby. Neither does it come from within; it is not a hallucination (Winnicott 1971: 5).

Stiegler highlights the pharmakological nature of this object:

> the transitional object is a *pharmakon*: it is the primordial *pharmakon* – […] and as all tertiary retention is a *pharmakon*, that is, a poison and a remedy. Winnicott showed that the transitional object, which is the condition of the formation of the infantile psychic apparatus, can also become a pathogenic factor if the mother fails to locate therapeutic value of the object and thereby allows it to become an object of pure addiction (Stiegler 2014: 12).

Thus, Stiegler continues,

> a tertiary retention always constitutes a kind of transitional object, in the Winnicottian sense according to which the first retentions and protentions that form the psychic apparatus of the baby are articulated with the retentions and protentions of its mother through the transitional object that opens the transitional space of play (Stiegler 2014: 12).

Guattari shows interest in Winnicott's transitional objects as well, not so much because of their objectual nature such as for Stiegler – so to be able to draw a parallel between them and the externalizations of *mnemo-technical traces* – but because of the nature of their "potential space" and "intermediate area of experience" (Winnicott 1971: 5). The main difference between Stiegler and Guattari in relation to the notion of transitional object seems to relate not to its pharmacological nature – not to its *how* – but to the different accent on its *where*. While Stiegler expands the notion of transitional object to technologies at large, putting the accent on their objectual nature, Guattari aims at turning it into "multivalent dimensions of an existential Territory or […] a machinic creativity of boundless potential" (Guattari 1995a: 94), emphasizing instead the nature of the transitional experience and *potential space* it opens towards.

Now, if the pharmacological and transitional nature of tertiary retentions (and tertiary protentions) explain their ability to produce both stereotypical and traumatypical refrains, the way they do this and the site of the shift between the two are still to be

addressed. How and where does the shift between a stereotypical refrain and a traumatypical refrain take place? I would like to argue that the shift can be grasped by understanding Guattari's *production of subjectivity* in relation to Stiegler's cinematographic consciousness – with the latter grounded in the notion of archi-POV.

Cinematic and post-cinematic POV intended as the aesthetic and technological formalization of the archi-POV at the root of cinematographic consciousness, act, thus, as "shifter of subjectivation" (Guattari 1995a: 20), and allow the transformation of stereotypes into traumatypes, and vice-versa. (Post-)Cinematic POV becomes the transitional object between the body and the camera, between subject and object, "at the junction of a subjectivity and an alterity" (Guattari 1995a: 20). Cinematic POV as transitional object of cinema works in the transitional space between subject (the body) and object (the camera) and discloses itself as the "object-subject of desire" (Guattari 1995a: 95), the desire Stiegler identifies as the desire of "being behind the camera and [on] the screen" (Stiegler 2014: 16), mentioned in section 1.2 of this article. The archi-POV takes shape via Winnicott's transitional object and open the possibility for the constitution of the cinematographic consciousness, while the transitional properties pass along from the object to the archi-POV to (post) cinematic POV. "There is always in a real situation a mediating object that acts as an ambiguous support or medium" (Genosko 2002: 70). This object – which now I should rather indicate as a subject-object – is the archi-POV intended as *transitional space* operating the transduction or phase-shift between cinematographic consciousness and archi-cinema, which is to say between subjectivity and technology. The transitional nature of cinematic POV and of the archi-POV is what allows both to overcome the duality between subject-object, in the same way in which Winnicott's transitional object overcomes "the dual analysis [of] the mother-child relation" (Genosko in Guattari 2014: 78).

Epilogue. Towards a cinema of desire: the transversality of archi-POV and (post) cinematic POV

Guattari's interpretation of the transitional object is connected to the concept of transversality which – despite its complexity and the multiple ways in which Guattari defines it (Genosko in Guattari 2014: 49-87) – can be generally understood as a coefficient of in-betweenness, or as a bridge (Genosko in Guattari 2014: 81).

The transversal nature of the archi-POV as in-betweenness and bridge between cinematographic consciousness and archi-cinema is what allows it to function not only as instrument of control and repression but also as instrument of emancipation. In Guattari, "transversality [is] an adjustable, real coefficient, decentered and non-hierarchical" (Genosko in Guattari 2014: 81), and as such it can be intended as the coefficient of transindividuation.

The transversal nature of (post) cinematic POV and archi-POV consists in the unstable relation between its machinic and bodily folds – and in the possibility of turning them into weapons for emancipation. The tendency towards lightness of cinematic gears defining a trend emerging clearly in the Fifties and Sixties[17], not only simplifies technically the expression of cinematic POV defined as *subjective camera shot*, but also puts it into the hands of social movements that exploit it to generate new forms of individuation and transindividuation. For Guattari, "the super 8 and the videotape recorder could be turned into means of writing that are much more direct and much more effective than discourses, pamphlets, and brochures" (Guattari 2009a: 238), while for Stiegler a filmmaker can become a "vehicle of the transindividuation of his or her epoch" (Stiegler 2014: 18) – as happens in the case of the Nouvelle Vague in France or Neo-realism in Italy.

Nowadays, POV mobile phone images recorded in the context of social unrests and protests and uploaded online (such as in the case of the so-called Arab Spring), become the available format for people to perform their political agency. The possible emancipatory rebirth of POV image points towards a form of *cinema* which tries to resist new processes of datification enforced by POV algorithmic technologies and by their reinvention of cinematic POV (Azar 2015). The Egyptian Revolution has been an experimental ground for such revolutionary media practices[18] (Azar 2012). The work of the collective *18 Days In Egypt* during the 2011 Egyptian Revolution is, to my eyes, an exemplary case of a *cinema of desire* able to re-invent *collective enunciation* and to activate libidinal energy leading to transindividuation. 18 days in Egypt is a crowd-sourcing documentary platform. This is how it works: friends decide to attend a demonstration. Armed with cameras, smart-phones, and internet connection they produce memories of the event and upload them live on the platform in the form of photos, videos, tweets, Facebook posts. Once at home, each of them is able to edit on the platform the stream of images and language generated by the collective narrative of the event and to produce a collective enunciation and possibly the beginning of a collective *transindividuation of an epoch* – specifically, of a dictatorship. The narration on the platform is the form that the multiplicity and singularity of demonstrators' POV – as singular *cuts* of the revolution – take, when they turn into a refrain that articulates the multiplicity of 'beating time' into a traumatypic line of flight. 18 days in Egypt stands, thus, as *cinema of desire*, a cinema capable of disclosing the transformative force of desire via the transversal nature of POV images, and to generate a virtuous *long circuit* (Stiegler 2010)– not a short-circuit as in

[17] Lighter formats to record images becomes available in the Fifties with 8 mm cameras, evolving into Super8 mm cameras in the Sixties and finally turning into electronic camcorders at the beginning of the Eighties and into digital cameras in the first decade of 2000. Cfr. Movie Camera, Wikipedia. Retrieved from https://en.wikipedia.org/wiki/Movie_camera#History.

[18] I've been writing about media activism in Egypt during the revolution while being based in Cairo and collaborating with activists' collective. Cfr. Azar, M. (2012). The revolution will not be twitted (?). Media-attivismo al Cairo durante la post-rivoluzione. *Alfabeta*, May 2012.

the case of a cinema *disseminating ideology* – between offline and online, bodily and machinic, turning technologies into a tool to amplify the force of a collective body.

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